Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In The Matter of	)	
	)	WC Docket No. 17-108
Restoring Internet Freedom	)	

COMMENTS OF CHARTER COMMUNICATIONS, INC.

Christianna Barnhart
Vice President, Regulatory Affairs
CHARTER COMMUNICATIONS, INC.
1099 New York Avenue, NW
Suite 650
Washington, DC 20001
(202) 621-1900

Samuel L. Feder
Luke C. Platzer
Samuel F. Jacobson
JENNER & BLOCK LLP
1099 New York Avenue, NW
Suite 900
Washington, DC 20001
(202) 639-6000

Counsel for Charter Communications, Inc.

TABLE OF CONTENTS

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In The Matter of	)	
	)	WC Docket No. 17-108
Restoring Internet Freedom	)	

COMMENTS OF CHARTER COMMUNICATIONS, INC.

Charter Communications, Inc. respectfully submits these comments in the above-captioned proceeding.

INTRODUCTION AND EXECUTIVE SUMMARY

For nearly 20 years, the internet was governed by a light-touch regulatory approach that enjoyed bipartisan support. The recognition by both Democratic and Republican Commissions that the internet should not be burdened with excessive regulations allowed the online ecosystem to take root and flourish—and was so successful that the internet has now become one of the many ways we learn, apply for jobs, access healthcare, consume entertainment, and communicate with friends and family. Without the need for heavy-handed regulation, ISPs recognized their customers' fundamental interest in an open internet and fostered the development of this open ecosystem, which has allowed consumers to access the lawful content of their choice and encouraged disruptive development by edge providers and app developers. Importantly, this light-touch framework also spurred continued investment by service providers in their networks, allowing them to deliver ever-faster speeds to consumers and thereby creating the foundation for the huge explosion in innovations.

As one of the country's leading providers of residential broadband internet access services, Charter is firmly committed to an open internet. We are committed to delivering the superior

broadband service that our customers want, need and expect—and that is the foundation upon which our longstanding commitment to an open internet is built. Our customers value our broadband service precisely because they can use it in any way they choose, including to access data-intensive apps such as streaming video and gaming. That is why Charter offers industry-leading base broadband speeds, with even our slowest internet packages starting at (at least) 60 Mbps or higher, with base speeds of 100 Mbps in a growing number of markets and maximum speeds significantly higher. And that is why we don't impose data caps, don't engage in usage-based billing, and don't charge our customers modem rental fees under our new service packages.

Consistent with Charter's pro-customer and pro-broadband approach, we have long put the principles of an open internet into practice in our own business. We do not block, throttle, or otherwise interfere with the online activity of our customers, and we are transparent with our customers regarding the performance of our service. Moreover, we have adopted these policies voluntarily, as part of our business objective of providing a superior broadband experience to our customers. Our "no annual contract" and "no early termination fees" terms of service mean we are held accountable to our customers every day.

Being able to offer the quality services our customers expect requires continuous investment in our network. Much of our success in providing ever-faster broadband and connecting more Americans to our advanced network has been the result of massive investments that we made under the prior light-touch, predictable regulatory environment. Charter is thus broadly supportive of the Commission's efforts to ensure a predictable regulatory environment in which broadband providers can plan such investments reliably.

By contrast, the Commission's reclassification of internet access services as Title II services imposed, upon an innovative and dynamic industry, a regulatory framework that had been

designed for a stagnant, century-old phone system. The broad and vague prohibitions of Title II create a destabilizing regulatory environment that discourages innovation, both in the delivery of service and in the underlying network infrastructure. Of equal or even greater importance, by leaving market participants unclear about which business models, services, or innovations regulators will permit, either today or in the future, this uncertainty undercuts the continuous private investment needed for the internet to flourish. Indeed, capital expenditures have decreased among broadband providers as a whole since the Commission's Title II reclassification decision. One recent study, for instance, found that capital expenditure from the nation's twelve largest internet service providers has fallen by $3.6 billion since the FCC's Title II reclassification, a 5.6% decline relative to 2014 levels.[1] Although various parties may disagree as to the specific size of the decrease, there can be no doubt that private investment in internet infrastructure has been on the decline. The harmful impacts of Title II are industry-wide, and have caused broadband providers to reconsider innovations and investments out of concern that regulators could squelch, or force significant modifications to, those ventures after funds had been expended. Undercutting infrastructure investment in this manner risks disrupting the very "virtuous cycle" of innovation that the Commission has so often praised: the ability of edge providers to keep developing and launching new services requires continuous growth and improvement in the quality and speed of the underlying consumer broadband connections.

