

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington DC 20554

RE: GN Docket No. 14-28 (Open Internet Remand)

Dear Ms. Dortch:

On April 9, 2014, we met with various representatives of the Federal Communications Commission to discuss matters related to the Open Internet Remand. The full list of attendees is enclosed within. The views we expressed were purely our own, based on our interest as private citizens and academics.

We discussed a novel option that relies on a limited return to the powers delegated to the Commission by Title II of the Telecommunications Act. In particular, we discussed the possibility for the Commission to leverage the asymmetric framework articulated in the D.C. Circuit's decision in *Verizon* into a regulatory framework that focuses on incoming or "sender-side" traffic. A draft paper which describes this proposal in more detail and the slides used in our presentation are attached to this filing.

Sincerely,

Tejas N. Narechania & Tim Wu

Stephanie Weiner	OGC
David Gossett	OGC
Claude Aiken	OGC
Aaron Garza	CGB
Alison Neplokh	MB
Kristine Fargotstein	WCB
Robert Cannon	OSP
Carol Simpson	WCB
Thomas Spavins	EB
Tim Brennan	OSP
Jennifer Salhus	WTB
Linda Oliver	OGC
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Matthew DelNero	WCB
Jonathan Sallet	OGC
Gigi Sohn	OCH
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## SENDER-SIDE TRANSMISSION RULES FOR THE INTERNET

Tejas N. Narechania & Tim Wu<sup>†</sup>

Since 1966, the Federal Communications Commission has, one way or another, protected businesses that deliver services over the nation's communications infrastructure. In January of 2014, the Court of Appeals for the D.C. Circuit struck down the FCC's Net Neutrality rules (called the *Open Internet Order* at the Commission). Since that time, Chairman Tom Wheeler has indicated that he will take up the D.C. Circuit's invitation to implement rules that, consistent with historic practice, "will meet the court's test for preventing improper blocking of and discrimination among Internet traffic."

That invites an obvious question: Presuming that the Commission wants its rules to survive judicial scrutiny, what is the most prudent legal course? While the Commission has a variety of legal options we focus here on solutions that are almost certain to survive legal challenge; we do not take any position on the merits of alternatives.

We propose a novel option that relies on a limited return to the powers delegated to the Commission by Title II of the Communications Act. In particular, we suggest that the Commission take seriously the asymmetric framework suggested by the D.C. Circuit based on the premise that two distinct transmissions comprise a single broadband transaction. Consider a typical usage of a broadband connection. First, the subscriber — the consumer — *calls* an application, service, or other content provider using the carrier facilities to which they have purchased access. Second, the content provider sends a *response* to the consumer, which necessarily traverses the broadband carrier's facilities to reach the original consumer. This two-stage process is the framework adopted by the D.C. Circuit; as the court emphasized, it may be "logical to conclude that [a broadband provider] may be a common carrier with regard to some activities but not others."<sup>1</sup>

The Commission may therefore, as a matter of first impression, decide that *response* transactions are subject to rules against discrimination and blocking. Indeed, as we explain below, none of the arguments in support of the theory that the information service designation applies to a broadband connection's call service can be said to apply

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<sup>1</sup> Slip op. at 51 (citing *NARUC v. FCC*, 533 F.2d 601, 608 (D.C. Cir. 1976)); see also *FCC v. Midwest Video*, 440 U.S. 689, 701 n.9 (1979)

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to the response transaction. Cabining the reach of the Commission's *Cable Modem Order*, which deigned the call transaction an information service, to *only* the second stage of the two-stage framework would restore the Commission's authority to enforce network neutrality rules over broadband-delivered content. In addition, because such sender-side regulation focuses on incoming traffic, it also provides a useful framework for addressing interconnection disputes between broadband carriers and content providers.

Alternatively, the Commission could simply examine whether changed circumstances have undermined its decade-old decision to reclassify broadband transmissions from telecommunications services to information services. Our examination of the Commission's analysis shows that the factual premises underlying the FCC's conclusion are now obsolete. That decision relied on the outdated premise that broadband subscriptions were akin to dial-up services like AOL, all of which offered a bundle of services including email access, branded web browsers, newsgroups, and other internet-based services. Today, the relevance of these bundled services is highly questionable, as broadband subscribers overwhelmingly rely on third-party services as Outlook, Gmail, and Google Groups, as well as independent browsers, such as Safari and Firefox.

Thus, the Commission has at least two paths available to it. The first is predominantly legal. By adopting the two-stage framework articulated by the D.C. Circuit earlier this year, the Commission need only decide whether the second stage — the response transaction — fits more comfortably within the statutory definition of a telecommunications service or information service. The second is predominantly factual: Is the Commission still swayed by its analysis, now over a decade old, analogizing broadband subscription services to dial-up internet access? Regardless of the path the Commission chooses, the destinations are similar. Either course allows the Commission to develop a regime that resembles its approach in the 1980s and 1990s — a period that is notable for the exponential growth in the telecommunications and Internet industries.

## I. BACKGROUND

For nearly fifty years, the Federal Communications Commission has enforced a regime whose basic purpose has been to foster the growth of network application providers and protect them from the owners of network facilities. The most recent iteration of that regime, which attempted to enforce a form of basic network neutrality norms, was known at the Commission as its *Open Internet Order*, but in fact the history of that effort stretches back into the 1960s.

## A. The Original Antidiscrimination Regime

The relevant history of the Net Neutrality regime begins with the *Computer Inquiries* that began in 1966.<sup>2</sup> Context is important here. The late 1960s marked the beginning of a historic shift at the Commission and the White House away from support for a regulated monopoly, and towards the encouragement of competitive markets — especially in new markets.<sup>3</sup> This project was driven both by the FCC as well as the Office of Telecommunications Policy in the White House, and its long term effects were nothing short of monumental.

The project began with selected segments of the communications industry, primarily long-distance telephony, satellite services, attachments, and what was then called “network data processing” (what we now know as internet services.) In each of these areas, the Commission developed a new regulatory initiative with two overarching goals.

First, given the long history of regulatory barriers to entry, the FCC attempted to avoid overregulation of new markets to encourage competition. Second, the Commission recognized that any new entrant in these markets would be necessarily dependent on the monopoly carriers, and would therefore be exceptionally vulnerable to anticompetitive behavior. Hence, the project’s second goal was to prevent the carriers from undermining these new entrants. These two goals can be understood as underlying the Commission’s *Carterfone* decision and the subsequent liberalization of network attachments, the various MCI and Execunet decisions, which opened to competition the long-distance telephony market, the “Open Skies” policy for satellites, and, most relevantly for our purposes, the *Computer Inquiries*. The combined effect of these policies was to create a communications economy that relied on common carriage services as the foundation for other markets, and eventually, entire industries. Indeed, the entire internet economy, for example, can be understood as an unexpected byproduct of the policies pursued in the *Computer Inquiries*.

This philosophy of opening markets on top of the network drove the Commission’s *First Computer Inquiry*. The 1966 Notice of Inquiry that began the FCC’s first foray into this space sought “information, views, and recommendations” regarding the vast “number of regulatory and policy questions” that had come to the fore through

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2 See, e.g., *In the Matter of Preserving the Open Internet*, 25 F.C.C.R. 17905 (2010) [hereinafter *Open Internet Order*] (Copp, Comm’r, concurring) (referring to the “Computer Inquiries”); *In the Matters of Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, 20 F.C.C.R. 14853, at ¶ 4 n.9 [hereinafter *DSL Reclassification Order*].

