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FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)

Restoring Internet Freedom)

WC Docket No. 17-108

COMMENTS OF AT&T SERVICES INC.

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INTRODUCTION AND SUMMARY

AT&T¹ supports an open Internet, as do essentially all broadband ISPs. We supported the open Internet principles adopted by the Commission in 2005. We supported the original *Open Internet Order* adopted under Chairman Genachowski's leadership in 2010. We continue to support a reasonable regulatory or legislative framework that is calibrated to protect an open Internet without undermining investment and innovation incentives. And regardless of what regulatory regime is in place, we will conduct our business in a manner consistent with an open Internet. Our customers demand no less.

The question is thus not, as the *Title II Order* framed it, whether the broadband Internet should remain an open platform “for innovation, job-creation and entrepreneurialism” and for “freedom of expression and the sharing of ideas around the world.”² Of course it should, and it will. The question instead is: which rules *actually promote* that objective, and which rules do more harm than good?

Viewed from that perspective, the *Title II Order* was an unprecedented regulatory overreaction. It grossly exaggerated the need for public-utility-style regulation while ignoring its costs. Indeed, “Timothy Brennan, the Commission’s chief economist at the time the [Title II] Order was initially in production, ... called [it] ‘an economics-free zone.’”³ The Commission should now acknowledge that deficiency and restore the type of light-touch oversight that prevailed for all but the past two years of broadband’s twenty-year history.

¹ AT&T Services Inc. files these comments on behalf of itself and all AT&T affiliates.

² Declaratory Ruling and Order, *Protecting and Promoting the Open Internet*, FCC 15-24, ¶ 77 n.121 (March 12, 2015) (“*Title II Order*”) (internal quotation marks omitted).

³ *United States Telecom Ass’n v. FCC*, 825 F.3d 674, 764 (D.C. Cir. 2016) (“*USTelecom*”) (Williams, J., dissenting in relevant part), *rehearing en banc denied*, 855 F.3d 381 (D.C. Cir. 2017) (“*USTelecom Reh’g Denial*”).

That outcome should be straightforward and indeed uncontroversial under any objective analysis of regulatory costs and benefits. The Title II rules that pro-regulation advocates now deem indispensable were not even adopted until 2015, nearly two decades into the broadband era. Throughout the lengthy *non*-Title II era, the open Internet prospered, and the broadband ecosystem reached heights of unparalleled investment and innovation. That ecosystem exhibited no systemic market failure requiring a prescriptive regulatory response. For that matter, it exhibited no *individual* instances of ISP conduct that could even theoretically justify more than a basic no-blocking/no-throttling rule. That track record is a complete answer to claims that the Commission will somehow imperil the open Internet if it restores the broadband ecosystem to the type of light-touch oversight that prevailed before 2015.

Pro-regulation groups nonetheless persist in a scorched earth campaign to scare the public into believing that consumers' ability to send emails, read blogs, and start small businesses requires preserving Title II. Rhetorical excess, however, is no substitute for cogent inquiry, and the Commission is right to ground this proceeding in a cost-benefit analysis.

As the Commission recognizes, the first step is to establish an appropriate regulatory "baseline" by which to judge the costs and benefits of any *incremental* regulation beyond that baseline (NPRM ¶ 108). Here, that baseline consists of core rules that virtually every industry participant supports: reasonable transparency obligations and clear rules that prohibit blocking and throttling of Internet content and applications (subject to appropriately flexible standards of reasonable network management). In 2014, the D.C. Circuit provided a blueprint for adopting these baseline rules without resorting to Title II, and it is essentially cost-free for the Commission to adopt them. No ISP engages in blocking or throttling without a reasonable network-management justification because no ISP sees any commercial upside in depriving its

customers of access to the complementary applications they value. Consumers expect their broadband services to support high-quality access to all lawful Internet content, and they will vote with their feet in this competitive environment if they receive anything less. In short, a baseline prohibition on blocking and throttling merely codifies standard industry practice and thus satisfies any cost-benefit analysis because it represents a minimal intrusion into free market dynamics. Reasonable transparency requirements likewise meet cost-benefit scrutiny because, by facilitating consumer choice, they enhance rather than subvert free market forces.

In contrast, substantive market intervention *beyond* these baseline rules would flunk any cost-benefit analysis, and the same is thus true of Title II classification itself. Although Title II advocates *profess* to support reclassification merely to put basic Internet protections on firm grounding, they actually support it because they favor full-blown public-utility-style regulation that the Commission could not otherwise adopt. Among other things, they want to subject ISPs to radically indeterminate “reasonableness” mandates so that they can rail into the indefinite future against innovative business models that ISPs might develop. The Commission should now find that these Title II rules serve no regulatory need and inflict enormous harm on broadband investment and innovation.

The Commission should also renounce the unprincipled legal acrobatics underlying Title II reclassification. As the Commission repeatedly found until 2015, broadband Internet access is a quintessential “information service.” Indeed, it qualifies under *each* of the eight, independent parts of the statutory definition of that term: It “offer[s]” consumers the “capability” to “acquir[e]” and “retriev[e]” information from websites, to “stor[e]” information in the cloud, to “transform[.]” and “process[.]” information by translating plain English commands into computer protocols, to “utiliz[e]” information through computer interaction with

stored data, and to “generat[e]” and “mak[e] available” information to other users by sharing files. 47 U.S.C. § 153(24). Giving consumers the “capability for” such interactions with third-party providers is of course the very essence of broadband Internet access. But even if ISPs had to provide “data-processing” or “data storage” functionalities *of their own* before Internet access could qualify as an information service, Internet access would still qualify as such because it invariably includes such functionalities (*e.g.*, DNS and/or caching).

There should be no disputing these points because Congress expressly borrowed its statutory definitions from pre-1996 legal regimes, and those regimes leave no doubt that broadband Internet access is an “information service.” Broadband Internet access is a classic “gateway” service that qualified as an “enhanced service” under the *Computer Inquiry* rules and an “information service” under the antitrust consent decree that broke up the Bell system (“the MFJ”), from which Congress pulled its statutory definition nearly verbatim. It is thus small wonder that the *Title II Order* barely addressed the *Computer Inquiry* precedents and ignored the MFJ regime altogether.

The remainder of these comments is organized as follows. Section I addresses why the Commission should restore the broadband ecosystem to light-touch oversight, as both the Supreme Court and the D.C. Circuit have confirmed that it may.⁴ As we explain, twenty years of regulatory history refute claims that “strong” net neutrality rules—under Title II or otherwise—are necessary to maintain the Internet as an open platform for innovation, economic growth, and

⁴ See *NCTA v. Brand X Internet Serv’s.*, 545 U.S. 967 (2005) (upholding “information service” classification); *USTelecom Reh’g Denial*, 855 F.3d at 384 (Srinivasan, J., joined by Tatel, J., concurring in denial of reh’g en banc) (“[T]he Act left the matter to the agency’s discretion. In other words, the FCC *could* elect to treat broadband ISPs as common carriers ... but the agency did not have to do so.”); *id.* at 386 (“*Brand X* ... concluded that Congress had authorized the agency to decide whether to regulate ISPs as common carriers”).

free expression. § I.A.1. Such claims have been a staple of regulatory advocacy since the advent of broadband in the late 1990s. But they have always been wrong. The open Internet has flourished in spite of—indeed, because of—the absence of *any* broadband regulation for most of the intervening two decades and the absence of *Title II* regulation for all but the past two years.

As that history suggests, there is also not even a theoretical “problem” that Title II regulation is needed to solve. Broadband competition is more than capable of disciplining conduct that threatens consumer welfare. And there is no coherent basis for the *Title II Order’s* alternative economic rationales—“gatekeeper” dynamics or Internet “externalities”—for regulating broadband even in the presence of competition. § I.A.2. The speculative boogeyman most often cited as justifying Title II regulation—the “paid prioritization” of packets traversing multiple IP networks—is unlikely to become a commercial reality anytime soon, and there is no valid basis for a categorical ban on this theoretical practice that can be expected to benefit consumers if and when it is implemented. § I.A.3. Title II is thus a sledgehammer aimed at a friendly gnat that does not yet exist. Indeed, any flat ban on paid prioritization arrangements is simply irresponsible in the emerging broadband environment that will need to support autonomous cars, remote surgery, and a growing array of other unusually latency-sensitive applications. And contrary to claims by Netflix, Google, Facebook, and other large corporate interests advocating Title II regulation, the marketplace for IP network interconnection continues to function efficiently and has no need for regulatory intervention. § I.A.4.

Section I.B then turns to the “cost” side of the cost-benefit analysis and explains why Title II regulation suppresses broadband innovation and investment. The prior Commission made no plausible cost-benefit case for subjecting broadband providers to a constant threat of liability for acting “unreasonably” towards particular edge providers whenever they innovate for

the benefit of their customers. Nebulous bans on “unreasonable” conduct might have made sense for the static and monopolistic railroad and telephone industries of the mid-twentieth century. They make no sense at all as applied to the competitive and technologically dynamic broadband Internet ecosystem, where they serve only to chill innovation and investment. The Commission did nothing to ease these concerns when it offered broadband providers an unworkable “mother-may-I” regime of innovation by government permission. § I.B.1-2.

Worse, Title II classification opened the door to the disquieting prospect of outright price regulation, as illustrated by the prior Commission’s quixotic use of the “no unreasonable interference/disadvantage” rule. § I.B.3. Just before the change in Administration, the Wheeler Commission prepared to make good on that threat by outlawing, as “unreasonable” and “discriminatory,” innovative sponsored data arrangements that were equivalent to deep discounts on data consumption and were thus highly popular with consumers. That initiative encapsulated the dangers of Title II regulation: harming consumers to protect favored edge providers by prohibiting practices that pose no genuine threat to Internet “openness.”

As we then show in Section II, the Commission should not only classify broadband Internet access as an “information service” exempt from common carrier regulation, but also find that the relevant statutory provisions are not even ambiguous in relevant respects and that they affirmatively compel an “information service” classification. § II.A. The Commission should acknowledge that the *Title II Order* misread *Brand X* in purporting to find a relevant statutory ambiguity, and that all nine Justices in *Brand X* presupposed that Internet access itself (as distinguished from last-mile transmission) is an information service. The Commission should further conclude that mobile Internet access is doubly insulated from common carrier treatment because it is not interconnected with the conventional telephone network and thus falls outside

any reasonable interpretation of the defined statutory term “commercial mobile service.” § II.B. The *USTelecom* panel erred when it found that the statute was ambiguous on these points, and the Commission should not acquiesce in the panel’s flawed analysis. Although that analysis may be binding precedent for D.C. Circuit panels, it does not bind the Supreme Court, nor does it bind other courts of appeals on review of future Commission orders.

In all events, the Commission plainly has discretion to classify broadband as a Title I information service rather than a Title II telecommunications service. As belt-and-suspenders, the Commission should follow through on its proposal (NPRM ¶ 64) to forbear from all common carriage regulation of broadband Internet access to address the contingency that a court or future Commission might seek to reinstate the *Title II Order* and the self-executing regulatory consequences of a “telecommunications service” classification. § II.C.

Optimally, Congress would put any remaining legal issues to rest by enacting new legislation codifying the baseline rules discussed above. But even in the absence of such legislation, the Commission can adopt baseline open Internet rules without relying on Title II, as we explain in Section III below. First, the D.C. Circuit and the Tenth Circuit have both held that the Commission has affirmative rulemaking authority under section 706 of the Telecommunications Act of 1996, and the D.C. Circuit in *Verizon* provided a blueprint for adopting baseline open Internet rules under that provision. *See Verizon v. FCC*, 740 F.3d 623, 657-58 (D.C. Cir. 2014); *see also In re FCC 11-161*, 753 F.3d 1015, 1054 (10th Cir. 2014). In particular, the *Verizon* court upheld the Commission’s transparency rules and indicated that section 706 further authorizes no-blocking/no-throttling rules for broadband information services so long as the Commission avoids a general ban on paid prioritization (and thereby removes common carriage treatment from its overall regime). *See* 740 F.3d at 657-58.

Section 706 is now an engrained part of telecommunications law, and the Commission could reasonably rely on that provision as its primary basis for open Internet rules. § III.A. That said, the Commission should announce and honor critical limiting principles for section 706 that it previously observed only in the breach. First, section 3(51) of the Communications Act prohibits the Commission from imposing common-carriage-type regulation on information services, as *Verizon* illustrates. Second, section 706 authorizes the Commission to regulate broadband network practices only insofar as it has a strong empirical basis for concluding that such regulation is necessary to promote *broadband investment by ISPs*—not other policy goals, such as the interests of edge providers. The Commission should thus disavow the types of “triple-cushion-shot” theories of broadband regulation that it invoked to justify a general ban on paid prioritization. Third, as both majority and dissenting judges noted at the *en banc* stage of the *USTelecom* litigation, any binding net neutrality rules implicate significant First Amendment concerns and will likely trigger at least intermediate First Amendment scrutiny. That fact presents yet another reason for the Commission to tailor its open Internet rules narrowly and keep them grounded in real-world evidence.

The Commission could alternatively invoke “ancillary” Title I authority as the basis for at least some open Internet rules. For example, the Commission could invoke ancillary authority to prohibit an ISP from anticompetitively excluding online services when such a prohibition is necessary “to support [the Commission’s] exercise of a specifically delegated power” under Title II, III, or VI of the Communications Act. *Comcast Corp. v. FCC*, 600 F.3d 642, 659 (D.C. Cir. 2010). Because there are limits to the use of ancillary jurisdiction to impose substantive rules on otherwise unregulated entities, *see id.*, the Commission could also invoke ancillary authority to impose competition-facilitating transparency requirements governing any blocking or throttling

practices *See Verizon*, 740 F.3d at 660 n.3, 668 n.9 (Silberman, J., concurring in part and dissenting in part). Under that approach, the Commission could require broadband providers to make prominent disclosures to consumers if they wish to engage in nonstandard network practices, enabling consumers to vote with their feet if they oppose those practices for any reason.

* * *

Although one would never know it from reading pro-regulation blogs today, there was a bipartisan consensus for nearly twenty years against Title II regulation of broadband Internet access services. As then-FCC Chairman William Kennard remarked in 1999:

We sometimes get so caught up in the policy debates about broadband . . . that we forget what we need to do to serve the American public. . . . We have to get these pipes built. But how do we do it? We let the marketplace do it. . . . [T]he best decision government ever made with respect to the Internet was the decision that the FCC made . . . NOT to impose regulation on it. This was not a dodge; it was a decision NOT to act. It was *intentional restraint born of humility. Humility that we can't predict where this market is going.*⁵

The Kennard Commission thus rejected calls for Title II-style “open access” regulation of cable modem service, then the dominant form of broadband Internet access.⁶

Chairman Kennard’s call for regulatory humility is every bit as relevant today as it was in 1999. Broadband is an unfinished project. Private companies need to go on investing billions of dollars in risk capital each year to strengthen America’s broadband infrastructure and extend it to underserved areas. They will also need to invest billions of dollars more in 5G mobile networks,

⁵ Remarks of Chairman William Kennard before the NCTA, *The Road Not Taken: Building a Broadband Future for America* (June 15, 1999), <http://www.fcc.gov/Speeches/Kennard/spwek921.html> (emphasis added).