The proposal before the Commission to restore the classification of internet access as an "information service" would reverse this trend. It would encourage greater investment and innovation, facilitate the Commission's ability to eliminate regulatory barriers to broadband

[1] Hal Singer, *2016 Broadband Capex Survey: Tracking Investment in the Title II Era* (Mar. 1, 2017), https://haljsinger.wordpress.com/2017/03/01/2016-broadband-capex-survey-tracking-investment-in-the-title-ii-era.

deployment, restore the environment that allowed the internet ecosystem to thrive for the benefit of consumers, and—as importantly—would best comport with the text and the intent of the Communications Act. Accordingly, Charter strongly supports the Commission's proposal to return to a Title I regulatory classification, thereby paving the path for the development of the next generation of edge provider applications and services.

I. CLASSIFYING BROADBAND AS A TITLE II SERVICE HAS BEEN UNNECESSARY AND COUNTERPRODUCTIVE.

Prior to the *Open Internet Order*, the internet had flourished for decades under a "light touch" regulatory framework that relied on market forces and targeted regulation to ensure that the internet remained free and open to all. The U.S. internet ecosystem experienced robust growth during this time—growth that occurred largely in the absence of top-down regulation of ISPs' operations.[2] Over the course of a roughly twenty-year period of light-touch regulation, ISPs invested over $1.5 trillion in the internet ecosystem,[3] the result being"[w]hole new product markets . . . blossomed" and "the market for applications . . . diversified and expanded."[4]

Perhaps no area of the internet ecosystem experienced more growth than the market for online video services. Made possible by the tremendous investments of ISPs in higher bandwidth capacity, which has allowed high-quality online video to be delivered directly to the home, Netflix transformed practically overnight from a mail-order DVD business to an online video provider

[2] *See In re Protecting and Promoting the Open Internet*, GN Docket No. 14-28, Comments of Charter Communications, Inc. at 4-9 (July 18, 2014).

[3] USTelecom, Broadband Investment, Historical Broadband Provider Capex (2017) (data through 2015), https://www.ustelecom.org/broadband-industry/broadband-industry-stats/investment (last visited July 14, 2017).

[4] *In re Protecting and Promoting the Open Internet*, Notice of Proposed Rulemaking, 29 FCC Rcd 5561, 5571 ¶ 31 (2014) ("*Open Internet NPRM*").

with more than 34 million subscribers, while revenues from online video services grew 175 percent, from $1.86 billion in 2010 to $5.12 billion in 2013.[5] Other online video service offerings have also exploded, including internet-delivered MVPD services, increasing customers' entertainment choices.[6]

In addition, enabled by providers' massive investments in broadband speeds to the home and in corresponding WiFi connections within the home, the number of tablet users in the United States increased nearly seven-fold from 9.7 million in 2010, when Apple first introduced the iPad, to almost 70 million by the end of 2012.[7] With this increase in the number of customers owning internet-enabled devices has come a dramatic increase in the demand for mobile applications. Overall app use in 2013 increased 115 percent relative to 2012 levels,[8] when there were already more than 20 independent non-carrier mobile application stores, offering over 3.5 million apps for 14 different operating systems.[9]

Title II has never been a good fit for regulating such a dynamic environment, in which new services, applications, and business models are constantly being invented. Developed for the more

---

[5] SNL Kagan Media Trends at 158.

[6] *See Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Eighteenth Report, MB Docket No. 16-247 (Jan. 17. 2017), at ¶ 132 (noting that "[t]he marketplace for the distribution of video programming over the Internet continues to grow, as technology advances, programmers license more content digitally, and both wireless and Internet speeds and capacity increase.").