3 As traced in Tim Wu, *THE MASTER SWITCH*, Chs. 7, 14 (2010).

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the “the growing convergence of computers and communications.”<sup>4</sup> In the Notice, the Commission sought to determine “under what circumstances data processing, computer information, and message switching services . . . should be subject to the provisions of the Communications Act.”<sup>5</sup>

While the technologies of this era were different, the basic architecture of the regulatory problem remains familiar. Companies, like Electronic Data Systems, (founded by entrepreneur Ross Perot), located at the “ends” of the telephone network were offering computer services that ran “over” AT&T’s wires. Conceptually, firms such as EDS were in a similar position to Netflix or Wikipedia today, while the role of AT&T is now played by such carriers as Comcast, Verizon, and AT&T.

As noted, the Commission was motivated by an interest in avoiding overregulation in the new data processing market, and in protecting that nascent industry from the monopoly carrier. The *First Computer Inquiry* achieved the first goal by exempting data processing services and from common carrier regulation.<sup>6</sup> It accomplished its second goal with the *Inquiry’s* “maximum separation” rule, which required any incumbent carrier to form an entirely separate corporate entity in order to offer data processing or computer networking services. The FCC believed that if AT&T was allowed to freely enter the market for network services, it could give itself unfair advantages to quickly eliminate competitors. The Commission reasoned that the Bell companies would “favor their own data processing activities by discriminatory services, cross subsidization, [and] improper pricing,” and therefore required that any carrier seeking to provide both transmission and processing capabilities segregate its offerings into “separate corporate entities.”<sup>7</sup>

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4 *In the Matter of Regulatory and Policy Problems Presented by the Interdependence of Computer and Communications Services and Facilities*, Notice of Inquiry 7 F.C.C. 2d 11 (1966) [hereinafter *Computer I Notice*], at ¶ 2.

5 *Computer I Notice*, at ¶¶ 18–19.

6 *In the Matter of Regulatory and Policy Problems Presented by the Interdependence of Computer and Communications Services and Facilities*, Tentative Decision of the Commission, 28 F.C.C. 2d 291 (1970) [hereinafter *Computer I Initial Decision*], at ¶ 35.

7 *Computer I Initial Decision*, at ¶¶ 33, 36; see also *In the Matter of Regulatory and Policy Problems Presented by the Interdependence of Computer and Communications Services and Facilities*, Final Decision and Order, 28 F.C.C. 2d 267 (1971), at ¶ 10 (maintaining decision reached in *Computer I Initial Decision*) [hereinafter *Computer I Final Decision*].

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To deal with cases where the distinction between data “transmission” and “processing” was less clear, the Commission defined a category of “hybrid” services<sup>8</sup> that were regulated according to the regime that governed the “predominant” offering: Where transmission predominated, the service would be subject to regulation under the Communications Act; where data processing predominated, only the maximum separation rule applied.<sup>9</sup> Importantly, the Commission deferred further guidance on the distinction within hybrid services. Instead, the FCC offered to conduct “ad hoc evaluations . . . to determine whether a particular package offering is essentially data processing or communication.”<sup>10</sup>

In 1979, the Commission’s *Second Computer Inquiry* eliminated the confusing “hybrid” service and established a regime with just two layers: basic and enhanced services.<sup>11</sup> The new taxonomy created the first clear horizontal regulatory model in FCC history,<sup>12</sup> with its rough recognition of a transport layer and an application layer. *Computer II* put all firms offering services over the network, into the enhanced category<sup>13</sup> and exempted them from most regulation.<sup>14</sup> At the same time, it maintained the common carriage rules for the underlying transportation services that supported this growing industry.<sup>15</sup>

The *Computer II* approach was the governing regulatory regime during the period of the exponential growth during the 1980s and 1990s in the computer networking and internet industries. Notably, the explosion in network services during this time casts serious doubt on the claims that any regulation under Title II is

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8 *Computer I Initial Decision* at ¶ 39; *Computer I Final Decision* at ¶ 31 & n.11.

9 *Computer I Initial Decision* at ¶¶ 41–42; *Computer I Final Decision* at ¶¶ 31–32.

10 *Computer I Final Decision* at ¶¶ 27; 33.

11 *In the Matter of Amendment of Section 64.702 of the Commission’s Rules and Regulations, Tentative Decision and Further Notice of Inquiry and Rulemaking*, 77 F.C.C.2d 384 (1980) ¶ 88-102 [hereinafter *Computer II Final Decision*].

12 See Richard S. Whitt, *A Horizontal Leap Forward*, MCI Public Policy Paper (Mar. 2004).

13 *Computer II Final Decision*, at ¶ 144 (There is “no regulatory distinction between enhanced services.”); see also *id.* at ¶¶ 5, 96, 109.

14 *Computer II Final Decision*, at ¶¶ 107, 119–120.

15 *Computer II Final Decision*, at ¶¶ 7, 12. Basic services included voice services. The revised rules also limited the application of the “maximum separation” rule to only AT&T and GTE (now known as Verizon).

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necessarily inconsistent with economic growth. To the contrary, the clever design of *Computer II*, which avoided overregulation of application-layer industries while simultaneously protecting them from carrier threats of blocking or discrimination, actually fueled growth in application-layer services. Thus, the *Computer II* model can be understood as a great boon to firms like AOL and MSN, which provided low-cost network services simply by buying volumes of telephone numbers, as well as to the first wave of “dot-com” firms, such as Netscape or Yahoo, which were able to reach users without paying costly termination fees to carriers.

The *Computer II* model survived until the early 2000s. It was codified in the Telecommunications Act of 1996, with merely a change in nomenclature: an “enhanced service” was effectively renamed to “information service,” and “basic service” became “telecommunications service.”<sup>16</sup> While *Computer II* was largely codified in statute, some details of the regime were modified by the Commission’s lengthy *Third Computer Inquiry*,<sup>17</sup> which, most notably, eliminated the “maximum separation” rule.<sup>18</sup>

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16 The Act’s definition of a “telecommunications service” — the commercial offering of the transmission of user information between two points without any change to the information — mirrored the Commission’s understanding of a “basic service” under *Computer II*. Compare 47 U.S.C. § 153(50), 153(53) (reassembled above) with *Computer II Final Decision*, at ¶ 96 (basic service is “offers a pure transmission capability over a communications path that is virtually transparent in terms of its interaction with customer supplied information”); see also *Computer II Final Decision*, at ¶ 5.

Similarly, its definition of “information service” — “the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications” — sounds in *Computer II*’s “enhanced service” definition. Compare 47 U.S.C. § 153(24) (above) with *Computer II Final Decision*, at ¶ 97 (in enhanced service, for example, “applications are used to act on the content, code, protocol, and other aspects of the subscriber’s information”); see also *Computer II Final Decision*, at ¶ 5.