⁶ *See, e.g.*, Stephen Labaton, *Fight for Internet Access Creates Unusual Alliances*, NEW YORK TIMES (Aug. 13, 1999), <http://www.nytimes.com/1999/08/13/us/fight-for-internet-access-creates-unusual-alliances.html>.

which will blur the distinction between “mobile” and “fixed” broadband services and usher in a new dimension of competition to the broadband marketplace. Yet first, in the words of Chairman Kennard, “[w]e have to get these pipes built.” How do we do it? His answer remains apt: “[L]et the marketplace do it,” and exercise regulatory “restraint born of humility.”

ARGUMENT

I. THE COSTS OF TITLE II REGULATION FAR OUTWEIGH THE BENEFITS.

As discussed in Section II below, the text, structure, and history of the Communications Act require an “information service” classification for broadband Internet access. But as we first explain, the Commission should also exercise its undisputed discretion to reach the same legal conclusion.

The Commission rightly proposes to conduct a cost-benefit analysis for calibrating the proper level of regulatory intervention. *See* NPRM ¶¶ 105-115. “[R]easonable regulation ordinarily requires paying attention to the advantages *and* the disadvantages of agency decisions,” and “[n]o regulation is ‘appropriate’ if it does significantly more harm than good.” *Michigan v. EPA*, 135 S. Ct. 2699, 2707 (2015). As the NPRM further recognizes, an appropriate analysis measures the *incremental* costs and benefits of particular rules. The Commission must therefore identify at the outset an appropriate regulatory “baseline” against which to judge the merits of incremental regulation beyond that baseline. *See* NPRM ¶ 108.

Here, there is nearly universal agreement on an appropriate “baseline” set of open Internet rules. These consist of basic transparency obligations and clear rules prohibiting blocking and throttling of Internet content and applications, subject to appropriately flexible standards of reasonable network-management. These baseline rules are uncontroversial precisely because no broadband ISP has any interest in violating them, and they are thus nearly

cost-free because they do not interfere with efficient private ordering. For example, no ISP wishes to block or throttle Internet content without a reasonable network-management justification because ISPs understand that customers expect them to provide unimpeded access to millions of sources of Internet content and applications, and those customers will take their business elsewhere if the ISP denies or impedes such access. No-blocking/no-throttling rules thus merely codify now-standard industry practices.

In short, a baseline prohibition on blocking and throttling satisfies any cost-benefit analysis because it represents a minimal intrusion into free-market dynamics. The same is true of basic transparency obligations calibrated to facilitate consumer choice.⁷ In contrast, additional rules *beyond* that baseline would flunk any cost-benefit analysis, as discussed below. For that reason, Title II classification *itself* violates any cost-benefit analysis because its only purpose has been to subject broadband ISPs to needless and costly incremental regulation beyond this baseline, including a nebulous “reasonableness” mandate mirroring sections 201 and 202 of the Communications Act. As discussed below, those incremental, Title II-specific rules serve no need and thus offer no benefits (§ I.A) but impose massive costs on the broadband ecosystem in the form of diminished incentives for investment and innovation (§ I.B.).

⁷ As AT&T has previously explained, the Commission should pare back the incremental transparency requirements added by the *Title II Order*, such as onerous obligations to disclose “packet loss” and other performance metrics. *See* Comments of AT&T, *Protecting and Promoting the Open Internet*, OMB Control No. 3060-1158, CC Docket No. 14-28 (Sept. 12, 2016). In contrast, the preexisting transparency requirements, such as those requiring disclosure of terms and conditions and basic network-management policies, generally pose more modest compliance costs.

A. There Is No Need for Intrusive Title II-Style Regulation of Broadband Internet Access.

1. The Historical Record Is Devoid of Market “Problems” Requiring a Regulatory Solution, Let Alone Title II Regulation.

The net neutrality debate, which began with the “open access” movement in the late 1990s, is now poised to enter its third decade. If there is one constant in that debate, it is the tendency of pro-regulation agitators to drown out facts and reason with apocalyptic rhetoric. This rhetoric is fueled by self-styled “consumer groups” such as Free Press, which use scare tactics to seek relevance and raise funds. The first rule of fundraising for these groups is to keep the message as simple and provocative as possible. To that end, accuracy and nuance are not only unnecessary, but affirmatively counterproductive.

It is therefore no surprise that, on their webpages, these groups peddle dystopian fantasies in the same breath in which they solicit money (and elicit formulaic FCC comments) from their duly outraged followers. For example, Free Press claims that, without strict net neutrality regulation, the Internet “would become a closed-down network” where ISPs “block websites or content they don’t like” and keep “activists” and “social movements” from “fight[ing] against oppression.”⁸ Common Cause warns that, without strict net neutrality regulation, “[t]hat blog you depend on for local news coverage could shut down.”⁹ Former Commissioner Michael

⁸ Free Press, *Net Neutrality: What You Need to Know Now*, <https://www.freepress.net/net-neutrality-what-you-need-know-now> (visited July 7, 2017); see Craig Aaron, Free Press, *Trump's FCC Chair Declares New War on Net Neutrality After 10-Year Battle for Free & Open Internet*, DEMOCRACY NOW (May 9, 2017), https://www.democracynow.org/2017/5/9/trumps_fcc_chair_declares_new_war (“[E]verything that makes the internet so great, the fact that anyone with a great idea can go online, start their own business, find their own voice, make their own art, that’s really in jeopardy if you lose this fundamental protection of net neutrality.”).

⁹ *Net Neutrality Is a Democracy Issue*, COMMON CAUSE (Sept. 10, 2014), <http://www.commoncause.org/democracy-wire/net-neutrality-is-a-democracy-issue.html?referrer=https://www.google.com/>.

Copps, now with Common Cause, contends that rescinding such regulation “would be a body blow to the open dialogue upon which successful self-government depends. It would be a red light for democracy[.]”¹⁰ Not to be outdone, Public Knowledge contends that, without tight regulation, “your ISP could block any website that can’t or won’t pay [its] ransom. This means that you could lose access to your email, banking, social media, music, or anything that requires the internet.”¹¹

We have heard these absurd sound-bites before, and they have always turned out to be wrong. Those who continue making them are grossly misleading the public.

As a threshold matter, there have been no “net neutrality” rules of any kind for most of the broadband era, and—despite incessant warnings to the contrary—no problems arose in that unregulated environment revealing any need for common-carrier style regulation. From the late 1990s through the end of his tenure in January 2001, Chairman Kennard consistently rejected proposals to impose any type of “openness” regulation on cable broadband providers because, “[i]f we’ve learned anything about the Internet in government over the last 15 years, it’s that it thrived quite nicely without the intervention of government.”¹² The Kennard Commission also rejected proposals in 1999 and 2000 to impose open access requirements on cable operators in connection with its merger-review authority.¹³ This hands-off policy continued for the next ten

¹⁰ John Nichols, *Trump’s FCC Has Begun Its Attack on Net Neutrality*, THE NATION (Apr. 26, 2017) (“Nichols”), <https://www.thenation.com/article/trumps-fcc-has-begun-its-attack-on-net-neutrality/>.

¹¹ Kate Forscey, *The FCC is Trying to Kill the Open Internet—What That Means and How to Stop It*, PUBLIC KNOWLEDGE (May 25, 2017) (“Ransom Model” graphic), <https://www.publicknowledge.org/news-blog/blogs/the-fcc-is-trying-to-kill-the-open-internet-what-that-means-and-how-to-stop-it>.

¹² Remarks of Chairman William Kennard before the NCTA, *The Road Not Taken: Building a Broadband Future for America* (June 15, 1999), <http://www.fcc.gov/Speeches/Kennard/spwek921.html>.

¹³ Mem. Op. and Order, *Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from MediaOne Group to AT&T Corp.*, 15 FCC Rcd 9816, ¶ 127 (June 6, 2000); see also Mem. Op. and Order, *Applications for Consent to the Transfer of Control of Licenses and*

years. The Commission instead issued general guidance to the industry, in the form of an “Internet Freedoms” speech by Chairman Michael Powell in 2004 and an *Internet Policy Statement* attached to the *Wireline Broadband Order* in 2005.¹⁴ That guidance was non-binding, consumer-oriented, and minimalist. For example, the *Policy Statement* stressed that the Commission was “not adopting rules” and wished only to offer “guidance” in support of Internet openness. *Internet Policy Statement* ¶¶ 4-5 & n.15. And even the Genachowski-era rules that took effect in 2011—which AT&T supported as a reasonable compromise—were notably moderate, particularly in their approach to mobile broadband. *See* § I.A.2.a, *infra*.

This regulatory history illustrates a simple point: the Title II rules that the pro-regulation advocates claim are essential to an open Internet were not even adopted until more than 16 years into the broadband era and have been in effect for only two years. Throughout that non-Title II era, the broadband ecosystem reached heights of unparalleled investment and innovation. There was no mobile broadband ecosystem in 2005, yet by 2010 consumers could download millions of apps onto their choice of smartphone and, for the first time, could reach their favorite edge providers anytime, anywhere.¹⁵ During the same period of unregulation, edge providers such as Facebook, Twitter, Netflix, Skype, Etsy, and YouTube grew from start-ups into the powerhouses they are today, accelerating the virtuous circle of investment and innovation throughout the Internet ecosystem.

Section 214 Authorizations from Tele-Communications, Inc. to AT&T Corp., 14 FCC Rcd 3160, ¶¶ 74-75 (Feb. 18, 1999).

¹⁴ *See* Chairman Michael K. Powell, *Preserving Internet Freedom: Guiding Principles for the Industry*, at 5 (Feb. 8, 2004); Policy Statement, *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, 20 FCC Rcd 14986 (Sept. 23, 2005) (“*Internet Policy Statement*”).

¹⁵ *E.g.*, Rani Molla, *How Apple’s iPhone changed the world: 10 years in 10 charts*, RECODE (June 26, 2017), <https://www.recode.net/2017/6/26/15821652/iphone-apple-10-year-anniversary-launch-mobile-stats-smart-phone-steve-jobs>.

Yet throughout this same unregulated era of unparalleled growth, pro-regulation agitators warned, year after year, that the Internet would “die” unless the government came down hard on broadband providers. As far back as 2001, Larry Lessig, the father of the net neutrality movement, claimed that broadband regulation was already long overdue because, he warned,

*The Internet revolution has ended just as surprisingly as it began. None expected the explosion of creativity that the network produced; few expected that explosion to collapse as quickly and profoundly as it has. The phenomenon has the feel of a shooting star, flaring unannounced across the night sky, then disappearing just as unexpectedly.*¹⁶

Indeed, Lessig insisted, recent developments around the turn of the millennium were “dismantling the very architecture that made the Internet a framework for global innovation.”¹⁷ Why did Lessig think that the “Internet revolution ha[d] ended” in 2001, and what did he blame for “dismantling [its] very architecture,” to the demise of “global innovation?” More than any other factor, he blamed the dynamic that has profoundly transformed the Internet and the world for the better: the migration from dial-up to broadband. He insisted: “Everyone knows that the broadband era will breed a new generation of online services, but this is only half the story. Like any innovation, broadband will inflict major changes on its environment. *It will destroy, once and for all, the egalitarian vision of the Internet.*”¹⁸ In the same vein, then-Commissioner Copps contended in 2003 that stringent broadband regulation was needed because the “Internet may be

¹⁶ Lawrence Lessig, *The Internet Under Siege*, 127 FOREIGN POLICY 56 (2001) (emphasis added).

¹⁷ *Id.*

¹⁸ Lawrence Lessig, *The Future of Ideas* 176 (2001) (emphasis in original) (quoting with approval Charles Platt, *The Future Will Be Fast But Not Free*, WIRED (May 2001)).

dying,” that “we really are teetering on a precipice,” and that “we could be witnessing the beginning of the end of the Internet as we know it.”¹⁹

All this was nonsense. The “explosion of creativity” in the Internet ecosystem did not “collapse,” as Lessig claimed in 2001, and the Internet was not “dying,” as Copps suggested two years later. Instead, Internet investment and innovation flourished for the next dozen years, even though broadband remained free of any prescriptive regulation through 2010 and free of common carrier regulation through early 2015. Throughout that period, broadband deployment brought incalculable benefits to consumers without remotely impairing the Internet’s openness, let alone limiting anyone’s freedom of expression. It is against that background that we should assess Copps’ histrionic claim today that reverting to the pre-2015 regulatory regime would somehow strike “a body blow to the open dialogue upon which successful self-government depends.”²⁰

Lessig and Copps were hardly the only false prophets of Internet doom. In 2007, Tim Wu tried to justify heavy regulation of the nascent wireless broadband industry on the ground that, left to market forces, wireless providers would not permit VoIP over mobile phones or “sell a Wi-Fi phone at any price.”²¹ Wu was soon proved wrong on both counts.²² Without

¹⁹ Remarks of Michael J. Copps, Commissioner, FCC, before the New America Foundation, *The Beginning of the End of the Internet? Discrimination, Closed Networks, and the Future Of Cyberspace* (Oct. 9, 2003), https://apps.fcc.gov/edocs_public/attachmatch/DOC-239800A1.pdf.

²⁰ *Nichols, supra*.

²¹ Tim Wu, *Wireless Net Neutrality: Cellular Carterfone and Consumer Choice in Mobile Broadband*, New America Foundation Wireless Future Program, at 12, 24 (Feb. 2007), <https://na-production.s3.amazonaws.com/documents/wireless-net-neutrality-cellular-carterfone-and-consumer-choice-in-mobile-broadband>.

²² Stephen Lawson, *Wi-Fi spreading fast among mobile phones*, INFO WORLD (Mar. 23, 2010), http://www.infoworld.com/d/networking/wi-fi-spreading-fast-among-mobile-phones-467?source=rss_infoworld_news (reporting the number will exceed 500 million phones by 2014).

regulatory intervention, phones on which users can both use Wi-Fi and download VoIP apps—*i.e.*, most smartphones today—quickly became industry standards.

Susan Crawford and Barbara van Schewick likewise share with Lessig, Wu, and Copps the distinction of making dystopian predictions that promptly collided with real-world competitive dynamics. One case in point is their criticism of “zero-rating” (or “sponsored data”), an industry practice in which a mobile provider exempts certain content from data allowances in wireless plans that have them.