[7] SNL Kagan, Media Trends Actionable Metrics, Benchmarks & Projections for Major Media Sectors 262 (2013) ("SNL Kagan Media Trends").

[8] *Open Internet NPRM,* 29 FCC Rcd at 5571 ¶ 31 (citing Flurry Analytics, *Mobile Use Grows 115% in 2013, Propelled by Messaging Apps*, Flurry Blog (Jan. 13, 2014), http://blog.flurry.com/bid/103601/Mobile-Use-Grows-115-in-2013-Propelled-by-Messaging-Apps).

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

static world of telephone services and related voice and data transport services, its broad and undefined proscriptions have created regulatory uncertainty and disincentivized investment, in the process blunting the Commission's efforts to encourage broadband deployment. The Commission's policy objectives and the internet ecosystem would be well-served by reversing this classification and returning to the more predictable and familiar legal framework under which the internet flourished for decades.

A. Title II Is Ill-Suited for Regulating Broadband.

At the outset, Title II is simply a poor fit for internet access services. Enacted to regulate the then-existing monopoly telephone companies (and later amended to encourage competition in the mostly static markets for telephone, voice, and data transit services), Title II contains dozens of reinforcing and interrelated substantive and administrative requirements,[10] virtually none of which have any sensible application to internet providers the way they operate today.[11] Rather, Title II is quite plainly targeted at the specific features of the markets for telephone and transit services, such as with requirements involving the specific procedures for interconnecting and establishing payments between carriers to send calls across one another's networks,[12] contributing to funds that support telephone number portability,[13] and the posting tariffs of charges for services.[14] The various rationales and history behind these policies, which target specific market

[10] 47 U.S.C. § 201 *et seq.*

[11] *Open Internet NPRM*, 29 FCC Rcd at 5615-16 ¶¶ 153-55; *see also In re Framework for Broadband Internet Service*, Notice of Inquiry, 25 FCC Rcd 7866, 7895, 7797-99, 7902 ¶¶ 68, 74-76, 86 (2010).

[12] 47 U.S.C. § 251(b)(5).

[13] 47 C.F.R. § 52.17.

[14] 47 U.S.C. § 203.

issues in the telecommunications space, have little relevance to broadband. Title II was enacted with this history and the particular market structure of the telephone industry in mind.[15] The internet has evolved on a completely different track.

The obvious incongruence between Title II and internet service providers was effectively acknowledged by the Commission when, in the *Open Internet Order*, it decided to forbear from 30 separate sections of Title II, as well as from numerous other provisions of the Act and Commission rules.[16] While Charter continues to support the Commission's efforts to avoid subjecting broadband providers to the more incongruously inapposite applications of Title II, the mere fact that such massive forbearance was necessary only confirms the awkward fit between Title II and internet access services. Moreover, this widespread forbearance has not solved the uncertainty that the Commission's reclassification has generated.

Among other problems, the Commission's 2015 decision to forbear from enforcing much of Title II—for now—is not binding on future Commissions, which could at any time start enforcing these requirements again. And even assuming such forbearance continues indefinitely, Title II vests regulators with the vague and plenary power to require that providers' prices, terms, and conditions of service be "just and reasonable," and that they not engage in "unjust and

---

[15] *See, e.g.*, 47 U.S.C. §§ 251(c)(3) & (c)(4) (requirements on incumbent providers, including to advance non-facilities-based competition by offering unbundled network elements and wholesale services for resale by competitors).

[16] The Commission decided to forbear from numerous provisions in whole or in part, either on a permanent or temporary basis. *See In re Protecting and Promoting the Open Internet*, Report and Order on Remand, Declaratory Ruling, and Order, 30 FCC Rcd 5601, 5834-35, ¶ 486 (2015) (sections 254(d), (g), and (k)); 5825, ¶ 470 (section 225(d)(3)(B)); 5835, ¶ 488 (section 254(d)'s first sentence); 5841-42, ¶ 497 (section 203); 5845, ¶ 505 (section 204); 5845, ¶ 506 (section 205); 5846-47, ¶ 508 (sections 211, 213, 215, 218, 219, 220); 5847-49, ¶¶ 509-12 (section 214 except for subsection (e)); 5849-51, ¶ 513 & n.1571 (section 251 except for subsection (a)(2), section 256); 5852-53, ¶ 515 (section 258).