For more on the similarities between *Computer II* and the Telecommunications Act of 1996, see *In the Matter of Federal-State Joint Board on Universal Service*, Report to Congress, 13 F.C.C. Rcd. 11,501 (1998), at ¶ 21 (“[W]e find that Congress intended the categories of “telecommunications service” and “information service” to parallel the definitions of “basic service” and “enhanced service” developed in our *Computer II* proceeding . . . .”); see also *National Cable & Telecommunications Ass’n v. Brand X Internet Services*, 545 U.S. 967, 977 (2005) (“The definitions of the terms telecommunications service and information service established by the 1996 Act are similar to the *Computer II* basic-and enhanced-service classifications.” (quotation marks omitted)); *In the Matter of Framework for Broadband Internet Service*, Notice of Inquiry, FCC GN Docket No. 10-127 (2010), at 13 (the Telecommunications Act of 1996 “codif[ie]d] the Commission’s distinction” from the *Computer Inquiries*) Kevin Werbach, *The Network Utility*, 60 DUKE L.J. 1761, 1774-75 (2011) (noting subtle difference in definitions).

17 *Third Computer Inquiry*, 50 FED. REG. 33581 (Aug. 20, 1985). This final proceeding in the trilogy of *Inquiries* lasted over a decade, spawning a plethora of orders and related litigation. E.g., *In the Matters of Amendment of Sections 64.702 of the Commission’s Rules and Regulations (Third Computer*



## B. From *Computer II* to Information Service

Until the turn of the millennium, the internet industry — that is, the set of application-layer data business that depended on the networked telecommunications infrastructure — blossomed under a regime that both deregulated its services, and protected it from carrier interference under Title II of the Communications Act of 1934. Shortly thereafter, the Commission sought to preserve these critical goals under a new regulatory structure. It moved to an alternative regime that reclassified all internet services — including the underlying carrier services — as “information services,” while still preventing carrier abuses through the enforcement of net neutrality norms.

In 2000, the Commission began considering the question of the appropriate classification for broadband services, beginning with the puzzle posed by cable internet service providers. The cable broadband product vertically integrated many of the functions that were sold separately by “enhanced service” providers like America Online. (In fact, one of the justifications for the AOL-Time Warner merger in 2000 was just such integration.) Cable providers therefore seemed to be offering what under the *Computer Inquiries* model would have been two services: a telecommunications service, and an information service. Consequently, based on the statutory text of the Telecommunications Act (which, as we have noted, codified the *Computer II* regime), the Ninth Circuit concluded that cable operators were clearly offering both.<sup>19</sup>

In 2002, the Commission departed from that interpretation derived from *Computer Inquiries*. Instead, it reclassified all of the layers of cable modem service as one complete “information service.” This designation had the critical effect of exempting it from the regulatory structure of Title II. The Commission’s reclassification rested on a few critical facts. First, the Commission compared the commercial offering of a cable

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*Inquiry*); and *Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Thereof Communications Protocols under Section 64.702 of the Commission’s Rules and Regulations*, 104 F.C.C. 2d 958 (1987); *In the Matter of Computer III Remand Proceedings: Bell Operating Company Safeguards and Tier 1 Local Exchange Company Safeguards*, 6 F.C.C. Rcd 7571 (1991); *California v. FCC*, 905 F.2d 1217 (9th Cir. 1990); *California v. FCC*, 4 F.3d 1505 (9th Cir. 1993); *California v. FCC*, 39 F.3d 919 (9th Cir. 1994). In the end, *Computer III* replaced the “maximum separation” rule with a variety of technical rules mandating interconnection and a series of accounting safeguards to prevent cross-subsidization and potentially anticompetitive pricing practices.

18 The motivation to remove the maximum separation rule was driven, in part, by a Chicago School-based understanding of the benefits of vertical integration. But as we explain further, such an understanding of vertical integration understates the possibility for network platforms to make anticompetitive use of vertical agreements by, for example, exclusion.

19 *AT&T Corp. v. City of Portland*, 216 F.3d 871 (9th Cir. 2000)

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modem service provider with the predominant alternative at the time: a dial-up internet connection offered by an independent provider like Earthlink or AOL (before its merger). Such internet service providers typically offered a bundle of internet services that were not themselves separable and had no separate legal status: a subscription to AOL came with access to an aol.com email address, to AOL-based newsgroups, as well as to a DNS (domain name system).<sup>20</sup> So too with cable modem service: a cable modem subscriber had access, for example, to a [provider].net email address, a DNS, and other related services. Thus, because dial-up internet services were considered information services,<sup>21</sup> the Commission reasoned that cable modem service must also be an information service.<sup>22</sup>

Critical to the Commission's decision was its enigmatic conclusion that the "telecommunications component is not . . . separable from the data-processing capabilities of the [cable modem] service."<sup>23</sup> With dial-up internet access providers, such as AOL, the transmission component was separately sold and provided by the phone company. By contrast, the Commission noted that, at the time, no "cable modem service provider ha[d] made a stand-alone offering of transmission for a fee directly to the public."<sup>24</sup> Hence, the Commission found that "the telecommunications is part and parcel of cable modem service," and "is integral to its other capabilities" such as email and newsgroups. The conclusion that this transmission capability was inseparable from the rest of the commercial offering, questionable at the time, seems clearly now to be erroneous,<sup>25</sup> given the widespread demand for independent services that compete with a provider's bundled offering. But this is to get ahead of ourselves.

The Commission's *Cable Modem Order* was challenged all the way to the Supreme Court in *Brand X*.<sup>26</sup> Although *Brand X* is a favorite of administrative law aficionados for

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20 *In re Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*, 17 FCC Rcd. 4798 ¶ 10 (2002) [hereinafter *Cable Modem Order*]

21 *Cable Modem Order* at ¶ 38.

22 *Cable Modem Order* at ¶ 38.

23 *Cable Modem Order* at ¶ 39.

24 *Cable Modem Order* at ¶¶ 39-40.

25 See *infra* Part.

26 *National Cable & Telecommunications Association v. Brand X Internet Services*, 545 U.S. 967 (2005).

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its discussion of *Chevron*,<sup>27</sup> the decision is, at its core, about telecommunications law. The majority in *Brand X* found sufficient ambiguity in the Telecommunications Act's definition of "telecommunications service" — "the offering of telecommunications for a fee directly to the public" — that it was willing to defer to the Commission's conclusion that cable modem service fell outside of its ambit.<sup>28</sup> In particular, the Court noted that the critical question (for the *Cable Modem Order*) was whether "from the consumer's point of view" the data transmission service is used "always in connection with the information-processing capabilities."<sup>29</sup> The Court was persuaded that it was: The transmission component, after all, was (in the Commission's view) "part and parcel" of the rest of the service.<sup>30</sup> Because the Court determined that "offering can reasonably be read to mean a 'stand-alone' offering," the Commission need not treat "the underlying telecommunications used to transmit that service" as a separate "offer" under the Telecommunications Act's regime.<sup>31</sup>

Although the Court was willing to defer to the Commission's conclusion in the *Cable Modem Order*, some members were at least a little doubtful. Justice Breyer noted that the Commission's interpretation "just barely" fell within the "scope of the [FCC's] statutorily delegated authority."<sup>32</sup> Three justices also dissented, arguing that "the telecommunications component of the cable-modem service retains such an ample independent identity that it *must* be regarded as being on offer" separately.<sup>33</sup> Despite this skepticism from four Justices, the Court upheld the Commission's *Cable Modem Order*. With the victory in *Brand X* at its back, the Commission extended the

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27 *Chevron USA, Inc. v. Natural Resources Defense Council*, 467 U.S. 837 (1984); see also *Brand X*, 545 U.S. at 982–83 (under *Chevron*, an agency interpretation of an ambiguous statute can override prior judicial interpretation).