After AT&T pioneered a sponsored data program in early 2014, T-Mobile launched “Music Freedom” (for music streaming) later that year and “Binge-On” (for video streaming) in 2015. These programs were enormously popular with consumers, and analysts credited them for T-Mobile’s major subscribership gains in 2015.²³ Ironically, that very success alarmed Crawford and van Schewick. Crawford warned in 2015: “Zero-rating is pernicious; it’s dangerous; it’s malignant. ... [W]e should outlaw it. Immediately. Unless it’s stopped, *it’s not going to go away.*”²⁴ She admonished that, if permitted to engage in zero-rating, all wireless carriers would strategically limit data buckets, thereby deterring customers from accessing non-zero-rated content and making “vertical discrimination ... the norm: the Internet as cable TV.”²⁵ Van Schewick agreed: “If left unchecked, Binge On leads us down a slippery slope. As other ISPs

²³ Adam Levy, *Look How Smart T-Mobile’s Binge On Is*, THE MOTLEY FOOL (Jan. 27, 2016), <http://www.fool.com/investing/general/2016/01/27/look-how-smart-t-mobiles-bingeon-is.aspx>.

²⁴ Susan Crawford, *Zero for Conduct*, BACKCHANNEL (Jan. 7, 2015), <https://backchannel.com/less-than-zero-199bcb05a868> (emphasis added).

²⁵ *Id.*

offer similar programs, the cumulative harms will change the Internet as we know it,” and “[s]mall players, non-commercial speakers, and start-ups . . . will be left behind.”²⁶

These, too, were false alarms. Although zero-rating became more widespread throughout 2015 and 2016, that practice did not “change the Internet as we know it” or snuff out “small players” and “start-ups.” Nor did it give mobile providers incentives to create artificial scarcity by limiting their data buckets so that they could convert “the Internet [into] cable TV.” Instead, competition drove all major mobile providers to *increase*, rather than decrease, their subscribers’ data buckets. And the same competitive forces have now supplanted the very concept of data buckets by compelling all major providers to focus their marketing on highly affordable *unlimited* plans, in which zero-rating is competitively immaterial to edge providers. Thus, two years after Crawford warned that zero-rating would never “go away” unless it was “stopped” by regulators “[i]mmediately,” it has in fact “gone away” as an important industry phenomenon. As Chairman Pai observes, “[p]reemptive government regulation did not produce that result. The free market did.”²⁷ And even if the industry had not moved *en masse* to unlimited plans, free-data programs straightforwardly benefit consumers. Because mobile broadband is competitive and no mobile provider has substantial market power, *see* § I.A.2, *infra*, such programs can only intensify competition because they are economically equivalent to discounts, *see* § I.B.3, *infra*.²⁸ They are not remotely “pernicious,” “dangerous,” or “malignant.”

²⁶ Barbara van Schewick, *T-Mobile’s Binge On Violates Key Net Neutrality Principles* at 4 (Jan. 29, 2016), <https://cyberlaw.stanford.edu/downloads/vanSchewick-2016-Binge-On-Report.pdf>.

²⁷ Remarks of Chairman Ajit Pai at the Mobile World Congress, Barcelona Spain, at 4 (Feb. 28, 2017), https://apps.fcc.gov/edocs_public/attachmatch/DOC-343646A1.pdf.

²⁸ That observation holds true when such arrangements involve vertically integrated affiliates because, “absent market power, vertical integration and vertical contracts are *procompetitive*.” *Comcast Cable Communications, LLC v. FCC*, 717 F.3d 982, 990 (D.C. Cir. 2013) (Kavanaugh, J., concurring) (emphasis in original); *see also* § I.B.3, *infra*.

Against this backdrop, it is impossible to take seriously the current assertions of these and similar pro-regulation agitators that the Commission will somehow doom the Internet if it restores the broadband ecosystem to the light-touch oversight that prevailed for all but two years of its nearly two-decade existence. Indeed, the historical record during that period is not only devoid of any *systematic* market failure requiring a prescriptive regulatory response, but also devoid of any *individual instances* in which ISPs have engaged in conduct that could even logically justify regulatory intervention beyond core prohibitions on unjustified blocking and throttling.

As the NPRM observes (¶ 50), Title II advocates keep returning to the same dry well in search of documented “problems” that net neutrality regulation is supposedly needed to address. The two most-cited episodes, which both arose 10-12 years ago, involved allegations (1) that in 2004 a small rural telephone company (Madison River) blocked VoIP applications and (2) that Comcast throttled the BitTorrent P2P file-sharing application in 2007 without accurately disclosing that practice to its customers. Because these episodes involved blocking or throttling (and alleged transparency violations), they were both resolved under the no-blocking/no-throttling principles of the 2005 *Internet Policy Statement*, thus underscoring the efficacy of that approach.²⁹ These oft-cited episodes thus cannot support the adoption for any of the *extra* regulatory measures—such as categorical bans on “paid prioritization” and diffuse

²⁹ Madison River entered into a consent decree, *see* note 145, *infra*, and Comcast likewise agreed to change its network practices even though it resisted sanctions. *See* Mem. Op. and Order, *Formal Complaint of Free Press and Public Knowledge Against Comcast Corp.*, 23 FCC Rcd 13028, ¶ 54 & n.244 (Aug. 20, 2008). Notably, even the BitTorrent CEO stated that he saw little need for prescriptive regulation because consumer demand will keep ISPs from “try[ing] to be gatekeepers against certain websites or Internet-based services,” and thus “[t]he public is our regulator.” Stephen Lawson, *Broadband Has No Regulator, BitTorrent CEO Says*, PCWORLD (Apr. 19, 2010), http://www.peworld.com/businesscenter/article/194554/broadband_has_no_regulator_bittorrent_ceo_says.html.

“nondiscrimination” requirements—that supposedly necessitate Title II classification. If anything, these episodes tend to confirm that core no-blocking/no-throttling rules are sufficient to address whatever net neutrality concerns might arise in the real world.

The other “incidents” cited in the *Title II Order* were even further afield. For example, the *Order* (¶ 79 n.123) appeared to credit allegations that Comcast had acted improperly in “exempt[ing] its own online video service from data caps when streamed to an Xbox.” Yet the *Order* did not mention that the Comcast Xbox service—much like AT&T’s U-verse IP video service or Comcast’s Stream service today—is a managed video service delivered over a closed network, not an over-the-top service delivered over the broadband Internet platform.³⁰ The Commission has always carved such “specialized services” out of the scope of its net neutrality rules, including in the *Title II Order* itself (e.g., ¶¶ 207-08).

Other “incidents” cited in the *Title II Order* involved straightforward issues of reasonable network management. These included temporary restrictions on the use of FaceTime on cellular networks (*id.* ¶ 79 n.123) and now-ubiquitous mobile bandwidth-management techniques such as imposing special terms for “tethering” mobile devices to laptops and slowing data traffic for the heaviest users (*id.* ¶ 96). Such practices presented no plausible “net neutrality” concern and indeed no public policy issue of any kind apart from disclosure obligations. To the contrary, such practices optimized network performance for the benefit of all users and avoided forcing lighter users to cross-subsidize the consumption of the heaviest users.³¹ That the *Title II Order*

³⁰ See Michael Powell, *No Good Deed Goes Unpunished—Washington Advocacy Run Amok*, NCTA (Mar. 28, 2012), <https://www.ncta.com/platform/technology-devices/tech-discussions/no-good-deed-goes-unpunished-washington-advocacy-run-amok/>.

³¹ See Report and Order, *Preserving the Open Internet*, 25 FCC Rcd 17905, ¶ 72 (Dec. 23, 2010) (“*2010 Open Internet Order*”) (“[P]rohibiting tiered or usage-based pricing and requiring all subscribers to pay the same amount for broadband service, regardless of the performance or usage of the service,

had to rely on these “incidents” in the first place speaks volumes about the weakness of its purported empirical justification for reclassification.

2. There Is Also No Theoretical Basis for Concern That Problems Will Arise in the Absence of Title II Rules.

Because the *Title II Order* could cite no credible evidence of any relevant market failure, it resorted to abstract economic speculation about market conditions that might theoretically imperil Internet openness someday. The *Order* and its supporters have cited three such conditions: (1) supposedly inadequate broadband competition combined with supposedly high switching costs (*e.g.*, *Title II Order* ¶ 81 & n.134); (2) a notional “gatekeeper” (or “terminating access monopoly”) phenomenon (*id.* ¶¶ 80 & n.130, 84); and (3) the “externalities” from maintaining the Internet as a neutral platform (*id.* ¶¶ 76-77, 83). As discussed below, none of these theoretical justifications for regulation holds up under scrutiny, validating the observation of the Commission’s own Chief Economist at the time that the *Order* was “an economics-free zone.”³²

A broader observation is also warranted at the outset. In the absence of *actual* market failures, speculation about *theoretical* conditions for future market failures cannot support a preemptive regime of heavy-handed regulation. Put differently, a purely speculative claim of need for market intervention at some point in the future cannot outweigh the certain costs of imposing such regulation today. Instead, even if such speculation about future market

would force lighter end users of the network to subsidize heavier end users. It would also foreclose practices that may appropriately align incentives to encourage efficient use of networks.”).

³² *USTelecom*, 825 F.3d at 764 (Williams, J., dissenting in relevant part); see Tim Brennan, *Is the FCC an Economics-Free Zone?*, Free State Foundation (June 28, 2016), http://www.freestatefoundation.org/images/Is_the_Open_Internet_Order_an_Economics_Free_Zone_062816.pdf.

failures were theoretically plausible, it could at most support a readiness to intervene if and when circumstances necessitate. The *Title II Order* identifies no coherent basis, and there is none, for claiming that the Commission must act now or forever lose the opportunity to address any future market failures in the unlikely event they do arise.

a. Broadband competition and switching.

As the Commission has long recognized, “competition can be expected to carry out the [pro-consumer] purposes of the Communications Act more assuredly than regulation” ever could, and thus intrusive regulation is appropriate only “where and to the extent that competition remain[s] absent in the marketplace.”³³ Here, competition is strong in all broadband market segments and particularly fierce in mobile, as discussed immediately below and in the attached Declaration of Mark Israel, Allan Shampine & Thomas Stemwedel (“Economists’ Declaration” or “Econ. Decl.”). Indeed, although pro-regulation advocates routinely assert that broadband competition is deficient, the *Title II Order* made no actual findings to that effect and thus made no attempt to justify its rules under traditional notions of retail market power.³⁴ The Commission should now take stock of competitive realities and thus conclude that competition and the dynamic character of broadband marketplace make common carrier regulation unnecessary and counterproductive.³⁵

³³ First Report & Order, *Price Cap Performance Review for Local Exchange Carriers*, 10 FCC Rcd 8961, ¶ 64 (Apr. 7, 1995).

³⁴ Instead, the *Title II Order* argued that market power findings are unnecessary on the theory that every ISP, no matter how competitively constrained in the retail market, has “gatekeeper” (or “terminating access monopoly”) power over Internet content providers. See *Title II Order* ¶¶ 80 & n.130, 84. As discussed in the following subsection, that “gatekeeper” construct is incoherent in the broadband context, and a finding of broadband competition thus does foreclose any rational scheme of intrusive regulation. See Section II.A.2.b, *infra*.

³⁵ See Econ. Decl. ¶¶ 25-52 (applying recognized “effective competition” framework to mobile and wireline marketplace). In the *Verizon* and *USTelecom* appeals, respectively, Judges Silberman and Williams concluded that the Commission’s failure to make market power findings was fatal to its regime

Mobile broadband. When discussing the state of broadband competition, pro-regulation advocates tend to argue that any relevant market is either a “monopoly” (dominated by a cable company) or at best a “duopoly” (consisting of the legacy cable and wireline telephone companies). This rhetoric is inaccurate even as a description of fixed-line broadband competition, as discussed below. Worse, it ignores *mobile* broadband competition altogether, even though the *Title II Order* extended the same intrusive net neutrality rules to mobile providers as to fixed-line providers. It is of course nonsensical to defend a decision about *mobile* broadband regulation on the basis of allegations about the state of *fixed-line* competition.

Unlike the *Title II Order*, the *2010 Open Internet Order* did attach regulatory significance to the strength of mobile competition. It adopted a light-touch regime for mobile broadband service because (*inter alia*) it recognized that consumers enjoy many “choices” among mobile providers. *2010 Open Internet Order* ¶ 95. If anything, competition has intensified since then, as AT&T recently explained in its comments in the Commission’s annual inquiry into the state of mobile wireless competition.³⁶ For example, the latest Commission data (year-end 2015) show that 96 percent of Americans could choose among at least three mobile broadband

and that its alternative “gatekeeper” rationale was unexplained and likely incoherent. *USTelecom*, 825 F.3d at 750, 766 (Williams, J., dissenting in relevant part); *Verizon*, 740 F.3d at 663-664 (Silberman, J., dissenting in relevant part). The *Verizon* majority deemed this objection waived because it had not been adequately raised on appeal, and in dicta it deferred to the Commission’s finding that ISPs need not have market power “to impose restrictions on [particular] edge providers.” *Verizon*, 740 F.3d at 647-648. In *USTelecom*, the panel majority found that the market power issue raised by Judge Williams was not presented because the Commission was not *required* to make findings on that empirical issue in order to reclassify broadband as a telecommunications service. *USTelecom*, 825 F.3d at 708. Nothing in either majority opinion keeps the Commission from adopting a more rigorous economic analysis of these issues.

³⁶ Comments of AT&T Inc., *State of Mobile Wireless Competition*, WT Docket No. 17-69 (May 8, 2017) (“AT&T 2017 Wireless Competition Comments”); *see also* Comments of CTIA, *State of Mobile Wireless Competition*, WT Docket No. 17-69 (May 8, 2017) (providing additional evidence of wireless competition); Econ. Decl. ¶¶ 31-44 (showing that mobile marketplace satisfies all relevant criteria for effective competition).

providers, and nearly 90 percent could choose among at least four—substantial increases from the previous year’s figures.³⁷ The percentages are even higher today because the major providers have all expanded the coverage of their networks over the past year. AT&T 2017 Wireless Competition Comments at 16. And the number of mobile competitors is expected to increase rapidly as Google, Comcast, Charter/Spectrum, and other well-capitalized new entrants launch their much-publicized initiatives to offer wireless services of their own, using Wi-Fi networks supplemented by wholesale cellular network capacity. *Id.* at 17; *see also* Econ. Decl. ¶ 32.

This competition is paying major dividends to consumers in the form of ever-faster mobile broadband connections and ever-diminishing per-GB data prices. *See* Econ Decl. ¶¶ 15, 35-37. Prices have continued to decline as output has risen. As the Commission noted in the *Nineteenth Report*, the “Wireless Telephone Service CPI” decreased by 3.8 percent from 2014 to 2015 even though the nation’s overall CPI increased modestly over the same period. And that trend has continued. The Bureau of Labor Statistics’ report for March 2017 shows that Wireless CPI decreased by 7.0 percent, “the largest 1-month decline in the history of the index.”³⁸ A recent UBS report similarly finds that the average customer bill, measured by average revenue per unit (“ARPU”), fell by an average of 5.1 percent between the fourth quarter of 2015 and the fourth quarter of 2016.³⁹ And these declines are on top of the historical trend of decreasing prices. CTIA’s 2015 survey found that ARPU declined for the four nationwide providers and

³⁷ *See* Nineteenth Report, *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993 (Annual Wireless Competition Report)*, WT Docket No. 16-137, ¶ 39, Chart III.A.2 (Sept. 23, 2016) (“*Nineteenth Wireless Report*”).