unreasonable" discrimination among customers.[17] Because the applicability of those requirements can be raised by way of complaints brought with the Commission or in the federal courts,[18] even the Commission's broad forbearance may not foreclose the possibility that each new service offering or innovation could be constantly subject to questioning and regulatory review as to whether its terms and conditions are "just and reasonable," forcing the Commission into a position of constantly evaluating business decisions for years to come. If Title II is kept in place as the framework governing broadband internet access services, providers will effectively be required to keep re-asking a rotating cast of regulators (with different political inclinations) what "just and reasonable" means in the context of each new service or product. The resulting uncertainty will continue to create a chilling effect on innovation in models for delivering service, as well as in investing in the infrastructure for providing such services.

The vagueness of Title II's general requirements, moreover, particularly as applied to a new service, is difficult to overstate. It has taken the Commission decades of work (and of presiding over disputes among providers, customers, and third parties) to flesh out the meaning of these broad terms in the markets for voice telephony and related services. And that is only the beginning: at least in the telephony context, the underlying services and products have been relatively static for decades. In the very different broadband marketplace, those terms are not only still entirely undefined—and thus could permit a vast range of possible interpretations that might be assigned to them by different litigants, federal courts, or future Commissions—but the underlying marketplace itself is highly dynamic.

---

[17] 47 U.S.C. § 201 (pricing, terms and conditions, and compulsory service); *id.* § 202 (nondiscrimination).

[18] 47 U.S.C. §§ 206, 207, 208.

B. Continued Application of Title II Is Inconsistent with the Commission's Objectives in Encouraging Broadband Investment.

The Commission has a long-standing goal of encouraging the deployment of both wired and wireless internet infrastructure through private investment.[19] For instance, the Commission has recently opened proceedings to facilitate and encourage wireline and wireless infrastructure investment and to identify and, where possible, remove state and local barriers to broadband deployment.[20] Continued Title II classification of broadband services would be inconsistent with these objectives, as the Title II regulatory environment undermines the very private investment and buildout of broadband networks the Commission is seeking to encourage.

These concerns are not purely theoretical. One recent study has found that "foregone investment in 2015 and 2016," the years during which internet access has been subject to Title II, has amounted to a staggering "$5.6 billion."[21] Another study cited in the NPRM has found a 5.6% decline in broadband capex relative to 2014 levels.[22] A further analysis estimated that the mere threat of Title II classification between 2011 and 2015 "reduced telecommunications investment

---

[19] *See* FCC, Connecting America: The National Broadband Plan, at 109 (Mar. 17, 2010), https://transition.fcc.gov/national-broadband-plan/national-broadband-plan.pdf (recommending the Commission take certain actions to remove barriers to broadband deployment and encourage private investment).

[20] *In re Accelerating Wireless Broadband Deployment By Removing Barriers to Infrastructure Investment*, WT Docket No. 17-79; *In re Accelerating Wireline Broadband Deployment By Removing Barriers to Infrastructure Investment*, WC Docket No. 17-84.

[21] Michael Horney, *Broadband Investment Slowed by $5.6 Billion Since Open Internet Order* (May 5, 2017), http://freestatefoundation.blogspot.com/2017/05/broadband-investment-slowed-by-56.html.

[22] *In re Restoring Internet Freedom*, Notice of Proposed Rulemaking, 32 FCC Rcd 4434, 4448-49 ¶ 45 & n.113 (2017) ("*NPRM*") (citing Hal Singer, *2016 Broadband Capex Survey: Tracking Investment in the Title II Era* (Mar. 1, 2017), https://haljsinger.wordpress.com/2017/03/01/2016-broadband-capex-survey-tracking-investment-in-the-title-ii-era).

by 20% (or more), or about $32 to $40 billion annually."[23] Although these various analyses may differ in their methodology or in the precise amounts of foregone investment they have identified, the consistent conclusion is that Title II classification has coincided with a material and adverse drop in broadband investment, which can be expected to continue if the classification is left in place.