28 47 U.S.C. § 153.

29 *Brand X*, 545 U.S. at 988

30 *Brand X*, 545 U.S. at 988 (quoting *Cable Modem Order* at ¶ 39)

31 *Brand X*, 545 U.S. at 988

32 *Brand X*, 545 U.S. at 1003 (Breyer, J., concurring).

33 *Brand X*, 545 U.S. at 1008 (Scalia, J., dissenting) (emphasis added). Justices Souter and Ginsburg joined the dissent.

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“information service” designation to internet access via DSL (digital subscriber line),<sup>34</sup> and other physical platforms,<sup>35</sup> including wireless.<sup>36</sup>

These various reclassification orders threatened to undermine the Commission’s long-held regulatory aim of protecting application layer companies from the threat of discrimination and blocking by carriers. Former Commission Chairman Michael Powell proposed that some behavior once prohibited by Title II would still be punished under a Net Neutrality regime that could be enforced even under the new classification. In a 2004 speech, Powell proposed four “Internet Freedoms,”<sup>37</sup> which were later codified as a policy statement,<sup>38</sup> and served as a baseline for the Commission’s *Open Internet* (Net Neutrality) *Order*.<sup>39</sup> Notably, in 2005, the Commission seems to have assumed that it retained authority to enforce its policy statement under its Title II powers: Faced with the first major complaint regarding the blocking of internet traffic, the Commission settled with Madison River Communications over the claim that it was violating Section 201 of the Telecommunications Act of 1996.<sup>40</sup> Since reaching that

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34 *Wireline Broadband Report and Order*, 20 F.C.C. Rcd. 14863. [hereinafter *DSL Classification Order*]

35 *United Power Line Council’s Petition for Declaratory Ruling Regarding the Classification of Broadband Over Power Line Internet Access Service as an Information Service*, 21 FCC Rcd. 13281 (2006).

36 *Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks*, 22 FCC Rcd 5901 (2007).

37 Michael K. Powell, Chairman, Federal Communications Commission, Speech, *Preserving Internet Freedom: Guiding Principle for the Industry* (Feb. 8, 2004), available at [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-243556A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-243556A1.pdf)

38 Federal Communications Commission, *In the Matters of Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, et al.*, Policy Statement, GN Docket No. 00-185, 20 F.C.C.R. 14986 (2005).

39 *In the Matter of Preserving the Open Internet Broadband Industry Practices*, FCC 10-201 (Dec. 23, 2010), available at [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-10-201A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-10-201A1.pdf) [hereinafter *Open Internet Order*]

40 Federal Communications Commission, *In the Matter of Madison River Communications, LLC, and affiliated companies*, Consent Decree, File No. EB-05-IH-0110 (2005). The Consent Decree notes that the Commission was investigating “Madison River’s compliance with section 201(b) . . . with respect to the blocking of ports used for Voice over Internet Protocol (“VoIP”) applications.” *Id.* Section 201(b) provides that “[a]ll charges, practices, classifications, and regulations for and in connection with such communication service, shall be just and reasonable, and any such charge, practice, classification, or regulation that is unjust or unreasonable is declared to be unlawful.” 47 U.S.C. § 201(b).

settlement, however, the Commission has faced stiff legal challenges to its authority to enforce these principles, losing before the D.C. Circuit in 2010,<sup>41</sup> and again in 2014.<sup>42</sup>

## II. PRESENT OPTIONS

For half of a century, the Commission has maintained some system for policing the power of carriers to block or discriminate against application layer businesses attempting to reach customers over carrier wires. The recent invalidation of the Commission's *Open Internet Order* in *Verizon* casts that basic premise of Commission regulation into doubt for the first time in the history of modern computer networking. Unsurprisingly, the Commission has responded by indicating that it will seek to reinforce its authority by whatever means necessary.<sup>43</sup> The operative question, then, is how this can most easily be accomplished.

The decision to sweep the transmission of internet traffic outside of the definitional scope of "telecommunications service" has had significant implications for the ability of the Commission to regulate such traffic. The Telecommunications Act of 1996 explicitly provides that a "carrier shall be treated as a common carrier under this chapter *only to the extent that it is engaged in providing telecommunications services.*"<sup>44</sup> Thus, where a facilities owner — a carrier — is providing a service other than telecommunications (as the term is regulatorily defined), the Commission has disabled itself from treating it as a common carrier.<sup>45</sup> The Commission has twice sought

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

42 *Verizon v. FCC*, No. 11-1355 (D.C. Cir. Jan 14, 2014).

43 Federal Communications Commission, *New Docket Established to Address Open Internet Remand, Public Notice*, GN Docket No. 14-28 (Feb. 19, 2014), available at <http://www.fcc.gov/document/new-docket-established-address-open-internet-remand> (establishing a new docket to consider path forward based on "authority under section 706 and all other available sources of Commission authority" (emphasis added)).

44 47 U.S.C. § 153(51); see also *Brand X*, 545 U.S. at [#] ("The Act regulates telecommunications carriers, but not information-service providers, as common carriers."). The provision was originally codified at 47 U.S.C. § 153(49), was moved to subsection 51 following subsequent amendments to the Telecommunications Act of 1996. See PUB. L. 105-33, § 3001(b) (1997) (adding new (49) and renumbering) and PUB. L. 111-260, § 101 (2010) (renumbering).

45 What it means to be "treated as a common carrier" remains unclear and fiercely contended. See, e.g., *Cellco Partnership v. FCC*, 700 F.3d 534 (2013).

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alternative ways of regulating internet traffic. Both attempts were squarely rejected by the D.C. Circuit. First, the Commission's attempt to rely on its ancillary authority was rejected in *Comcast*;<sup>46</sup> more recently in *Verizon*, the court held that the Commission's *Open Internet Order* imposed rules tantamount to common carrier regulation in violation of the Communications Act.<sup>47</sup>

Others have expressed optimism that Section 706 of the Telecommunications Act might provide the FCC with the authority to enforce basic network neutrality norms.<sup>48</sup> We do not express any opinion on this hypothesis: Our present focus, instead, is on the Commission's traditional power to regulate carriers. Some have called for the Commission to overturn its 2002 reclassification decision. As explained in more detail further below, we agree that the *Cable Modem Order's* conclusions no longer have a substantial basis in fact. However, we begin with a more modest solution: a narrower application of the Commission's strongest and most secure grant of congressional power: Title II of the Telecommunications Act.