³⁸ *See* Bureau of Labor Statistics, *CPI Detailed Report, Data for March 2017* at 2, https://www.bls.gov/cpi/cpi_dr.htm#2017.

³⁹ UBS Securities LLC, *Wireless 411: A difficult market asking for repair*, 15, Fig. 29 (Feb. 22, 2017) (“*UBS Wireless 411 Report*”).

U.S. Cellular in 2015, and that the average customer’s bill in 2015 was lower than at any time since CTIA began tracking such data in 1993.⁴⁰

In addition, unlimited data has become the new normal—again, because competition leaves providers with no alternative. Econ. Decl. ¶ 35. As anyone with a television is aware, the four national mobile providers are waging an intense price war, which has driven each to offer unlimited data plans to consumers at very attractive price points.⁴¹ As a result, for a fixed monthly fee, today’s mobile customers can essentially stream as much video and other data as they wish over their smartphones and tablets, with per-GB prices asymptotic to zero.⁴²

Contrary to the suggestion in the *Title II Order* (¶¶ 98-99), switching is easy and widespread; indeed, nearly a quarter of mobile consumers switch providers in any given year.⁴³

⁴⁰ See CTIA, Wireless Industry Indices Report at 86 (July 2016) (“Wireless Industry Indices Report”).

⁴¹ For example, the “AT&T Unlimited Plus” plan offers unlimited voice, text, and data—and a complementary subscription to HBO Go—for \$90 a month to individual subscribers. The “AT&T Unlimited Choice” plan offers unlimited voice, text, and data for \$60 a month to individual customers who agree to a maximum throughput of 1.5 Mbps (about 480p resolution) for all video—including any affiliated video—and 3 Mbps for all other traffic. Both plans scale for accounts with multiple lines. Thus, a family of four can subscribe to Unlimited Plus for \$185 and to Unlimited Choice for \$155. See AT&T, Unlimited Data Plans, <https://www.att.com/plans/unlimited-data-plans.html> (last visited July 11, 2017). Other providers likewise offer affordable unlimited plans. See Verizon Wireless, Unlimited Data and Talk & Text Plans, <https://www.verizonwireless.com/plans/verizon-plan/> (last visited July 10, 2017); T-Mobile, Cell Phone Plans – Unlimited Data Plans – T-Mobile One, https://www.t-mobile.com/cell-phone-plans?icid=WMM_TM_Q117TMO1PL_H85BRNKTD037510 (last visited July 10, 2017); Sprint, Unlimited Data Plans, <https://www.sprint.com/landings/unlimited-cell-phone-plans> (last visited July 10, 2017). Sprint estimates that “[m]ore than 90 percent of our customers are already choosing Unlimited.” News Release, Sprint, *Sprint Simplifies Choice for Customers and Doubles Down on Unlimited* (Apr. 6, 2017), <http://www.businesswire.com/news/home/20170406005432/en/Sprint-Simplifies-Choice-Customers-Doubles-Unlimited>.

⁴² Most mobile providers that offer unlimited plans set a threshold after which an unlimited customer may very occasionally be subject to slower speeds. In AT&T’s case, that threshold is set at 22 GB *per line* per billing cycle. But even the customers who exceed that high per-line threshold during a billing cycle are subject to slower speeds only during periods of network congestion, and in general such periods are unusual and brief.

⁴³ See *Nineteenth Report* ¶ 18 (noting reported “annual industry-wide churn rate of 23.6 percent” in 2015); see also Econ. Decl. ¶ 39; UBS Wireless 411 Report at 15, Fig. 29.

That substantial churn rate is facilitated by the decisions of all four national carriers to phase out long-term contracts for wireless service and the increasing ease of “unlocking” smartphones to take them from one carrier to another.⁴⁴ As one analyst explains, “The fact that consumers can now jump from carrier to carrier means a lot of interesting deals exist that are designed to tempt them into switching.”⁴⁵ Sprint, for example, has begun offering a free year of unlimited data for mobile customers that switch to Sprint.⁴⁶ Likewise, T-Mobile aggressively recruits new customers by agreeing to “cover [any] device payoff” they may owe to their existing carriers under installment plans for their phones.⁴⁷ Moreover, the mobile industry spends hundreds of millions of dollars *each quarter* on advertising campaigns encouraging consumers to switch providers. For example, just between January 1 and February 14, 2016, wireless carriers spent “more than \$420 million on ads that ran more than 62,000 times across national TV.”⁴⁸ Mobile providers obviously would not invest so much in such advertising if it did not produce results in the form of widespread switching.

⁴⁴ See, e.g., David Goldman, *AT&T Is Doing Away with Two-Year Contracts*, CNN (Dec. 31, 2015), <http://money.cnn.com/2015/12/31/technology/att-2-year-contracts/>; Matt Elliott, *How to Unlock Your Phone for Use with Another Carrier*, CNET (Sept. 8, 2016), <https://www.cnet.com/how-to/how-to-unlock-your-phone-for-use-with-another-carrier/>. Because all major carriers use LTE technology, taking smartphones from one carrier to another will become even easier as the ecosystem completes its transition from 2G and 3G technologies to LTE.

⁴⁵ Bill Snyder, *AT&T Finally Joins Modern Wireless World, Kills Off Contracts*, CIO (Jan. 5, 2016), <http://www.cio.com/article/3019082/carriers/att-finally-joins-modern-wireless-world-kills-off-contracts.html>.

⁴⁶ Jeff Dunn, *Sprint is offering an aggressive deal: a free year of ‘unlimited’ data for people who switch from Verizon, AT&T, or T-Mobile*, BUSINESSINSIDER (Jun. 13, 2017), available at <http://www.businessinsider.com/sprint-free-unlimited-plan-deal-switch-verizon-att-t-mobile-2017-6>

⁴⁷ T-Mobile, *There’s Never Been a Better Time to Switch to T-Mobile*, <https://www.t-mobile.com/offer/switch-carriers-no-early-termination-fee.html> (last visited July 10, 2017).

⁴⁸ Ben Munson, *Verizon Ad Spend Leads Wireless Sector in 2016, but T-Mobile Dominates Online Response Post-Super Bowl*, FIERCEWIRELESS (2016), <http://www.fiercewireless.com/special-report/verizon-ad-spend-leads-wireless-sector-2016-but-t-mobile-dominates-online-response>.

To obscure these facts, the *Title II Order* relied on a now-dated *Consumer Reports* study that, in the *Order*'s words, purported to show "significant barriers to switching." See *Title II Order* ¶ 98. As discussed in the attached Economists' Declaration (¶ 44), the study shows no such thing. To begin with, it is now obsolete because, to a significant extent, it preceded the general demise of multi-year contracts and the widespread unlocking of phones, both of which have increased subscribers' ability to switch providers. In any event, the study did not find that switching is unusually difficult in this industry or that switching costs are high. Instead, it found only that about a quarter of mobile subscribers who had registered some dissatisfaction with their mobile providers had not yet gotten around to switching. See *id.* Neither the *Order* nor the study identified any basis for concluding that this modest level of consumer inertia is unusual when compared to consumer behavior in other product markets, let alone that it requires special regulatory intervention.⁴⁹ To the contrary, another *Consumer Reports* article from the same period supports the opposite conclusion, finding that 71% of consumers *would switch ISPs* if their current ISP started to block (or impose extra charges to use) high-bandwidth services.⁵⁰ The *Title II Order* conveniently ignored that study.

Fixed broadband. Quite apart from their mobile broadband options, consumers benefit from unprecedented levels of investment and competition in the fixed broadband segment. See generally Econ. Decl. ¶¶ 45-52. According to the Commission's April 2017 survey, 97% of census blocks with housing units have at least two providers offering fixed broadband services

⁴⁹ See also Econ. Decl. ¶ 44 (demonstrating that sound economics refutes *Title II Order*'s passing reliance on a Bernstein Report that assumes consumers act irrationally whenever they do not choose the cheapest plan).

⁵⁰ 71% of U.S. households would switch from providers that attempt to interfere with Internet, CONSUMER REPORTS (Feb. 18, 2014), <http://www.consumerreports.org/cro/news/2014/02/71-percent-of-households-would-switch-if-provider-interferes-with-internet-traffic/index.htm>.

with a minimum of 10 Mbps downstream and 1 Mbps upstream, and 79% have at least three such providers. FCC, *Internet Access Services: Status as of June 30, 2016*, at 6, Fig. 4 (Apr. 2017). Those speeds are more than enough to handle the broadband needs of most American households; indeed, they can support two simultaneous high-definition video streams. *E.g.*, Netflix, *Internet Connection Speed Recommendations*, <https://help.netflix.com/en/node/306> (last visited July 7, 2017).

This proliferation of choices—at what used to be considered luxury speed levels—is only the beginning. Over the past several years, GB-speed services have moved from abstract aspiration to everyday reality for millions of American consumers in locations across the United States. Cable companies such as Comcast and Charter/Spectrum initially led the way in introducing such services by deploying DOCSIS 3.0/3.1 technologies.⁵¹ AT&T, Verizon/FiOS, and others have responded with competitive GB services of their own. For example, AT&T launched a multi-billion-dollar initiative to build out its residential fiber network to support growing customer demand for ultra-high-speed Internet access.⁵² AT&T has now deployed fiber-to-the-premises (“FTTP”) infrastructure to millions of customer locations across 51 major

⁵¹ *E.g.*, Tony Werner, Executive Vice President & Chief Technology Officer, *Comcast, World’s First Live DOCSIS 3.1 Gigabit Class Modem Goes Online in Philadelphia*, COMCAST VOICES (Dec. 22, 2015), <http://corporate.comcast.com/comcast-voices/worlds-first-live-docsis-3-1-gigabit-class-modem-goes-online-in-philadelphia> (“The beauty of DOCSIS 3.1 is that it is backwards compatible, so no digging up streets or backyards. This technology ... will provide more gigabit choices for our customers.”).

⁵² *See, e.g.*, News Release, AT&T, *AT&T Invests Nearly \$2 Billion over Three-Year Period to Enhance Local Networks in Chicago Area* (Apr. 7, 2014) (“Chicago-area residents depend on our fast and reliable Internet connections more and more every day, whether it’s access to files and apps at work, watching a video at home, or even receiving updates from connected cars or home monitors.”) (quoting AT&T Illinois President Paul La Schiazza), http://about.att.com/story/att_invest_nearly_two_billion_over_three_year_period_to_enhance_local_networks_in_chicago_area.html.

metro areas.⁵³ This project is ongoing. AT&T has committed to expand its FTTP service by mid-2019 to at least 12.5 million mass-market customer locations,⁵⁴ and it plans to deploy fiber in 67 metro areas.⁵⁵ All told, since 2012, AT&T has invested \$135 billion in the United States in its mobile and fixed networks—more than any other U.S. public company.

By itself, the presence of competitive fixed-broadband alternatives, outlined in the Commission’s April 2017 survey, is sufficient to deter each fixed-broadband provider from degrading its customers’ ability to make full use of whatever Internet content and applications they wish to access.⁵⁶ And as explained in the Economists’ Declaration, only a very small number of competitors is needed to protect consumer interests in industry contexts like this one, where fixed and sunk costs are high and the incremental cost of serving incremental users is comparatively low.⁵⁷ In those contexts, rivals have strong incentives to compete fiercely to gain

⁵³ News Release, AT&T, *100% Fiber Networks Powered by AT&T Fiber Available in Over 50 Metros by End of February* (Feb. 13, 2017) (“100% Fiber Networks”), http://about.att.com/newsroom/att_fiber_coming_to_over_50_metros_by_end_of_february.html; News Release, AT&T, *AT&T Plans to Bring 5G Evolution to Over 20 Metros by End of Year* (Apr. 25, 2017), http://about.att.com/story/5g_evolution_to_over_20_metros_in_2017.html.

⁵⁴ Mem. Op. and Order, *Applications of AT&T Inc. and DIRECTV for Consent to Transfer Control of Licenses and Authorizations*, 30 FCC Rcd 9131, App. B, § .III (July 28, 2015) (“AT&T-DIRECTV Merger Order”).

⁵⁵ E.g., *100% Fiber Networks*, *supra*.

⁵⁶ These competitive statistics debunk the notion, popularized by pro-regulation advocates, that fixed broadband has devolved into a “*de facto* cable monopoly” poised to usurp basic industry norms of Internet access. E.g., Susan P. Crawford, *The Communications Crisis in America*, 5 HARV. L. & POL’Y REV. 245, 248, 261 (2011) (“Given the tremendous economies of scale and cost advantages of the cable industry, being a wireline phone company is not a great business these days The emergence of a *de facto* cable monopoly in high-speed wired Internet access in most of the country cannot stay a secret.”).

⁵⁷ See Econ. Decl. ¶¶ 53-55; accord Timothy J. Tardiff, *Changes in Industry Structure and Technological Convergence: Implications for Competition Policy and Regulation in Telecommunications*, 4 INT’L ECON. & ECON. POL. 109 (2006); Dennis L. Weisman, *When Can Regulation Defer to Competition for Constraining Market Power? Complements and Critical Elasticities*, 2 J. COMPETITION L. & ECON. 101, 102 (2006) (“[P]rice increases that produce even small reductions in demand can generate large losses in contribution to joint and common costs because the firm’s revenues decline much more than the costs it can avoid. It is in this manner that high margins can serve to discipline the [de]regulated firm’s pricing behavior.”).

and retain customers even as prices fall because, whenever they lose a customer, they save minimal costs but lose significant revenues. *See* Econ. Decl. ¶ 54. It is for precisely this reason that the Commission has concluded that even two competitors can be sufficient to ensure effective competition.⁵⁸

Beyond that, any broadband provider also faces an additional reason to meet consumer expectations of an open Internet: consumers now make use of multiple broadband networks during the course of a single day. For example, a typical consumer uses a home broadband network in the early morning and at night and different mobile and fixed-line networks during the course of a day—*e.g.*, in the workplace or over the local Wi-Fi connections offered by campuses, coffee shops, and restaurants. The fact that a typical consumer uses multiple networks sharply disciplines the ability of any given network to engage in conduct that threatens consumer welfare. Even apart from enforcement of the transparency rules, that market dynamic will cause consumers to notice, complain, and switch if any ISP allows its best-effort broadband platform to diminish in quality or engages in anticompetitive treatment of edge providers. *See* Econ. Decl. ¶¶ 14-16, 25-27, 39-44, 49-52, 65-69.