More broadly, Title II affects providers' ability to obtain financing for new projects through the capital markets. The willingness of private investors to invest capital depends upon projected rates of return, which, in turn, include consideration of risk and potential regulatory compliance costs. The greater the risk of litigation and/or regulatory scrutiny, the less willing private investors are to fund an investment, and the greater the rate they demand in return. These higher borrowing costs, in turn, affect which investments providers can justify, limiting in particular the viability of more innovative or creative ventures.

The uncertain regulatory environment created by Title II reclassification thus has an obvious effect on providers' willingness to invest in and undertake new or innovative business ventures, projects, or service delivery models. Although Charter itself is in the somewhat unusual position of having incurred capital expenditures (as a percentage of its total revenue) above the cable industry's average over the past two years, those heightened capital expenditures have been driven, in large part, by one-time costs associated with Charter's recently-closed transactions with Time Warner Cable and Bright House Networks. These capital expenditures include the costs of integrating the companies' operations as well as the essentially mandatory investments necessary

[23] *See* George S. Ford, Net Neutrality, Reclassification and Investment: A Counterfactual Analysis, Phoenix Center for Advanced Legal & Economic Public Policy Studies, Perspectives 17-02, Apr. 25, 2017, at 10, http://www.phoenixcenter.org/perspectives/Perspective17-02Final.pdf.

to meet broadband buildout and upgrade requirements associated with conditions that local, state and federal regulators placed on the transactions.

With respect to the investment climate Charter has faced since Title II regulation has been imposed, however, it has experienced the deterrent effects described above in its own operations. Charter has been forced to consider whether regulators might adopt interpretations of Title II's vague requirements that could jeopardize investments that had already been made, or force significant alterations, at Charter's expense, in the underlying business models of potential new projects. To use one recent example, Charter put on hold a project to build out its out-of-home WiFi network, due in part to concerns about whether future interpretations of Title II would allow Charter to continue to offer its WiFi network as a benefit to its existing subscribers, or whether Charter would be compelled to separate access to its wireless network from its wired broadband services and sell it separately—a requirement that would significantly affect the business model, pricing, and investment case for such a buildout. Similar concerns about the potential consequences of applying Title II obligations to Charter's own networks also contributed to Charter's decision, last year, to delay and then move more slowly with plans to launch a wireless service. Although increased optimism about potential restoration of the "information service" classification has allowed Charter to take cautious, renewed steps towards some of these innovations and investments in recent months, without further Commission action to return to a light-touch regulatory framework, the future of projects such as these—or at least the amounts that Charter can responsibly invest in them without taking on undue risk—remains uncertain.

C. Reclassification Would Help Preserve a Deregulatory Environment Going Forward.

Reclassification would also help ensure that the light-touch environment can be maintained into the future. The Commission's longstanding recognition that information services should be

free from public utility regulations would help safeguard broadband services from any future regulatory requirements that operate as barriers to deployment and innovation. The Commission has recognized, as far back as the *Computer II Inquiry* in 1980, that information services (referred to as "enhanced services" at the time) are best positioned to "'burgeon and flourish' in an environment of 'free give-and-take of the market place without the need for and possible burden of rules, regulations and licensing requirements.'"[24] Furthermore, the Commission's authority to preempt state laws and regulations that conflict with this national policy of nonregulation is well-established and frequently utilized.[25] Thus, although the Commission's power to ensure that broadband services do not face burdensome future regulations that interfere with the flourishing of the internet in no way depends upon their legal classification, the Commission's longstanding policies regarding information services would easily safeguard them from such regulatory obstacles without question.

---

[24] *See, e.g.*, *In re Vonage Holdings Corporation Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission*, Memorandum and Order, 19 FCC Rcd 22,404, 22,416 ¶ 24 (2004) ("*Vonage Declaratory Order*") (quoting *Computer II Final Decision*, 77 F.C.C. 2d 384, 425-433 ¶¶ 109-27 (1980)), *aff'd sub nom. Minn. Pub. Utils. Comm'n v. FCC*, 483 F.3d 570 (8th Cir. 2007).