### A. Net Neutrality for a Second Stage

Over the course of Verizon's challenge to the *Open Internet Order*, the FCC and Verizon articulated distinct and competing visions of the nature of the relationship between a broadband carrier and a content provider. The Commission argued that content providers were not, in any meaningful sense, a "customer" of a broadband carrier: To the contrary, the Commission argued that broadband subscribers are the *only* necessary customers, and the relationship between a content provider and the carrier is simply *derivative* of any request by that customer to view specified content.<sup>49</sup> The D.C. Circuit rejected this construction.<sup>50</sup> Instead, it adopted the view proffered by Verizon, which argued that there were two distinct, separable, and equally important commercial relationships at issue: (1) the broadband provider's contract with "retail end-users" as well as (2) its relationship with "other providers that seek to deliver their

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

47 *Verizon v. FCC*, No. 11-1355 (D.C. Cir. Jan 14, 2014). The decision was reissued on January 15, 2014 to correct a typographical error.

48 *E.g.*, Wheeler Silicon Flatirons speech; Narechania draft.

49 FCC Brief at 60–63, *Verizon v. FCC*, No. 11-1355 (D.C. Cir. Jan. 14, 2013).

50 Slip op. at 51. But compare *City of Arlington v. FCC*, 133 S. Ct. 1863 (2013) (under a hypothetical statute, a court must defer to agency's definition of "common carrier").

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own services over the common carrier’s facilities.”<sup>51</sup> The D.C. Circuit agreed that these were better treated as distinct relationships.<sup>52</sup> But in so doing, the court stated that it would be “logical to conclude that [a broadband provider] may be a common carrier with regard to some activities but not others.”<sup>53</sup> That is, by parsing these two commercial relationships, the court has established the possibility for the distinct regulatory treatment of these separable transactions.

Thus, rather than treating *all* internet traffic as monolithic entity subject to the same regulatory treatment, the FCC can split the facilities-based services offered by broadband carrier into two discrete transactions: first, a *call* by broadband subscribers to request data from a third-party content provider; and second, a content provider’s *response* to the subscriber. Imposing this constructed two-stage call-and-response frame on the structure of internet traffic — a frame that is derived from the D.C. Circuit’s recent decision in *Verizon* — allows the Commission to separately consider the appropriate regulatory treatment for each.

This creates an obvious opportunity for the Commission to classify — in the first instance — one of these relationships as subject to some form of regulation under Title II. In particular, the Commission should consider the appropriate regulatory treatment of traffic that is sent by content providers in response to requests from retail end-users.<sup>54</sup> Classifying such “sender-side” traffic as a telecommunications service is, perhaps surprisingly, consistent with the *Cable Modem Order*. As we described above, the Commission’s analysis in that *Order* focused squarely on the broadband provider’s relationship with the end user: Its consideration of the “business relationships” between “cable operators” and “consumers” examined only *retail* subscribers to broadband

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51 Verizon Reply Brief at 6–8, *Verizon v. FCC*, No. 11-1355 (D.C. Cir. Jan. 14, 2013).

52 Slip op. at 51.

53 Slip op. at 51 (citing *NARUC v. FCC*, 533 F.2d 601, 608 (D.C. Cir. 1976)); see also *FCC v. Midwest Video*, 440 U.S. 689, 701 n.9 (1979)

54 Here, we use the term “response” somewhat loosely. We do not mean to cabin the applicability of our proposed framework to only particularized sorts of real-time “dialogues” between a user and a content provider. The frame is equally applicable to asynchronous communications. (Imagine a user, who hosts her own email service, that receives an email days after an offline communication with an acquaintance.) Rather, the point is that the commercial offer to deliver *incoming* traffic (incoming from the perspective of the access network) is distinguishable from the offer to the consumer for a broadband subscription. Happily, the offer to deliver *unwanted* incoming traffic, such as spam or malware, is also distinguishable, creating space for the Commission to create narrow exceptions for *reasonable network management*, as it had in the Open Internet Order.

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service.<sup>55</sup> Indeed, even the Supreme Court agreed that the critical question addressed in the *Cable Modem Order* was what a broadband subscription looked like “from the consumer’s point of view.”<sup>56</sup> Thus, this specific focus on the set of bundled services that were sold to broadband subscribers excluded any analysis of the opposing offer to charge for the delivery of traffic in the second stage of the two-stage framework described above.<sup>57</sup>

Despite this exclusion, both the D.C. Circuit and the Commission have proceeded on the assumption that the decision reached in the *Cable Modem Order* applies equally across both the call and the response transactions.<sup>58</sup> But the decision in *Verizon* makes clear that that need not be so. In fact, a closer analysis of the service that a broadband provider offers to a content provider (in a second-stage, response transaction) bears none of the hallmarks of an information service under the *Cable Modem Order*. When Verizon delivers Netflix content to Verizon subscribers, it does not also offer Netflix “e-mail, newsgroups, and the ability to create a web page.”<sup>59</sup> Instead, Verizon provides a discrete transmission service: it delivers traffic from the point of interconnection to a specified subscriber.

Verizon wants to now charge for this delivery.<sup>60</sup> Notably, the *Cable Modem Order*’s conclusion rested in part on the observation that no broadband “provider ha[d] made a stand-alone offering of transmission for a fee.”<sup>61</sup> But Verizon’s new proposal is exactly that:<sup>62</sup> It is a stand-alone offer of “transmission” “between . . . points” that

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55 *Cable Modem Order* at ¶ 30.

56 *Brand X*, at 988.

57 Even to the extent that the *Cable Modem Order* considered content offered through internet service providers, it emphasized that this content is typically bundled — from the consumer’s perspective — with the broadband service. See *Cable Modem Order* at ¶ 52–53 (arrangements with unaffiliated ISPs offer an integrated service for which both the provider and the ISP take dual responsibility). The same cannot be said for YouTube or Netflix content that is delivered by Comcast. Cf. [Netflix Speed Reports] (Netflix reporting of differences between all the facilities owners over which it sends content).

58 Slip op. at 53-54 (noting classification decision as applicable).

59 *Cable Modem Order* at ¶ 37.

60 Slip op. at 37.

61 *Cable Modem Order* at ¶¶ 39-40.

62 Slip op. at 37 (“[B]ut for the Open Internet Order [Verizon] would be exploring . . . commercial arrangements” to charge for the delivery of sender-side traffic.)



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Netflix (for example) has “specified.”<sup>63</sup> This is paradigmatic “telecommunications service” that may be subject to regulation under Title II. That is, the transmission of data from the Internet *to* an individual subscriber not only retains an “independent identity that it must be regarded as being on offer” — it seems to be the *only* identity that can be regarded as on offer.<sup>64</sup> Thus, relying on the distinction drawn by Verizon in its challenge to the *Open Internet Order*, the Commission can classify commercial offers to deliver second-stage traffic, beginning at the point of interconnection, as a telecommunications service under the 1996 Act.

### B. Changed Circumstances

As an alternative to the limited classification of second-stage traffic, the Commission could return to its original position that the transmission of all internet traffic is a “telecommunications service.”<sup>65</sup> That is, rather than simply cabining the reach of *Cable Modem Order* to its original context — the call transaction — the Commission could undertake to address both stages of traffic by revisiting its conclusions in the *Cable Modem Order* (and the similar proceedings that followed<sup>66</sup>).