Finally, any market concentration in the fixed-line space is at best temporary because the line between “mobile” and “fixed” broadband market segments is increasingly blurred, and mobile providers are poised to compete head-to-head with fixed providers. *See* Econ Decl. ¶¶ 56-64. Mobile and fixed-line broadband services are already substitutes to some extent. According to a Pew Research study, “a growing share of Americans now use smartphones as their primary means of online access at home. Today just over one-in-ten American adults are

⁵⁸ Report and Order, *Business Data Services in an Internet Protocol Environment*, WC Docket No. 16-143, FCC 17-43, ¶ 120 (Apr. 28, 2017).

‘smartphone-only’ internet users—meaning they own a smartphone, but do not have traditional home broadband service.”⁵⁹ That trend is likely to continue with the roll-out of affordable mobile plans with unlimited data (see above) and the ubiquitous availability of public Wi-Fi hotspots. The distinction between fixed and mobile will evaporate further with the deployment of ultra-high-capacity 5G technologies, which will feature a proliferation of very small cell sites linked by dense fiber backhaul networks. Although 5G is still in the planning stages, analysts predict that 25 percent of U.S. mobile broadband subscriptions will use 5G by 2022.⁶⁰

That point is significant because the Commission should adopt a forward-looking regulatory regime, built to last well into the next decade. *See* Econ. Decl. ¶ 64. That regime should reflect the likelihood that, with the proliferation of 5G technologies, typical consumers in five years will be able to choose among half a dozen high-end broadband services for all their Internet access needs.

b. “Gatekeeper” power.

The *Title II Order* contended that retail competition, no matter how strong, is insufficient to prevent market failures. It reasoned that each broadband ISP, no matter how small and nondominant, possesses “gatekeeper” (or “terminating access monopoly”) power over edge providers seeking access to its end user customers. *Title II Order* ¶¶ 80 & n.130, 84. And on that basis it disavowed any need to limit its rules to ISPs with market power in any retail market.

⁵⁹ Pew Research Center, *Internet/Broadband Fact Sheet* (Jan. 12, 2017), <http://www.pewinternet.org/fact-sheet/internet-broadband/>.

⁶⁰ Ericsson, *Ericsson Mobility Report: On the Pulse of the Network Society*, at 2 (Nov. 2016), <https://www.ericsson.com/assets/local/mobility-report/documents/2016/ericsson-mobility-report-november-2016.pdf>; *see also* Statista, *The Next Frontier: 5G to Hit the Mainstream by 2022*, ECN MAGAZINE (May 31, 2017), <https://www.ecnmag.com/news/2017/05/next-frontier-5g-hit-mainstream-2022>.

See id. ¶ 84. As explained in recent scholarship and the attached Economists’ Declaration, such “gatekeeper” rhetoric is incoherent in this context, and the Commission should repudiate it as a basis for broadband regulation.⁶¹

The term “gatekeeper” is a populist shorthand for the more traditional concept of a “terminating access monopoly.” *See Title II Order* ¶ 80 n.130; *see also 2010 Open Internet Order* ¶ 24 & n.66. It refers to the putative “monopoly” that any interconnected communications provider, no matter how competitively insignificant it may be in the retail market, is said to possess for the “service” of terminating traffic to its own subscribers. This concept first arose in the 1990s and early 2000s when small competitive local exchange carriers (“CLECs”) began assessing inefficiently high terminating access charges on interconnecting carriers for the delivery of long-distance calls. Because CLECs were new entrants with small market shares, some speculated that they could impose these excessive charges only because of a market failure associated with their “bottleneck” control of access to their end users. As the Commission ultimately acknowledged, however, this “CLEC access charge” problem arose not from a market failure, but from the application of Title II regulation itself—specifically, from tariffing, interconnection, and geographic-averaging requirements.⁶²

⁶¹ *See* Econ. Decl. ¶¶ 65-69; Andres Lerner & Janusz Ordovery, *The “Terminating Access Monopoly” Theory and the Provision of Broadband Internet Access*, in Verizon Ex Parte, GN Dkt. No. 14-28 (filed Jan. 15, 2015); Jonathan E. Nuechterlein & Christopher Yoo, *A Market-Oriented Analysis of the “Terminating Access Monopoly” Concept*, 14 COLO. TECH. L.J. 21 (2015) (“Nuechterlein & Yoo”).

⁶² *See* Seventh Report and Order, *Access Charge Reform*, 16 FCC Rcd 9923, ¶ 2 (Apr. 27, 2001) (“[W]e limit the application of our tariff rules to CLEC access services in order to *prevent use of the regulatory process* to impose excessive access charges[.]”) (emphasis added). In particular, the Commission’s Title II rules (i) entitled the CLEC to tariff its termination rates unilaterally; (ii) compelled long-distance companies to interconnect with the CLEC and hand off all terminating traffic bound for its customers; and (iii) required those long-distance companies to pay the tariffed termination rates in the process, no matter how objectionably high they might be. *See id.* In addition, section 254(g) precluded these IXCs not only from sending the bill to the called parties (*i.e.*, to the CLEC’s end users), but also from passing the inflated termination charges through to the specific calling parties who placed these

The broadband market contains no such regulatory distortions and presents no “terminating access monopoly.” See Econ. Decl. ¶¶ 65-69. No broadband ISP can “tariff” the “service” of providing access to its end users, and no backbone or other third-party network has any regulatory obligation to interconnect with any ISP, let alone pay whatever rates the ISP might wish to charge for access to its users. Although networks might have more or less bargaining leverage in interconnection negotiations depending on their relative size (among other factors), network providers do not have “monopoly” power simply by virtue of serving a discrete set of last-mile customers, and the marketplace for Internet traffic exchanges has in fact been functioning efficiently without regulation for decades. See Section I.A.4, *infra*. Indeed, if the “terminating access monopoly” were a genuine phenomenon, it would be impossible to make sense of routine commercial interactions today. For example, broadband ISPs often *pay* for interconnection (in the form of transit services offered by Internet backbones) to connect their end users to content providers rather than *charging* anyone for access to those customers.⁶³ Similarly, a typical cable company or other subscription TV provider does not *charge* content

particular calls. The net result of these Title II regulations was to make the CLECs’ subscribers completely indifferent to the level of these termination charges—and thus to preclude any market response to them. Even in the absence of these regulatory distortions, person-to-person voice calls might give rise to inefficiently high terminating access charges for reasons specific to such calls: “in any given call, the calling party has a particularized need to reach a given individual at a given number, and the terminating carrier (with whom the calling party typically has no relationship) controls access to that entire [one-person] ‘market.’” Nuechterlein & Yoo, *supra*, at 35. But that is a “special case,” *id.*, which cannot be extrapolated more broadly to relationships between ISPs and third parties, *id.*

⁶³ See Peyman Faratin, David Clark et al., *The Growing Complexity of Internet Interconnection*, 72 COMM. & STRATEGIES 51, 63 (2008); Stanley M. Besen & Mark A. Israel, *The Evolution of Internet Interconnection from Hierarchy to “Mesh”: Implications for Government Regulation*, 25 INFO. ECON. & POL’Y 235, 243–44 (2013) (“Besen & Israel); see also Section II.A.4, *infra*.

providers for access to its customer base; instead, it typically *pays* content providers for the right to transmit their programming to its customers.⁶⁴

As these examples illustrate, the mere fact that a network provider has retail customers that rely on it to connect them to content does not give the provider any special bargaining clout when negotiating with third parties over access to those customers. It certainly does not create “monopoly” or “gatekeeper” power warranting a regulatory response, let alone regulatory intervention beyond a baseline no-blocking/no-throttling rule.⁶⁵ The Commission should make these findings explicit in its order and disavow any reliance on “gatekeeper” or “terminating access monopoly” power in the broadband context. Otherwise, future Commissions may follow the lead of the Commission’s prior leadership and revert to using sloppy “gatekeeper” rhetoric as a substitute for serious market analysis in a variety of contexts.⁶⁶

⁶⁴ These charges can take the form either of “affiliate fees” (for cable channels) or “retransmission consent fees” (for broadcast channels). *See, e.g.,* Report and Order, *Amendment of the Comm’n’s Rules Related to Retransmission Consent*, 29 FCC Rcd 3351, ¶ 2 (Mar. 31, 2014) (“broadcasters have increasingly sought and received monetary compensation [from MVPDs] in exchange for retransmission consent”).

⁶⁵ *See also* Econ. Decl. ¶¶ 65-69. Even if there *were* a “gatekeeper” phenomenon warranting a regulatory response, a no-blocking/no-throttling rule would suffice to address it. *Id.* ¶ 70. With no ability to block particular content (without a network-management justification), an ISP obviously cannot impose unilateral tolls on content providers as the price of access to its customers. Although a no-blocking/no-throttling rule would not prohibit voluntary paid prioritization agreements between ISPs and content providers, there is no need for a categorical ban on such agreements in the first place, as discussed in Section I.A.3 below.

⁶⁶ In addition to the *2010 Open Internet Order* and the *Title II Order*, the Commission relied on “gatekeeper” analysis to justify imposing far more burdensome privacy rules on broadband ISPs than on edge providers such as Google and Facebook. *See* Report and Order, *Protecting the Privacy of Customers of Broadband and Other Telecommunications Services*, WC Docket No. 16-106, FCC No. 16-148, ¶ 36 (Nov. 2, 2016), *abrogated by* Pub. L. No. 115-22, 131 Stat. 88 (Apr. 3, 2017); *see also* Wireless Telecomm’ Bureau, *Policy Review of Mobile Broadband Operators’ Sponsored Data Offerings for Zero-Rated Content and Services*, at 7-8, 11, 13, 16 (Jan. 11, 2017), http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0111/DOC-342987A1.pdf.

Finally, the Commission should make clear that, because this “gatekeeper” analysis is flawed, there is no valid policy basis for imposing intrusive net neutrality rules on any nondominant ISP—*i.e.*, any ISP that does not exercise substantial market power in the relevant retail markets. In *Verizon*, the D.C. Circuit deferred in dicta to the Commission’s decision to apply its rules to all ISPs, no matter how nondominant, on the theory that each has the supposed “gatekeeper” power discussed above. *See* note 35, *supra*. But nothing in that opinion precludes the Commission from revisiting that determination, rejecting the economically flawed “gatekeeper” rationale, and concluding (like Judge Silberman in his dissent) that a showing of retail market power is an essential prerequisite to intrusive regulation.

c. Externalities.

The *Title II Order* separately contended that broadband competition is insufficient to protect consumer welfare because the open Internet exhibits many positive externalities (*Title II Order* ¶¶ 76-77), which any individual broadband ISP does not fully internalize (*id.* ¶ 83). In particular, the *Order* contended that ISPs “have incentives to engage in practices that will provide them short term gains but will not adequately take into account the effects on the virtuous cycle.” *Id.* Apart from blocking and throttling, the Commission identified a single, purely hypothetical “practice” that, in its view, would present such “negative externalities” (*id.*): paid prioritization. As discussed in Section I.A.3 below, that practice—even if it were a real-world phenomenon rather than a mere theoretical possibility—could be expected to promote rather than harm consumer welfare. More broadly, the Commission’s concern about preserving Internet externalities cannot support intrusive broadband regulation even as a theoretical matter, as discussed more fully in the attached Economists’ Declaration (¶¶ 71-76).

To begin with, most Internet services—indeed, innumerable goods and services in our economy generally—produce substantial externalities without thereby triggering any need for regulation. Obvious examples include the network externalities associated with Facebook’s social network, the Apple and Google/Android app stores, and Microsoft’s desktop operating system and office productivity software.⁶⁷ Few would suggest that common carrier-type regulation is needed to protect or enhance these externalities. For example, no one proposes requiring Microsoft to make its dominant Office productivity software more interoperable with alternative word-processing and spreadsheet programs. And no one proposes regulating how Apple and Google/Android vet and arrange unaffiliated apps within their respective app stores, which together account for nearly 100% of app downloads in smartphones today. There is no stronger “externalities” case to be made for regulating broadband ISPs.

In any event, the net neutrality rules actually imposed by the *Title II Order*, with their broad *ex ante* prohibitions on new ISP business models, are absurdly overinclusive solutions to any “externalities” concern that might exist. Suppose, for example, that ISPs began implementing isolated paid-prioritization arrangements to support quality of service (“QoS”) for unusually latency-sensitive applications, such as high-definition videoconferencing or massively multiplayer online gaming (“MMOG”).⁶⁸ Such QoS-enhancement arrangements would hardly threaten the integrity of the Internet as a neutral platform for all other applications; indeed, they

⁶⁷ The term “network externalities” refers to the phenomenon in which the value of a product to any given user increases with the number of other users of that product. For example, Facebook users benefit from the large number of other Facebook users, and Microsoft Word users benefit from the ease of file-sharing with the many other users of that program. Communications networks, including the Internet, exhibit the same phenomenon.

⁶⁸ These comments use the term “latency-sensitive” as a shorthand to describe Internet applications whose performance quality is unusually sensitive to latency, jitter, and similar variables.

would likely have no discernible effect on those other applications in either the short term or the long term. *See* Section I.A.3, *infra*. Yet the *Title II Order* prohibited such arrangements outright. Neither the *Order* nor any of its supporters has ever articulated any plausible reason why it is necessary to straitjacket the Internet with such overbroad prohibitions now, before any actual “problem” arises, rather than waiting to see whether innovation in Internet business models does in fact pose a genuine threat to Internet openness. Experimentation should not be illegal per se.

3. “Paid Prioritization” Concerns Are Baseless.

The *Verizon* court upheld the transparency rules established in the *2010 Open Internet Order* and identified a non-Title II path for the Commission to follow when reinstating its no-blocking/no-throttling rules. *See* § III, *infra*. AT&T and others offered extensive guidance on how to craft such non-Title II rules, and the Commission’s post-*Verizon* NPRM proposed to follow that basic roadmap.⁶⁹ That proposal, however, prompted a backlash from pro-regulation advocates, who believed that the Commission should categorically ban business-to-business paid prioritization agreements and adopt a catch-all “no-unreasonable interference/disadvantage” standard mirroring the “just and reasonable” standard of sections 201 and 202. The advocates cited the purported need to adopt these two measures as a reason to reclassify broadband under Title II. To be sure, both measures are impermissible if broadband is classified as an “information service.”⁷⁰ But that fact cannot possibly cut in favor of Title II classification

⁶⁹ Notice of Proposed Rulemaking, *Protecting and Promoting the Open Internet*, 29 FCC Rcd 5561, ¶ 4 (May 15, 2014) (“*2014 Open Internet NPRM*”).

⁷⁰ *See* 47 U.S.C. § 153(51) (“[a] telecommunications carrier shall be treated as a common carrier ... only to the extent that it is engaged in providing telecommunications services”); *Verizon*, 740 F.3d at 655-57 (invalidating 2010 “nondiscrimination” rule, including presumptive ban on paid-prioritization arrangements for fixed broadband services, as impermissible common carriage regulation).

because both of these regulatory measures are needless and indeed harmful. We address the “paid prioritization” concern in this section before turning to the “unreasonable interference/disadvantage” standard in the next.