[25] *See, e.g.*, *Vonage Declaratory Order*, 19 FCC Rcd at 22,425 ¶ 34 (preempting state regulations on online voice service and explaining that Section 230 articulates a "national Internet policy," and that the section "expresses Congress's clear preference for a *national* policy" to "preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services" (emphasis added) (internal quotation marks omitted)); *In re Petition for Declaratory Ruling that Pulver.com's Free World Dialup is Neither Telecommunications nor a Telecommunications Service*, Memorandum Opinion & Order, 19 FCC Rcd 3307, 3316 ¶ 16 (2004) ("[F]ederal authority has already been recognized as preeminent in the area of information services, and particularly in the area of the Internet and other interactive computer services, which Congress has explicitly stated should remain free of regulation"); *id.* at 3316 ¶ 15 (explaining that any efforts for states to treat an unregulated information service as "a telecommunications service or otherwise subject it to public-utility type regulation would almost certainly pose a conflict with our policy of nonregulation").

II. RESTORING THE LONGSTANDING CLASSIFICATION OF BROADBAND INTERNET ACCESS AS AN INFORMATION SERVICE IS COMFORTABLY WITHIN THE COMMISSION'S AUTHORITY.

Restoring the Commission's longstanding treatment of broadband services as "information services" would address the difficulties addressed above. Moreover, such a move would be well within the Commission's statutory authority. The courts have already held that the Commission has significant flexibility to classify broadband internet access service in the manner that it believes best implements Congress's intent and policy objectives. Indeed, the Supreme Court has already held that the Commission's classification of broadband internet as an "information service" under Title I of the Act is a reasonable interpretation of an ambiguous statute.[26] Accordingly, so long as the FCC "acknowledge[s] and explain[s] the reasons for [its] changed interpretation,"[27] it is free to return to its long-standing classification of broadband internet access services as "information services" without difficulty.

The legal and policy arguments for returning to the Commission's previous position are compelling and straightforward. To start, classification of broadband internet access as an "information service" better comports with the text of the statute and Congressional intent, for substantially the reasons set forth in the NPRM. First, as the NPRM correctly observes, broadband internet service providers connect users to a wide variety of third-party services (*e.g.*, social media platforms, web hosting services, email services, translation services, online encyclopedias, cloud storage services such as DropBox and Google Docs, etc.) that users can use to generate, acquire,

---

[26] *Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs.*, 545 U.S. 967, 980-81 (2005).

[27] *USTelecom Ass'n v. FCC*, 825 F.3d 674, 706 (D.C. Cir. 2016); *see also FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515-16 (2009); *Mary V. Harris Found. v. FCC*, 776 F.3d 21, 24-25 (D.C. Cir. 2015).

store, transform, process, retrieve, utilize or make available information on the internet.[28] Thus, broadband internet access service providers quite literally offer—by enabling users to access and use such third-party services—the "capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications."[29] Although the Supreme Court did not comment specifically on this interpretation of the Act's definitions in the *Brand X* decision, its reasoning comports fully with the statutory text and represents a reasonable reading of the Act.

Moreover, beyond offering the capability to access and use third-party services, broadband internet access continues to comprise features such as security, Domain Name Service ("DNS"), and caching, each constituting the literal "offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications" by the provider itself.[30] As the NPRM correctly surmises, these service features are more than merely incidental to the broadband internet service that ISPs provide.[31] In fact, without these features, broadband internet access would cease to resemble the seamless information retrieval service to which customers have become accustomed.[32] Absent DNS, for example, customers would find it more difficult to locate information they wish to access; and without network management and caching, customers would experience greater delays in

[28] *NPRM*, 32 FCC Rcd at 4442-43 ¶¶ 27-28.

[29] 47 U.S.C. § 153(24).

[30] 47 U.S.C. § 153(24).

[31] *NPRM*, 32 FCC Rcd at 4446 ¶ 37.