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63 47 U.S.C. § 153. Here, the “user” is Netflix, and “points . . . specified” are the point of interconnection and the “calling” subscriber.

64 *Brand X*, 545 U.S. at 1008 (Scalia, J., dissenting).

65 There is one further wrinkle with regard to mobile internet service. Section 332 of the Telecommunications Act states that providers of “commercial mobile services” are common carriers, whereas providers of other mobile services are exempt from common carrier regulation. The Commission has concluded that wireless transmission of internet traffic both “*is* an ‘information service’ and *is not* a ‘commercial mobile service.’” *Cellco*, 700 F.3d at 538. Thus, “mobile-data providers are statutorily immune, perhaps twice over, from treatment as common carriers.” *Id.*

Reclassification for wireless broadband would require undoing both layers of protection. For present purposes we focus on the question that is common to all physical platforms for the transmission of internet traffic: the information service designation. For now, it suffices to note that the FCC would have to also address the “commercial mobile service” finding of the *Wireless Classification Order*. 22 FCC Rcd 5901 ¶ 37 (2007). That would require the Commission to conclude that wireless internet service is “for profit,” is an “interconnected service,” and is available “to the public or . . . to a substantial portion of the public,” as those terms are defined in the Telecommunication Act. 47 U.S.C. § 332(d)(1).

66 *See supra* notes [##].

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On this point, it is important to emphasize that no legal bar prevents the Commission from undoing its decision in the *Cable Modem Order*. Indeed, the Supreme Court has repeatedly recognized that agencies have “ample latitude to adapt their rules and policies to the demands of changing circumstances.”<sup>67</sup> Indeed, changed circumstances seem to have invalidated most of the factual premises underlying the Commission’s 2002 *Cable Modem Order*. That decision rests on a now outdated understanding of cable-based broadband offerings: Subscribers then “d[id] not need to contract separately” for “discrete services or applications.” Not only were these applications “part and parcel” of the subscription package,<sup>68</sup> but (in the view of the *Order*) they formed a critical part of the *value* of the service to consumers.<sup>69</sup>

It is no longer clear that these additional services add measurable value to broadband subscriptions. To be sure, the *Cable Modem Order* acknowledged the existence of competing content at the time it was adopted: It noted that

“by ‘click-through’ access,” cable modem service offers “many functions from companies with whom the cable operator has not even a contractual relationship. For example, a subscriber . . . is free to download and use . . . a web browser from Netscape, content from Fox News, and e-mail in the form of Microsoft’s ‘Hotmail.’”

The *Order*, however, de-emphasized the import of these options, suggested that they were simply redundant because such “functions currently are all [also] included in the standard cable modem service offering.”

The Commission did, however, wisely note the inchoate nature of the broadband business and conceded that “[c]ustomers, for their part, are still learning the capabilities of cable modem service and deciding which applications they prefer.” The intervening decade of experience has provided the Commission with vast data regarding actual consumer preference between those affiliated applications that were critical to its determination that broadband access was properly classified an information service, and other unaffiliated options. These data indicate that, today, separate email services, such as Gmail and Outlook.com (formerly Hotmail), dominate those that are affiliated

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67 *Motor Vehicles Manufacturers Association of the United States v. State Farm Mutual Automobile Insurance Co.*, 463 U.S. 37, 42 (1983).

68 *Cable Modem Order* at ¶¶ 11, 39.

69 *Cable Modem Order* at ¶ 11 (accessing “unaffiliated” content “may require the subscriber to pay those entities an additional fee”); see also *Brand X*, 545 U.S. at 988.

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with broadband service.<sup>70</sup> And the majority of internet traffic is for content outside of the “services or applications” that are provisioned through the broadband subscription.<sup>71</sup>

Furthermore, where the Commission once expressed concern that “additional fee[s]” might deter a broadband subscriber from accessing “unaffiliated” content, the recent proliferation of paid broadband-based services, such as Netflix, suggests that such a concern is no longer well-founded.<sup>72</sup> That is, consumers are not only willing to access unaffiliated advertisement-supported content, they are also willing to pay to access content outside of that which is built into a broadband carrier’s offering.<sup>73</sup>

Taken together, this evidence suggests a consumer preference to use the provider’s transmission service to connect to other content services. Unlike the conclusions reached in the *Cable Modem Order*, end-users do not use broadband transmission capabilities “always in connection” with the services offered by the provider.<sup>74</sup> To the contrary, end users increasingly view broadband service as providing a predominantly transmission service that connects them to content services provided by other entities, rather than as an integrated information service.<sup>75</sup> Viewed on the terms of *Cable Modem Order* — which emphasized the retail subscriber’s view of the commercial “offer”<sup>76</sup> — the information service designation based on bundled services now seems quaint.

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70 [cite]. See also *Cable Modem Order* at ¶ 25 (contrast between outside service providers and affiliated services).

71 See Sandvine, *Global Internet Phenomena Report*, (H2 2013), available at <https://www.sandvine.com/downloads/general/global-internet-phenomena/2013/2h-2013-global-internet-phenomena-report.pdf> (28% of traffic associated with Netflix, 17% with YouTube, 7% with BitTorrent, 3% with iTunes, 1% each for Amazon Video, Hulu, and Facebook, for a total of 58%).

72 Netflix has 33 million U.S. members, as compared to an estimated 115 million households in the U.S. Without controlling for household broadband access, Netflix *alone* has achieved a 29% market penetration. Compare [Netflix Letter to Shareholders Q4 2013] with [U.S. Census].

73 *Supra* note []; (28% traffic for Netflix, 17% for YouTube)

74 *Brand X*, 545 U.S. at 988.

75 For a list of capabilities that even the *Cable Modem Order* considers to be within the “basic level” transmission functions, see ¶ 17 (“physical connection between the cable system and the Internet by operating or interconnecting with Internet backbone facilities . . . . protocol conversion, IP address number assignment, domain name resolution through a domain name system (DNS), network security, and caching”).

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One bundled service bears special attention. Of critical importance to practically every broadband subscriber is DNS service. Stated simply, DNS service allows a web user to reach a particular website: `www.fcc.gov`, for example, is a signifier for a unique numerical address — an IP address — such as `192.104.54.5`. A DNS service acts as an automated phone book, translating between the easily-remembered website name and its unique address. Standard web traffic, which still comprises roughly 10% of all internet traffic,<sup>77</sup> depends on accurate DNS service. End users, then, would seem to contract for DNS service when they subscribe for broadband access.<sup>78</sup>

That broadband subscribers contract for DNS service, however, need not mean that they are purchasing an information service. Indeed, even the *Cable Modem Order* itself provides no clear guidance as to whether DNS services are “data processing” or “transmission.”<sup>79</sup> Turning to the statute, telecommunications is defined to mean “the transmission, between or among points specified by the user, of information of the user’s choosing.” DNS service, then, merely enables telecommunications: In seeking to visit a website, the user identifies the information they want (the website) and the location from which they want it (`www.fcc.gov`), and requests that it be transmitted back to them. Any intermediate action to translate the website name to a particular address<sup>80</sup> is no more than a functional step carried out in service of that transmission.

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76 *Brand X*, 545 U.S. at 988; see also *Cable Modem Order* at ¶ 35 (examining “the functions that cable modem service makes available to its end users”).