“Paid prioritization” is the ultimate red herring in the net neutrality debate, and categorical restrictions on such practices are not only unwarranted, but also blatantly premature. As discussed below, both the paid prioritization of packets *traversing the public Internet* and any associated payments remain theoretical constructs that no ISP has yet operationalized for the mass market.⁷¹ Moreover, if and when such arrangements *are* operationalized, they would enhance consumer welfare, and flatly banning them could thus only injure consumers and suppress Internet innovation, particularly for latency-sensitive applications. In all events, these still-theoretical arrangements certainly pose no risk to Internet “openness” sufficient to justify the costs of Title II regulation.

As a threshold matter, issues concerning paid prioritization of Internet traffic have had limited practical significance to date because the Commission has always allowed a more important type of “packet prioritization”: the common ISP practice of logically segregating categories of latency-sensitive IP traffic (such as VoIP or video) from Internet traffic and selling the associated services separately as “specialized” (or “managed”) IP services. For example, AT&T offers managed IP video (*i.e.*, subscription TV) services over the same U-verse network infrastructure it uses to deliver broadband Internet traffic. AT&T ensures QoS for the IP video service in part by connecting content servers directly to its IP network (so that it manages every

⁷¹ By definition, the only “paid prioritization” arrangements at issue here involve traffic carried over *the public Internet*—*i.e.*, traffic that is likely to traverse multiple IP networks from source to destination. IP traffic that remains on a *single* network does not cross the public Internet, is not considered part of any provider’s “broadband Internet access service,” and is thus not subject to the Commission’s net neutrality rules. See *Title II Order* ¶ 208.

link from source to destination) and by marking the associated “video” IP packets for priority on the routers that are also used to process “Internet” IP packets.⁷² The Commission’s rules expressly permit any ISP to engage in such packet prioritization as a means of providing specialized services; the rules merely curtail the ISP’s ability to prioritize certain packets *within* the stream of packets exchanged over the public Internet as part of its “broadband Internet access” service. *See, e.g., Title II Order* ¶ 208.

Of course, the specialized services exception does not fully negate the regulatory costs of the Commission’s rules against Internet packet prioritization. Certain Internet applications—such as high-definition videoconferencing and multi-player online gaming—also have unusually acute QoS needs but are less susceptible to a “managed service” solution because they often involve participants using many different ISP networks. For example, suppose that several hundred people connect to the Internet through many different ISPs and wish to compete against one another in real time in the same high-definition virtual reality game. Split-second reaction times matter to gaming success, and latency and jitter may frustrate the gamers and skew the results of the game. The ISPs connecting these gamers to the Internet could thus greatly enhance the gaming experience for all participants by marking the relevant packets for special delivery in the event of congestion at peering points and anywhere else those packets are exchanged between IP networks. Such an arrangement would make gaming enthusiasts substantially better off and, as discussed below, would be exceedingly unlikely to make anyone worse off because it would not significantly affect the performance of less latency-sensitive Internet applications. For example, consumers would not notice if their email packets occasionally arrive a few

⁷² *See* Comments of AT&T Inc., *Preserving the Open Internet*, WC Docket No. 07-52, at 52-54 (Jan. 14, 2010) (“AT&T 2010 Net Neutrality Comments”).

milliseconds later because their gaming packets receive a higher priority during transitory periods of network congestion.

To develop such a solution, however, the ISP community would first have to overcome a basic collective action problem. When one general-purpose IP network hands off its traffic to another, it has an obvious incentive to present *all* of its outgoing traffic (*i.e.*, the traffic generated by its own content-originating customers) as “high priority,” because any ensuing costs would be incurred only by the other network. Thus, although both IPv4 and IPv6 contain headers that any network can use to mark particular IP packets for differential treatment by its own routers, networks have traditionally honored the priority markings only for the traffic that they originate and have ignored those for traffic originated on other networks. *See* AT&T 2010 Net Neutrality Comments at 58. To solve that collective action problem, industry participants might need to attach price signals to such QoS guarantees by charging for them, just as market participants in any other industry routinely ensure allocative efficiency by monetizing scarce resources rather than giving them away for free. The use of price signals would match QoS guarantees with the latency-sensitive applications and content that need them most in order to function optimally. Otherwise, *all* packets might ultimately be marked for special handling, and thus none would actually receive it.

In short, paid prioritization arrangements for latency-sensitive Internet traffic could substantially enhance consumer welfare, yet they are currently prohibited by the Commission’s flat ban. To be sure, the regulatory costs of that flat ban are unquantifiable—not because there are none, but because, when the ban was imposed, the Internet community had not yet worked out any widely recognized, economically sustainable mechanism for “QoS-aware” exchanges of

traffic across multiple networks. But the very existence of that flat ban obviously chills pro-consumer innovations in the growing marketplace for latency-sensitive Internet applications.⁷³

Some pro-regulation advocates argue that this flat ban is somehow pro-consumer on the theory that it motivates ISPs to build fatter pipes capable of handling all applications—even the most latency-sensitive ones—with perfect reliability at all times. *E.g.*, *Title II Order* ¶ 126 & n.288. That rationale makes no sense for the reasons explained by Internet pioneer (and former FCC Chief Technologist) David Farber and Wharton professor (and former FCC Chief Economist) Gerald Faulhaber:

Internet traffic varies by time of day and is highly variable, or “bursty.” Installing capacity sufficient to carry all demand all the time could well involve providing capacity *dozens of times* larger than average demand, with a concomitant increase in costs to customers to pay for capacity that sits idle for all but an hour a year. It is the nature of stochastic “bursty” traffic that peak demand will be much larger than average demand, so providing for the peak would be very expensive, and certainly against good engineering and economic principles.⁷⁴

As Professors Farber and Faulhaber conclude, the “[j]ust add capacity” mantra emphasized by advocates of net neutrality regulation “is a recipe for a very expensive Internet, primarily

⁷³ Ironically, paid prioritization arrangements are so ubiquitous outside the Internet context that they are an accepted part even of *regulated common carrier regimes* involving transport *monopolists*. For example, monopoly pipelines have long offered natural gas “shippers” (i.e., companies that pay pipelines to transport gas from its source to end users or other pipelines) a choice of purchasing “firm” or “interruptible” service over shared transmission facilities. “Firm” service is priced higher than “interruptible” service but, as its name suggests, entitles shippers to priority over other shippers that have bought lower-priced “interruptible” service, thereby enabling them to make use of finite pipeline capacity during periods of congestion. That distinction is a longstanding fixture in FERC’s regulatory regime. *See, e.g., Complex Consol. Edison Co. v. FERC*, 165 F.3d 992, 998 n.12 (D.C. Cir. 1999); *Assoc. Gas Distrib. v. FERC*, 824 F.2d 981, 1013 (D.C. Cir. 1987); *Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol*, 50 Fed. Reg. 42,408, 42,438 (1985); 18 C.F.R. § 284.9(a)(3).

⁷⁴ Gerald R. Faulhaber & David J. Farber, *The Open Internet: A Customer-Centric Framework*, 4 INT’L J. OF COMMUNICATION 302, 324 (2010).

because of the bursty nature of Internet traffic.”⁷⁵ Of course, ordinary consumers would ultimately be the ones footing the bill for that “very expensive Internet.”

Some pro-regulation advocates similarly claim—with no evidence—that any use of paid prioritization, no matter how targeted, will give ISPs the incentive and ability to consign *all other* traffic “to the digital equivalent of a winding dirt road.”⁷⁶ This, too, is nonsense. Mobile and fixed-line providers would not be investing tens of billions of dollars a year to increase their speeds (*see* Section I.A.2, *supra*) if it were commercially viable for them to consign their customers to a “dirt road” in any context. If Broadband Provider X began degrading its best-effort Internet access platform to favor its “prioritized” content, such that most applications and content loaded more slowly on X’s network than on its rivals’ Internet access platforms, customers would begin switching to those rivals en masse. *See id.*

Recent advocacy for a flat ban on “fast lanes” ignores these points and then blunders into several related misconceptions about how the Internet operates. Consider this widely circulated social media video from three U.S. Senators purporting to explain the net neutrality debate to ordinary Americans:

Ever since the internet started, every innovation, every advance has happened because we have treated content neutrally. ... Now what they [ISPs] wanna do is create a fast lane for businesses that can afford a fast lane. Right now, you get a blog post from some, ya know, right-wing or left-wing or middle-of-the-road blogger, all at the same damn time, and that goes at the same speed as the New York Times or as Fox News’ website, and it all competes with each other. But if

⁷⁵ *Id.*

⁷⁶ Lawrence Lessig & Robert W. McChesney, *No Tolls on the Internet*, WASH. POST, June 8, 2006, <http://www.washingtonpost.com/wp-dyn/content/article/2006/06/07/AR2006060702108.html>; *see also Title II Order* ¶¶ 68, 126 & n.288.

just the big businesses, the big, wealthy, deep-pocketed businesses are able to go at a faster speed, then all that other stuff won't get through to you.⁷⁷

Every proposition in that passage is wrong.

First, the Internet has never “treated content neutrally,” nor have end users ever been able to download all Internet content “at the same speed.” Instead, content providers with the financial resources needed to buy sophisticated content delivery services—or to build out their own content delivery networks, as Google, Amazon, and Netflix have done—have always given consumers better performance than have ordinary websites that do not seek or cannot obtain capital financing, and that is a critical reason for their market dominance.⁷⁸ No one claims that the government should intervene to neutralize this longstanding disparity because no one familiar with the Internet ecosystem believes the sham “equality” rhetoric underlying much of the advocacy for net neutrality regulation.

The premise of any market-based economy is that private companies should use all of their comparative advantages, including capital resources, to compete as effectively as they can. No one suggests that the government should prohibit large companies from attracting better employees with higher wages or from running more prominent ads than their competitors. And no one has yet suggested that is inappropriate for Netflix, Amazon, or Google/YouTube to use their scale advantages and multi-billion-dollar content delivery networks to outperform smaller

⁷⁷ *The internet is under attack—and these Senators are trying to save it*, NOWTHISPOLITICS (June 17, 2017), www.facebook.com/NowThisPolitics/videos/1595571697140981.

⁷⁸ Content delivery networks (“CDNs”) are massive networks of cache servers deployed near population centers across the world and are connected by fiber-optic transmission links. By reducing the number of “hops” that content packets must take from content source to individual end user, they greatly speed download times and improve content performance. See AT&T 2010 Net Neutrality Comments at 69. Third-party CDN providers such as Akamai and Limelight tout those benefits to content providers to justify the purchase of costly CDN services. See e.g., Akamai White Paper, *Beyond Caching: The User Experience Impact of Accelerating Dynamic Site Elements across the Internet*, at 1, 8 (Nov. 2008), http://www.ibusiness.de/wrapper.cgi/www.ibusiness.de/files/jb_2532165951_1259489113.pdf.

video rivals that have more limited resources and thus cannot obtain comparable content-delivery functionality. Indeed, the *Title II Order* itself acknowledged that “established entities with substantial resources will always have a variety of advantages over less established ones” and that the largest edge providers obtain substantial “benefits” from “invest[ing] in enhancing the delivery of their services to end users.” *Title II Order* ¶ 128 (internal quotation marks omitted). But it made no effort to explain why this is less of a concern with respect to CDNs, which are a real-world phenomenon, than with respect to paid prioritization, which remains a theoretical construct.

This does not mean, of course, that large companies necessarily win out over small companies, because the capital markets help start-ups with promising business plans acquire the assets and services needed for the highest-quality Internet experiences. The capital markets would perform that same function no less fairly or efficiently if paid-prioritization arrangements ever became a commercial reality. Indeed, paid-prioritization arrangements could help level the playing field for small start-ups by enabling them to compete more effectively against better-funded incumbents. It is thus no surprise that the incumbents with the largest and most expensive CDNs seek to preserve regulatory barriers to that alternative means of providing high-quality latency-sensitive services to consumers.

Second, the Senators’ video indulges a popular misconception when it contends that, if ISPs are permitted to offer QoS enhancements for unusually latency-sensitive applications, “other stuff won’t get through to you.” *See also Title II Order* ¶ 126 & n.287 (uncritically accepting assertions to this effect from some commenters and noting but not responding to refutations from other commenters). Last-mile access is not a zero-sum game, and prioritizing the packets for latency-sensitive applications will not typically degrade other applications

sharing the same infrastructure (let alone keep them from “get[ting] through to you”). Some applications are unusually latency-sensitive and thus *need* QoS enhancements to function optimally, and accommodating those application-specific needs will not materially impair the performance of other, less latency-sensitive applications. As one network engineering textbook explains: “in many multimedia applications, packets that incur a sender-to-receiver delay of more than a few hundred milliseconds are essentially useless to the receiver,” and such “characteristics are clearly different from those of elastic applications such as the Web,” for which even “long delays” are “not particularly harmful.”⁷⁹

In other words, if ensuring QoS for multi-player online gaming or videoconferencing means a loss of several milliseconds in the loading of a webpage or a P2P file-sharing session, users of the latter applications will neither notice nor care. For similar reasons, it is illogical to suggest that “an entrepreneur who sells craft chocolates and coffee ... could never compete if Godiva and Starbucks paid for faster carriage.”⁸⁰ It is exceedingly unlikely that the Godiva and Starbucks websites would even benefit from paid prioritization in any commercially significant way, let alone attain any strong competitive advantage if they obtained it (much less deprive their smaller rivals of access to the capital markets to match whatever notional benefits paid prioritization might bestow).

To be clear, AT&T currently has no plans to enter into paid prioritization arrangements over the public Internet in connection with any mass-market broadband services. Our central

⁷⁹ James F. Kurose & Keith W. Ross, *Computer Networking: A Top-Down Approach* 598 (5th ed. 2010).

⁸⁰ Gigi Sohn, *4 steps to writing an impactful net neutrality comment (which you should do)*, MASHABLE (June 15, 2017), <http://mashable.com/2017/06/15/how-to-write-a-good-fcc-comment/#C0xkmi5.Tiqw>.

point is that baseless fear-mongering about paid prioritization cannot justify a blanket prohibition on that still-theoretical model for optimizing latency-sensitive Internet applications; still less can it justify retaining Title II classification as a policy matter.

4. Regulation of Interconnection Arrangements Is Unnecessary.

Classification of broadband Internet access as a “telecommunications service” was the explicit and only legal basis for the *Title II Order*’s assertion of regulatory authority over the terms of interconnection agreements between IP networks.⁸¹ Some parties to interconnection agreements wish to preserve that asserted basis of regulatory authority because they hope that the Commission will use it to grant them better interconnection terms than they could negotiate in the free market. This, too, is no basis for retaining Title II regulation. Internet interconnection agreements have been “historically unregulated and beyond the Commission’s reach,” NPRM ¶ 42, yet the ensuing arrangements have functioned hyper-efficiently for decades, all to the ultimate benefit of American consumers.