[32] *Brand* X, 545 U.S. at 993 (holding that it was "consistent with the statute's terms" for the Commission to take into account "the end user's perspective" in classifying a service as "information" or "telecommunications").

receiving such information if and when they find it. Because these features add additional functionality that "is useful to end users, rather than carriers," and alter and enhance the character of the service, it would be reasonable for the Commission to once again deem such features "part and parcel" of internet access service, and outside the "telecommunications management exception."[33]

Finally, it is less and less accurate to describe end users as dictating the "points" from which information is sent and received over the internet, as they do in traditional telecommunications contexts.[34] Much of the popular content that users access on the internet today is rarely, if ever, stored in a single location or on a single server, then routed back to users in response to requests to that server, as in the Internet's earlier days. Rather, complicated relationships among content (or "edge") providers, content delivery networks ("CDNs"), and internet access providers increasingly manage the best way to store, retrieve, and route the information that end users request online, often from numerous duplicative caches housed throughout the country, to create a more seamless experience of retrieving and accessing content when users request it. For example, many prominent edge providers such as Netflix maintain duplicate stores or caches of their content directly on the servers of various internet access providers, so that when a user requests a movie or television program, the ISP (or CDN) does not need to search for and transmit such information across various networks in order to deliver it back

---

[33] *Cf. In re Bell Operating Companies, Petitions for Forbearance from the Application of Section 272 of the Communications Act of 1934, As Amended, to Certain Activities,* Memorandum Opinion and Order, 13 FCC Rcd 2627, 2639, ¶ 18 (Com. Car. Bur. 1998); *North American Telecommunications Association Petition for Declaratory Ruling Under §64.702 of the Commission's Rules Regarding the Integration of Centrex, Enhanced Services, and Customer Premises Equipment,* , Memorandum Opinion and Order, 101 F.C.C. 2d 349, 359-61, ¶¶ 24, 27, 28 (1985).

[34] 47 U.S.C. § 153(50) (defining "telecommunications" as "transmission, between or among points *specified by the user*") (emphasis added).

to the user. At other times, especially peak hours, CDNs share traffic among numerous servers or web caches to increase the overall capacity and reliability of the network. As these networks and relationships among upstream providers grow more complex, it becomes less and less accurate to conceptualize users as specifying the "points" among which their internet data is transmitted—rather, users are largely unaware of where the information they request is stored (or where the information they send is directed), and have come to depend on intermediaries to retrieve and route information for them to and from the right places in the most efficient manner possible. Under those circumstances, it would certainly be reasonable for the Commission to decide that the statutory phrase "among points specified by the user" in the definition of "telecommunications" is, at the very least, ambiguous, and to adopt a revised interpretation of the phrase that renders it inapplicable to internet access services as they are provided today.

But, beyond being a better reading of the statute, classification of broadband internet as an "information service" is simply good policy, further justifying the Commission's proposed decision.[35] As detailed above, Title II has created an uncertain regulatory environment that has discouraged investment and innovation, and blunted the Commission's efforts to promote broadband deployment and adoption through private investment. Restoring the Commission's classification of broadband internet as an "information service" would restore certainty as to the regulatory framework to which services and providers will be subject, reducing barriers to innovation and investment. And because market forces continue to necessitate that Charter and other service providers not block, throttle, or engage in harmful paid prioritization of content, and

[35] *See Brand X*, 545 U.S. at 981 (holding that an agency "must consider varying interpretations and the wisdom of its policy on a continuing basis . . . for example, in response to . . . a change in administrations") (internal quotation marks omitted)).

that they remain open about their traffic management practices, the Commission need not sacrifice innovation and investment to maintain these important consumer protections.

CONCLUSION

For the foregoing reasons, the Commission should restore its classification of broadband internet access service as an "information service" subject to a light-touch regulatory framework under Title I of the Act.

Respectfully submitted,

Christianna Barnhart
Vice President, Regulatory Affairs
CHARTER COMMUNICATIONS, INC.
1099 New York Avenue, NW
Suite 650
Washington, DC 20001
(202) 621-1900

Samuel L. Feder
Luke C. Platzer
Samuel F. Jacobson
JENNER & BLOCK LLP
1099 New York Avenue, NW
Suite 900
Washington, DC 20001
(202) 639-6000

Counsel for Charter Communications, Inc.