77 Sandvine, *Global Internet Phenomena Report*, (H2 2013) (HTTP traffic comprises 9% of internet traffic).

78 Although most DNS service comes with broadband service, it is increasingly offered on a stand-alone basis by independent entities. E.g., OpenDNS, Google DNS.

79 Compare *Cable Modem Order* at ¶ 17 (“[B]asic” “functions” to “transmit data” include “domain name resolution through a domain name system (DNS)”) with ¶ 38 (“[I]n many ways” “DNS constitutes a general purpose information processing . . . capability”).

80 The fact that either the address or the content might be cached, the fact that different DNS services might point to two distinct but identical copies of the same website, or even that a single DNS might dynamically cycle through different locations for the same content need not change this conclusion. The instruction is best understood as a command to retrieve information from *any* of the available end-points that matches `www.fcc.gov`. This is a reasonable construction of the phrase “points specified by the user;” the statute does not require that user command be so specific as to identify the IP address with particularity. But see Christopher Yoo, *Is There a Role for Common-Carriage in an Internet-Based World?*, 51 HOUSTON L. REV. 545, 567 (2013) (“The fact that DNS determines from which of the multiple available endpoints a particular query will be served makes it hard to characterize Internet communications as being between “points specified by the user” as required by the definition of telecommunications service.”). The Commission can permissibly construe the “points specified by the user” as simply “my computer” and “FCC,” and

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Other policy considerations undercut the prevailing “information service” designation. The *DSL Classification Order* — one of the proceedings that followed quickly after the *Cable Modem Order* — concludes that an “access requirement impedes deployment of innovative wireline broadband services.”<sup>81</sup> The Commission has since rejected this reasoning. In its *Open Internet Order*, the FCC stated clearly that “openness is critical to . . . increased end-user demand for broadband, which drives network improvements.”<sup>82</sup> That is, the Commission now believes that the statutory aims of the Telecommunications Act are more easily met through regulated access rules rather than deregulated access.

“Regulatory agencies do not establish rules of conduct to last forever,” and the “forces of change do not always or necessarily point in the direction of deregulation.”<sup>83</sup> The Commission retains the ability to re-examine the conclusions it reached in the *Cable Modem Order* and its subsequent related decisions. A number of “chang[ed] circumstances” support the decision to treat broadband access as a telecommunications service. For one, consumer behavior suggests the users increasingly view broadband as a transmission service providing access to independent content providers, and other subscription services, rather than as a bundle of applications that rely on an underlying faster-than-dial-up transmission service. That is, the “offer,” which has always been capacious enough to *include* a telecommunications service,<sup>84</sup> is increasingly seen as *predominantly* a telecommunications service.<sup>85</sup> Furthermore, the Commission’s view of how to best promote the statutory aims of the Telecommunications Act have fundamentally shifted:<sup>86</sup> Where the Commission once thought that a non-discrimination

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allow the user to defer to the network’s best judgment as to how to deliver that content. The point is further illustrated by a call forwarding service. Telephone service subscribers can request that incoming calls to them be forwarded to an alternate number, *even before* reaching the end point (that is, the call forwarding is carried out by the network, not by the handset). In such cases, the network will dynamically reroute the call to an appropriate location in order to effectuate the intent of the caller. Yet the use of call forwarding does not transform basic telephone service into an “information service.”

81 *DSL Classification Order*, at ¶ 97.

82 *Open Internet Order*, at ¶ 14.

83 *Motor Vehicles Manufacturers Association of the United States v. State Farm Mutual Automobile Insurance Co.*, 463 U.S. 37, 42 (1983) (alterations and citations omitted).

84 Brand X ; see also dissent.

85 *Cf. Computer I.*

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rule would deter network investment, it now believes that non-discrimination rules will “increase incentives to invest in broadband infrastructure.”<sup>87</sup> Given these “chang[ed] circumstances,” including the shift in the “agency’s view of what is in the public interest,” the Commission can provide an amply reasoned analysis for reinstating its classification of the transmission of internet traffic as a telecommunications service.<sup>88</sup>

### C. Proceeding by Adjudication

So far we have examined two routes for the Commission to consider as it forges a path forward from *Verizon*. But there are more permutations to consider: The Commission has a variety of procedural options, regardless of the substantive path it chooses.

Consider, for example, section 208 of the Communications Act,<sup>89</sup> which gives the Commission the adjudicatory authority to investigate and resolve complaints against common carriers.<sup>90</sup> In particular, it allows the FCC to initiate an inquiry into conduct that is inconsistent with the Commission’s long-held goal of protecting application layer services from untoward carrier behavior. If broadband carriers begin, for example, to discriminate against unaffiliated competing content, the Commission might reconsider its classification decisions through a series of adjudicatory proceedings. One such proceeding might address only second-stage traffic if the alleged violation affects only incoming traffic, or if it involves an interconnection dispute. A subsequent adjudication might expand the scope of inquiry as necessary.

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86 See 47 U.S.C. § 1302(a) (“The Commission . . . shall encourage the deployment on a reasonable and timely basis of advanced telecommunications [broadband] capability to all Americans.”)

87 *Open Internet Order*, at ¶ 14.

88 *State Farm*, 463 U.S. at 57.

89 Although we briefly discuss Section 208 here, we do not mean to opine on the proper scope of the rules that the Commission should impose under Title II. We note only that the Commission has, in the past, noted that it could “forbear . . . from all but a small handful of provisions necessary for effective implementation” of its policy goals. We do not comment on which provisions of Title II are ripe for such forbearance.

90 Section 403 offers similar authority, but allows the Commission to act *sua sponte*. 47 U.S.C. § 403 (“The Commission shall have full authority and power at any time to institute an inquiry, on its own motion, in any case and as to any matter or thing concerning which complaint is authorized to be made . . .”)

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The new Chairman of the Federal Communications Commission has suggested a soft preference for such an incremental approach.<sup>91</sup> The Commission, of course, retains the discretion to choose the mode of policymaking that it believes best:<sup>92</sup> So long as the Commission’s “adjudicative procedures . . . produce the relevant information to mature and fair consideration of the issues,” it is entitled to “proceed by with caution [and] develop[] its standards in a case-by-case manner.”<sup>93</sup>

In other words, the Commission can establish by adjudication that an offer to transmit data sent by a content provider to a subscriber is a “telecommunications service” subject to regulation under Title II.<sup>94</sup> And the Commission can then make an individual determination as to whether the particular practice at issue is “unjust” or an “unreasonable discrimination” against an application-layer service,<sup>95</sup> and enjoin the practice as necessary.<sup>96</sup> This approach has the notable benefit of allowing the Commission to operate on a case-by-case basis,<sup>97</sup> thereby creating room for the flexible administration of policy in a still-evolving technological space.<sup>98</sup>

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91 Wheeler statement.

92 *NLRB v. Bell Aerospace*, 416 U.S. 267 (1974); also *Verizon Telephone Cos. v. FCC*, 269 F.3d 1098 (D.C. Cir. 2001)

93 *Bell Aerospace*, 416 U.S. 267. See also Benjamin Kapnik, *Affirming the Status Quo? The FCC, ALJs, and Agency Adjudications*, 80 GEO. WASH. L. REV. 1527 (reviewing quality of FCC adjudicatory process).