The Internet is composed of many constituent networks, and each network must connect either directly or indirectly with every other to ensure connectivity among their respective

⁸¹ See *Title II Order* ¶ 204 (“As a telecommunications service, broadband Internet access service implicitly includes an assertion that the broadband provider will make just and reasonable efforts to transmit and deliver its customers’ traffic to and from ‘all or substantially all Internet endpoints’ under sections 201 and 202 of the Act.”) (emphasis added); *id.* ¶ 206 (“certain regulatory consequences flow from the Commission’s classification of [broadband Internet access], including the traffic exchange component, as falling within the ‘telecommunications services’ definition in the Act”). Conversely, once retail broadband Internet access is no longer a telecommunications service, it will no longer include the “implicit” common carrier obligations on which the Commission based the extension of sections 201 and 202 to Internet traffic exchange arrangements. See NPRM ¶ 42. AT&T also maintains its position that the *Title II Order*’s stated basis for regulating interconnection is untenable even insofar as the retail broadband service remains classified as a telecommunications service.

customers. Peering and transit are the most traditional means of meeting that objective.⁸² Peering is a private commercial arrangement under which two “peer” Internet providers interconnect directly and exchange traffic. Each peer provides the other with access only to its own customers (including transit customers that serve end users of their own) rather than to the entire Internet. In contrast, when a network sells “transit,” it ensures the delivery of its customers’ traffic to any Internet destination. A content provider that purchases such transit services is said to obtain “indirect” interconnection with the ISPs serving its end users. In recent years, many content providers have supplemented such indirect interconnection arrangements by also negotiating direct connections with some ISPs. *See Besen & Israel, supra.* And many content providers purchase specialized content delivery services from third-party CDNs such as Akamai, Limelight, or Level 3, which in turn arrange for either direct or indirect interconnection with ISP networks.

All of these commercial relationships have always been unregulated, and the interconnection marketplace has always functioned efficiently, in part because there are many routes into and out of any broadband ISP’s network.⁸³ Again, to reach an ISP’s end users, edge providers need not even deal with the ISP directly; they can instead choose transit services offered by one or more of the ISP’s peers (and, for many ISPs, the ISP’s own transit providers).

The ISP cannot selectively degrade particular peering arrangements to harm particular edge

⁸² *See generally* Michael Kende, *The Digital Handshake: Connecting Internet Backbones*, FCC OPP Working Paper No. 32, at 7 (2000), <https://www.fcc.gov/reports-research/working-papers/digital-handshake-connecting-internet-backbones>.

⁸³ *See, e.g., Besen & Israel, supra.* The main exceptions to this general rule have come when certain networks, hoping to shift blame to others or elicit regulatory intervention, have misleadingly accused ISPs of creating congestion. *See, e.g., Dan Rayburn, Cogent Now Admits They Slowed Down Netflix’s Traffic, Creating A Fast Lane & Slow Lane*, STREAMINGMEDIABLOG.COM (Nov. 5, 2014), <http://blog.streamingmedia.com/2014/11/cogent-now-admits-slowed-netflixs-traffic-creating-fast-lane-slow-lane.html>.

providers because those edge providers and their transit intermediaries—not the ISP—choose the interconnection facilities they will use for sending content to the ISP’s customers.⁸⁴ Moreover, transit always remains an attractive option for edge providers because the transit market is fiercely competitive; indeed, as the Commission found in 2016, “transit prices have fallen by more than 90% in the last five years alone.”⁸⁵ Those low prices in turn limit the rates any ISP can charge for direct interconnection with those that request it.⁸⁶

In short, there is no need for regulatory oversight of these relationships. The *Title II Order* did not conclude otherwise; it found instead “that the best approach is to watch, learn, and act as required, but not intervene now, especially not with prescriptive rules.” *Title II Order* ¶ 31. In any event, interconnection concerns cannot plausibly justify retaining Title II regulation as a policy matter because they lack any empirical basis. To the contrary, the Commission’s abstract assertion of regulatory authority on the basis of Title II served only to distort this otherwise well-functioning market. Because the *Title II Order* predicated its interconnection

⁸⁴ Peers and their edge provider customers routinely rely on multiple redundant paths into any ISP’s network. If one peering point becomes congested, a peer can shift traffic to another peering point in real time. Similarly, many edge providers use multiple transit providers (*i.e.*, the broadband Internet provider’s peers) at the same time and can instantaneously adjust their routing decisions among those providers, depending on cost, measured performance, and other considerations. As a result, a broadband provider could not execute a “degradation by congestion” strategy without, among other things, limiting capacity across *all of its peering points* for extended periods. That strategy would be a commercial non-starter: it would radically degrade the provider’s Internet access service and threaten its status as a broadband provider to both consumers and businesses.

⁸⁵ Mem. Op. and Order, *Applications of XO Holdings and Verizon Communications Inc. for Consent to Transfer Control of Licenses and Authorizations*, 31 FCC Rcd 12501, ¶ 44 n.156 (Nov. 16, 2016); *see also* Dan Rayburn, *Here’s The Latest North American Transit Pricing, Down 10% Year-Over-Year*, STREAMINGMEDIABLOG.COM (May 9, 2016), <http://blog.streamingmedia.com/2016/05/north-american-transit-pricing.html>; William Norton, *What Are the Historical Transit Pricing Trends?*, DRPEERING, <http://drpeering.net/FAQ/What-are-the-historical-transit-pricing-trends.php> (last visited July 10, 2017).

⁸⁶ *See Besen & Israel, supra*, at 243 (“CDNs (and their content provider clients) ... have alternatives to direct peering, and those alternatives limit whatever negotiating leverage an ISP would otherwise have.”).

authority on Title II classification of *retail* broadband services (*see id.* ¶ 339), it imposed radically asymmetrical regulatory obligations on only one party in most interconnection negotiations: the ISP, and never the network serving the edge provider. That asymmetry warps the negotiating process and has created an unreasonable double standard. The ISP has been subject to common carriage regulation and lawsuits while its counterparties, which are often some of the largest and most powerful Internet companies, have been treated as unregulated private carriers whose practices are immune from regulatory scrutiny. The Commission should thus restore regulatory parity to these relationships by eliminating common carrier regulation from all interconnecting parties.

B. Title II Regulation Imposes Massive Costs on the Internet Ecosystem.

As discussed, the Commission reclassified broadband Internet access under Title II largely because it wished to subject that service to the vague “just and reasonable” and “nondiscrimination” standards of sections 201 and 202 by means of the equally vague, multi-factor “no unreasonable interference/disadvantage standard.” This was the single greatest value-destroying regulatory measure the Commission has undertaken since the advent of broadband in the late 1990s. It exemplifies why Title II classification is not only unnecessary, but profoundly anti-consumer.

1. The Commission’s Title II Rules Are Vague and Unworkable.

As the Economists’ Declaration explains, any comprehensive scheme of economic regulation imposes substantial costs, including forgone investment and innovation, and those costs can be justified only where the scheme is actually needed to prevent equal or greater harms. *See Econ. Decl.* ¶¶ 83-93 (canvassing academic literature). Title II restrictions may have satisfied this cost-benefit standard when they were applied to the monopolistic, technologically

static telephone industry of the mid-20th century. They flunk that standard when extended to broadband. The broadband Internet ecosystem is one of the most technologically dynamic sectors of the modern economy. It is difficult to imagine any industry less suited to such old-economy-style regulation, designed originally for railroad monopolies. Such regulation inflicts incalculable costs on the Internet ecosystem by deterring productive investment and the free development of innovative, value-enhancing business models.

Many of the costs imposed by the *Title II Order* arise in part from the radically indeterminate character of Title II regulation itself and the Commission’s implementing rules. Sections 201 and 202 impose no standards at all: they simply admonish common carriers to act “just[ly] and reasonabl[y]” and not to engage in “unjust or unreasonable discrimination.” 47 U.S.C. §§ 201(b), 202. The Commission did not clarify these mandates when it adopted its so-called “no-unreasonable interference/disadvantage standard,” which it described as an “interpretation of sections 201 and 202 in the broadband Internet access context.” *Title II Order* ¶ 137. The rule forbids broadband providers to “unreasonably interfere with or unreasonably disadvantage end users’ ability” to access edge providers or “edge providers’ ability to make [their content or services] available to end users.” 47 C.F.R. § 8.11.

All of the operative terms in that regulation—unreasonably, interfere, and disadvantage—are “classic terms of degree” that give regulated parties “no principle for determining” when they pass “from the safe harbor” of the permitted “to the forbidden sea” of the prohibited. *Gentile v. State Bar of Nevada*, 501 U.S. 1030, 1049 (1991). That concern is particularly acute because these terms have “no settled usage or tradition of interpretation in law” in the broadband context. *Id.* at 1049. Legacy telephone-era section 201 and 202 precedents applying these terms will be of little value in determining whether broadband network management practices “unreasonably

interfere with or unreasonably disadvantage” edge providers in their dealings with customers or vice versa. Unsurprisingly, Chairman Wheeler himself admitted that he “d[idn’t] really know” what conduct the rule prohibited.⁸⁷

The *Title II Order* compounded rather than alleviated the problem when it announced a “nonexhaustive list” of seven factors to be used in applying this supposed “standard,” including “end-user control,” “consumer protection,” “effect on innovation,” and “free expression.” *Title II Order* ¶¶ 138-145. None of those concepts provides any meaningful guidance. For instance, the *Order* defined the “end-user” factor as a preference for practices that “empower meaningful consumer choice,” while recognizing that “many practices will fall somewhere on a spectrum” of end-user control and that “there may be practices controlled entirely by broadband providers that nonetheless satisfy” the rule. *Id.* ¶ 139. Worse, the *Title II Order* further announced (¶ 138) that the Commission would consider other, unnamed factors, and provided no hint as to how the Commission would weigh the known and unknown factors against one another.⁸⁸

In short, the Commission provided no real guidance beyond warning ISPs that they would be subject on a case-by-case basis to the general section 201/202 ban on “unreasonable” conduct. Because the Commission understood that it was untenable to subject ISPs to such vague threats of enforcement action, it encouraged them to ask Commission staff for advance “guidance” (or “advisory opinions”) on whether their planned practices might trigger liability.

⁸⁷ February 2015 Open Meeting Press Conference of Chairman Tom Wheeler (Feb. 26, 2015), available at <http://www.fcc.gov/events/open-commission-meeting-february-2015> (165:30-166:54).

⁸⁸ See *Timpinaro v. SEC*, 2 F.3d 453, 460 (D.C. Cir. 1993) (“The uncertainty facing a [regulated party] . . . is all the greater when [open-ended factors] are considered in combination, according to some undisclosed system of relative weights.”).

Title II Order ¶¶ 231-232. Under this approach, any ISP with an innovative business idea would have to suspend implementation while its lawyers prepare a request for “guidance” and then await permission from 12th and Maine before proceeding.

This mother-may-I regime is a parody of bureaucratic overreach; indeed, it is hard to imagine a regulatory process more conceptually inimical to the spirit of permissionless innovation at the heart of the modern Internet economy.⁸⁹ But in reality it hardly matters because this “guidance” process is so circumscribed and burdened with risk that it has never functioned in practice and never could. To begin with, the advisory opinions cannot be obtained for existing conduct, conduct subject to a pending inquiry, or conduct that is a “mere possibilit[y].” *Title II Order* ¶¶ 231-232. Beyond that, the Enforcement Bureau has discretion as to when or even whether to respond to a request for guidance; its guidance does not bind the Commission; and seeking guidance can trigger enforcement. *See id.* ¶¶ 231-235.

Moreover, the whole concept underlying advisory opinions is structurally flawed in today’s highly politicized regulatory climate. Regulatory advocates perceive illusory threats lurking behind any broadband innovation, and the Commission has seemed willing in the past to throw rigorous analysis to the wind rather than confront inflammatory populist rhetoric. *See, e.g.,* § I.B.3, *infra*. Companies would thus rarely seek guidance in the first place. If they did, they would be exceedingly unlikely to obtain any regulatory certainty in the process and might well increase their liability for increased forfeiture penalties if the Commission later concludes that staff’s “maybe” answer had put them on due notice of potential concerns.

⁸⁹ *See* Michael Kende and Konstantinos Komaitis, *Let a Thousand Flowers Bloom.fm*, Internet Society (May 5, 2014), <https://www.internetsociety.org/blog/public-policy/2014/05/let-thousand-flowers-bloomfm> (“‘Permissionless innovation’ is a key technical principle that has guided the Internet’s development and evolution ever since its inception.”).

2. Any Title II Regulation Is Inimical to Investment, Innovation, and Experimentation.

The Commission could not fix the problems identified above by tweaking its Title II implementing rules to make them more predictable in application. The problem arises instead from the very nature of subjecting an inherently dynamic industry to sections 201 and 202 in the first place, with their inherently indeterminate prohibitions on “unreasonable” conduct. Absent complete forbearance from those provisions (*see* § II.C, *infra*), Title II classification will always subject broadband ISPs to major and unpredictable regulatory risks.

The Economists’ Declaration explains in detail why, for this reason and others, common-carrier-style regulation of broadband Internet access will harm consumers by chilling innovation and investment. *See* Econ. Decl. ¶¶ 85-109. First, any rational ISP will think twice before investing in innovative business plans that might someday be found to violate the Commission’s undisclosed policy preferences and thus give rise to a cease-and-desist order and perhaps massive forfeiture penalties. This concern is particularly acute because broadband innovation frequently requires sunk investments that cannot be recovered if the Commission ultimately prohibits the business practice that they were incurred to support. *Id.* ¶¶ 98, 100. Similarly, regulatory uncertainty depresses investment because it “raises the rate of return (or ‘hurdle rate’) a firm will require to undertake the investment.” *Id.* ¶ 96.

These concerns are heightened by the prospect of “regulatory creep.” Firms will be deterred from making investments if they perceive a risk that regulators will betray their current assurances of moderation and subsequently ratchet up their degree of market intervention. Econ. Decl. ¶¶ 90, 98. The Commission’s recent conduct vividly highlights this concern. The Commission has expanded regulation of broadband over the past several years, most dramatically by imposing vague Title II common carrier rules shortly after disclaiming any intent

to do so. *Id.* ¶¶ 91, 100. Compounding that concern, the Commission specifically designed its behavioral rules to give itself maximum flexibility to expand regulation even further. *See* § I.B.1, *supra*. And as shown by the Wheeler Commission’s effort to regulate how ISPs charge for data usage, *see* § I.B.3, *infra*, ISPs have every reason to fear that Title II regulation would slide inexorably into outright price regulation and one-size-fits-all conduct restrictions designed to convert all ISPs into commoditized “dumb pipes.”⁹⁰ It is hard to imagine a stronger case study in investment-detering regulatory creep. *See* Econ. Decl. ¶¶ 110-18.