94 See *supra* section [§]

95 47 U.S.C. § 202.

96 We note, for the sake of completeness, that the Commission would likely be unable to impose retrospective fines in cases that present first-of-their-kind departures from governing standards (including settled expectations regarding the reach of various classification decisions). *Verizon Telephone Cos. v. FCC*, 269 F.3d 1098 (D.C. Cir. 2001). Nevertheless, the Commission can clearly order injunctive relief, which the more important — and more practical — remedy.

97 Wheeler speech/statement.

98 See *In the Matters of Formal Complaint of Free Press and Public Knowledge Against Comcast Corporation for Secretly Degrading Peer-to-Peer Applications*, FCC, WC Docket No. 07-52, 23 FCCR 13038 (2008), at ¶¶ 30-32 (arguments in favor of an adjudicatory approach).

CONCLUSION

For nearly a half-century, the Federal Communications Commission has attempted to nurture the growth of the various application-layer industries by protecting them from the potential of owners of basic network infrastructure to block their content and discriminate against their services. The D.C. Circuit's decision in *Verizon v. FCC*, which struck down the Commission's Open Internet Order, has undermined the ability of the Commission to continue its efforts in service of that goal.

The Commission, however, is hardly helpless in the face of this setback. As we have explained, the Commission might follow a previously unconsidered option under Title II of the Communications Act. As Verizon itself argued, a broadband transaction can be understood as occurring in two-stages: a call, and a response. This framework, which was adopted by the D.C. Circuit, allows the Commission to correctly characterize the second stage — the response — as no more than a telecommunications service. Such a conclusion would return the scope the *Cable Modem Order* to its original context, while giving the Commission the ability to protect application service providers from anticompetitive carrier conduct.

Alternatively, the Commission could expand its frame of inquiry to both the call and response, and hold a rulemaking (or adjudication) that examines whether changed circumstances have undermined the Commission's 2002 reclassification of broadband services. As described above, we are confident that the factual premises underlying that decision are now obsolete.

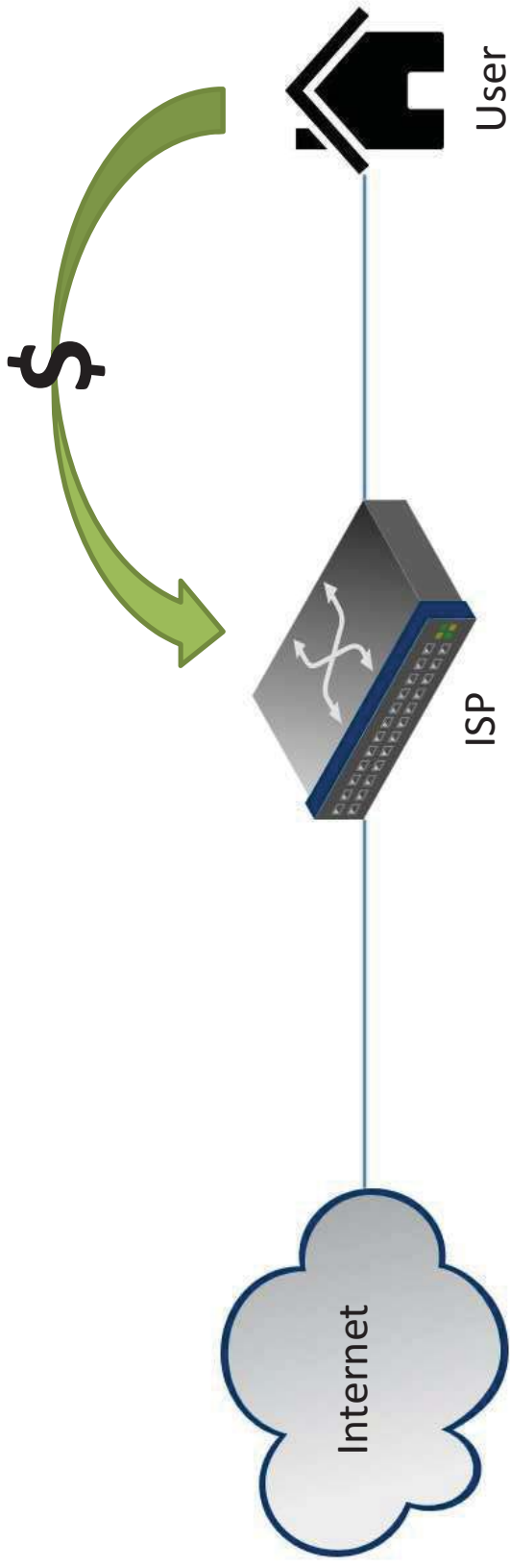
As a legal matter, either possibility is less novel than it first appears. Both resemble the approach taken in the *Computer Inquiries*. Furthermore, the Commission's regulatory authority under Title II is not subject to serious doubt, but is naturally cabined to the context of telecommunications. Most recently, the D.C. Circuit mentioned that, in enacting the Telecommunications Act of 1996, "Congress clearly contemplated that the Commission would continue regulating internet providers in the manner it had previously" — its 2002 Order. In short, we believe that the proposals described here represent the most straightforward and legally sound measures for ensuring the continued growth of the application industries that have blossomed while they remained insulated from the anticompetitive carrier conduct.



# Sender-Side Proposal

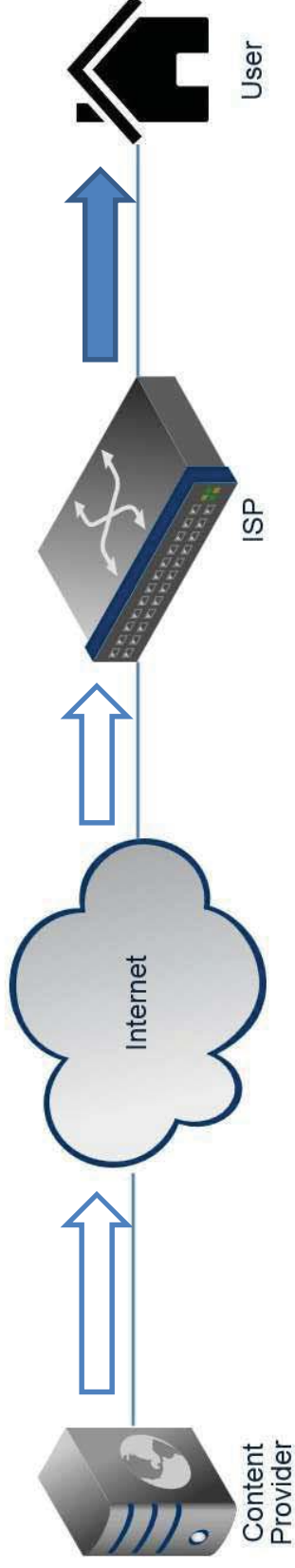
Tejas N. Narechania & Tim Wu

# Traditional Model



- Commercial Offer: ISPs bring users the internet content of their choosing

# “Sender-Side”



- Commercial Offer: ISPs bring content to their users

# Sample Basic Network Diagram