A growing body of empirical research confirms that overregulation has indeed depressed broadband investment in recent years. As explained in the Economists’ Declaration (¶¶ 104-09), a proper analysis of the available evidence shows a reduction in relevant capital spending during the period immediately following adoption of the *Title II Order*. Although correlation does not equal causation, and although it may be impossible to isolate all confounding variables, this empirical research tends to support a basic conclusion that is indisputable as a matter of economic theory: unpredictable regulation chills investment in dynamic industries such as this one. *See* Econ. Decl. ¶¶ 104-09.⁹¹

⁹⁰ This is the avowed objective of the most extreme pro-regulation groups. *See, e.g.*, Free Press, *The Net Neutrality Court Case Decoded* (Jan. 15, 2014), <https://www.freepress.net/blog/2014/01/15/net-neutrality-court-case-decoded> (vowing to reduce ISPs to “providers of ‘dumb pipes’”).

⁹¹ Some pro-regulation advocates disingenuously claim that AT&T CEO Randall Stephenson somehow “admitted that [Title II] rules haven’t harmed investment” when he identified other factors that have also affected investment levels since 2015. *See* Dana Floberg, *AT&T’s CEO Admitted That the Net Neutrality Rules Haven’t Harmed Investment*, FREE PRESS (May 5, 2017) (capitalization altered), <https://www.freepress.net/blog/2017/05/05/atts-ceo-admitted-net-neutrality-rules-havent-harmed-investment>. This is nonsense. Multiple factors, including regulation, influence the extent and timing of any company’s investments. The relevant question here is not whether investment would have increased or decreased in an absolute sense irrespective of Title II regulation, but whether investment would have increased more or decreased less in the absence of Title II regulation. On that issue, AT&T’s CEO made clear that “placing utility style regulation” is “suppressive to investment,” and “[t]here is no way anybody can argue” otherwise. Hal Singer, *Bad Bet by FCC Sparks Capital Flight from Broadband*, *Forbes* (Mar.

In addition, unnecessary regulation can thwart welfare-enhancing innovation even when its prohibitions are clear from the outset. To take one example, the flat ban on paid prioritization is a bright-line rule, but it makes no policy sense, and it nips in the bud a range of technological solutions that would enhance the value to consumers of latency-sensitive Internet applications such as high-definition videoconferencing and multiplayer online gaming. *See* § I.A.3, *supra*. In addition, if paid prioritization became a reality, it would create a two-sided market and thereby impose downward pressure on retail broadband prices, thereby spurring greater broadband deployment and adoption.⁹² A ban on such practices thus operates to negate those effects, raising retail prices and suppressing broadband adoption.⁹³

3. The Commission’s Treatment of Zero-Rating Illustrates the Harms of Title II Regulation

The previous Commission’s treatment of zero-rating programs—its most prominent application of section 201/202 “nondiscrimination” principles against broadband ISPs—provides an instructive case study of the consumer harms inflicted by Title II reclassification. *See* § I.A.1, *supra*. Like every other business model innovation by broadband ISPs, zero-rating arrangements triggered outrage among net neutrality zealots. *See id.* (discussing criticism by Crawford and van Schewick). The story of the Commission’s ensuing investigation provides a cautionary tale

2, 2017) (quoting Mr. Stephenson), <https://www.forbes.com/sites/washingtonbytes/2017/03/02/capital-flight-from-broadband-in-the-title-ii-era/#10bd370035cf>.

⁹² *See Verizon*, 740 F.3d at 665 (Silberman, J., dissenting in relevant part) (observing that the Commission’s 2010 general presumption against paid prioritization prevented the development of “potentially efficient, pro-consumer” two-sided market).

⁹³ Ironically, not even Title II could support a flat ban on paid prioritization, as it has long been settled that even regulated monopolies may offer different levels of service quality so long as they offer them on generally available terms. *See* note 73, *supra*. The fact that the Commission found it necessary to go beyond even such traditional common carrier regulation—and impose what amounts to a categorical line-of-business restriction—underscores the extremes to which the Commission has been willing to go in this politically overwrought climate. That lack of a limiting principle on Commission policy judgments only amplifies the chilling effect of subjective Title II standards on investment and innovation.

of how the threat of regulation under sections 201 and 202 can threaten consumer welfare in this hyper-politicized regulatory environment. *See* Econ. Decl. ¶¶ 110-18.

The *Title II Order* adopted a posture of studied ambivalence on zero-rating practices. It noted that “the record reflects mixed views” on the topic (¶ 151), took no clear position on those views, and announced that it would “look at and assess such practices under the no-unreasonable interference/disadvantage standard, based on the facts of each individual case, and take action as necessary” (¶ 152). To that end, the Commission Staff opened an inquiry into zero-rating practices in late 2015, which remained dormant for about a year.

AT&T duly submitted information to the Commission about its own practices. Starting in September 2016, its new affiliate DIRECTV began participating in AT&T’s preexisting sponsored data program so that customers of DIRECTV and AT&T Mobility could stream DIRECTV content over AT&T’s mobile broadband network without having that content count against their data allowances. From the outset, AT&T Mobility offered the same sponsored data service at the same unit cost to all unaffiliated content providers, regardless of their size or the amount of data they chose to sponsor. That sponsored-data rate, moreover, was set at an extremely attractive wholesale level as low as the market-based rates AT&T Mobility offers to major wireless resellers who commit to significant purchase volumes. As such, it was generally well below the effective rates that retail customers pay per unit of actual consumption, and these lower effective rates generated additional data usage. The resulting combination of increased output at lower per-unit prices is the very criterion of increased consumer welfare.⁹⁴

⁹⁴ *See, e.g., McWane, Inc. v. FTC*, 783 F.3d 814, 841 (11th Cir. 2015); *MCI Commc’ns Corp. v. AT&T Co.*, 708 F.2d 1081, 1113 (7th Cir. 1983).

This “Data Free TV” initiative was already a hit with consumers when, in late 2016, Commission staff revived its quiescent year-long investigation and sent AT&T letters that all but threatened to shut that initiative down.⁹⁵ AT&T responded that Data Free TV is unambiguously pro-consumer: it is economically equivalent to a hypothetical bundled rebate arrangement under which DIRECTV reimburses its customers for the incremental data charges they incur by virtue of streaming its content on AT&T’s cellular network. Indeed, AT&T added, the Commission had cited precisely such bundled discount arrangements as a pro-competitive benefit when approving the AT&T/DIRECTV merger.⁹⁶ The sponsored data arrangement here is economically indistinguishable from such a bundled discount: it is simply a price concession that enables consumers to use more data at lower effective rates and thus intensifies both video and mobile competition.

In January 2017, under the direction of the outgoing Chairman, Commission staff issued a “policy review” that essentially condemned Data Free TV along with a different sponsored data arrangement offered by Verizon.⁹⁷ This staff report opined that Data Free TV “discriminated” against unaffiliated streaming video providers even though AT&T offered to sponsor those providers’ data on the same terms as DIRECTV’s data. The report nowhere explained how it could be rational to prohibit this sponsored data arrangement even though an economically

⁹⁵ See, e.g., Letter from Jon Wilkins, FCC, to Robert Quinn, AT&T, at 2 (Dec. 1, 2016). Staff’s letters were nominally nonpublic, but the Commission promptly leaked them to the press.

⁹⁶ *AT&T-DIRECTV Merger Order* ¶¶ 3-4 (“As standalone companies, neither has the full set of assets necessary to compete against the dominant providers of video service,” but that “the combined AT&T-DIRECTV will increase competition for bundles of video and broadband, which, in turn, will stimulate lower prices, not only for the Applicants’ bundles, but also for competitors’ bundled products—benefiting consumers and serving the public interest.”).

⁹⁷ Wireless Telecommunications Bureau, *Policy Review of Mobile Broadband Operators’ Sponsored Data Offerings for Zero-Rated Content and Services* (Jan. 11, 2017), http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0111/DOC-342987A1.pdf.

equivalent bundled rebate arrangement would almost certainly be permissible. At bottom, the report sought to hold AT&T liable for offering such low-priced services and force it to raise prices for the benefit of unaffiliated online video providers. In other words, the staff report committed the single greatest error in competition policy: it favored the interests of *competitors* over those of *consumers*.⁹⁸ And it committed that error only because it perceived no relevant limiting principles in the open-ended “reasonableness” inquiry the Commission assumed for itself under sections 201 and 202 and the implementing conduct rule.

The newly constituted Commission appropriately repudiated the staff report and pulled the plug on the zero-rating investigation in February 2017.⁹⁹ As Chairman Pai and Commissioner O’Rielly have recognized, the report made no economic sense and served only to deter broadband providers from offering welfare-enhancing price concessions to consumers.¹⁰⁰ But if the outgoing Chairman had remained in office, the Commission very likely would have pursued its irrational condemnation of sponsored data, including the Data Free TV service that AT&T had already launched and was selling to hundreds of thousands of new subscribers. That regulatory intervention might well have embroiled the Commission and AT&T in a pitched legal battle. And the terms of that litigation would have been truly perverse: while AT&T would have

⁹⁸ *Cf. Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477, 488 (1977) (antitrust laws should be applied for “the protection of *competition* not *competitors*”) (emphasis added).

⁹⁹ Order, *Wireless Telecommunications Bureau Report: Policy Review of Mobile Broadband Operators’ Sponsored Data Offerings for Zero Rated Content and Services*, DA 17-127, (Feb. 3, 2017).

¹⁰⁰ See Statement of Commissioner Ajit Pai on the FCC’s Midnight Regulation of Free Data (Jan. 11, 2017) (noting that the Bureau policy statement “does not reflect the views of the majority of Commissioners”); Statement of Commissioner Michael O’Rielly on FCC’s Zero-Rating Investigation (Dec. 2, 2016) (opposing “this attempt to intimidate providers in order to shut down popular offerings to consumers”).

fought to honor its Data Free TV pledge to consumers, the Commission would have been fighting *to make consumers pay more* for their network usage.¹⁰¹

This episode illustrates the profoundly disruptive consequences of allowing the Commission to enforce open-ended Title II regulation against broadband ISPs in this highly competitive environment. Such consequences can be expected to recur, to the detriment of consumers, so long as broadband remains classified as a Title II service and ISPs continue innovating.

II. BROADBAND INTERNET ACCESS SERVICE CANNOT LAWFULLY BE SUBJECT TO COMMON CARRIER REGULATION.

Because Title II regulation flunks any reasonable cost-benefit analysis, the Commission should eliminate it by exercising its authority to restore the “information service” service classification for broadband Internet access. No one seriously disputes that the Commission retains that authority under any plausible reading of this statutory scheme. *Brand X* itself upheld an information service classification. And even the judges who formed the panel majority in *USTelecom* upheld the *Title II Order* on the basis that “the Act left the matter to the agency’s discretion. In other words, the FCC could elect to treat broadband ISPs as common carriers ... but the agency did not have to do so.” *USTelecom Reh’g Denial*, 855 F.3d at 384 (Srinivasan, J., joined by Tatel, J., concurring in denial of reh’g en banc); *see also id.* at 386. But the Commission should take its statutory analysis one step further. It should find that the language,

¹⁰¹ As noted, competition forced all major mobile providers by March 2017 to shift their commercial focus from tiered data plans to unlimited plans, under which sponsored data arrangements are competitively immaterial. *See* § I.A.1, *supra*. Here, too, the lesson is clear: true consumer protection in the broadband Internet ecosystem comes from market forces, not regulation. *See* Remarks of FCC Chairman Ajit Pai at the Mobile World Congress, Barcelona Spain, at 4 (Feb. 28, 2017), https://apps.fcc.gov/edocs_public/attachmatch/DOC-343646A1.pdf (“Preemptive government regulation did not produce that result. The free market did.”).

structure, and history of the Communications Act not only *permit* but *compel* an information service classification. It should not acquiesce in the D.C. Circuit’s ruling that this statutory scheme is “ambiguous” in any relevant respect. That ruling is erroneous, and it binds neither the Supreme Court nor other courts of appeals on review of future Commission orders.

A. The Text, Structure, and History of the Communications Act Compel an Information Service Classification for Broadband Internet Access.

Congress defined “information service” expansively in 1996 to encompass any service that “offer[s]” the “capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available, information via telecommunications.” 47 U.S.C. § 153(24). Broadband Internet access unambiguously qualifies as such.

Our discussion on this point is organized as follows. We begin with critical historical context that the *Title II Order* all but ignored: the “gateway” functionality at the heart of broadband Internet access plainly constituted an “information service” (or “enhanced service”) under two pre-1996 regimes whose definitions Congress explicitly intended to codify in the 1996 Act. § II.A.1. The same conclusion follows from the statutory text itself: from the statutory definitions of “information service” and “telecommunications service” in section 3 of the Communications Act and the related definitions in sections 230 and 231. § II.A.2. Moreover, even if broadband Internet access could qualify as an “information service” only if the ISP offers data-processing and data-storage functionalities of its own (rather than gateway access to third-party functionalities), every ISP *does* provide such functionalities (*e.g.*, DNS). § II.A.3. Beyond that, virtually all ISPs *also* “offer” additional information-service functionalities (such as email) as part of any Internet access package, and it makes no statutory difference whether consumers use or value those services differently now than before. § II.A.4. The *USTelecom* panel majority missed these basic points because it misconstrued *Brand X* to suggest that the statute was

ambiguous in these respects, but in fact *Brand X* suggested no such thing. § II.A.5. Finally, if there were any remaining question on these issues, it should be resolved against Title II classification under the “major questions” doctrine. § II.A.6.

1. The “Gateway” Functionality Performed by Broadband Internet Access Is an “Information Service”/“Enhanced Service” Under the Pre-1996 Act Definitions That Congress Codified in 1996.

When enacting the statutory definitions of “information service” and “telecommunications service,” Congress explicitly borrowed from two pre-1996 Act regimes: (1) a consent decree regime (known as the “Modification of Final Judgment” or “MFJ”) developed after the breakup of the Bell System and (2) the *Computer Inquiry* rules developed by the Commission.¹⁰² Under both regimes, the direct antecedents of today’s Internet access services, with the same salient features, were uniformly considered “information services” (or “enhanced services”) rather than “telecommunications services” (or “basic services”). That fact confirms that broadband Internet access, too, is an information service because, when a term “is obviously transplanted from another legal source, ... it brings the old soil with it.” *Sekhar v. United States*, 133 S. Ct. 2720, 2724 (2013).

The MFJ. Although the *Title II Order* completely ignored the MFJ, Congress pulled the terms “telecommunications service” and “information service” *and* their definitions nearly verbatim from that consent decree, which governed the Bell companies from 1982 through

¹⁰² “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, and the definitions of ‘telecommunications’ and ‘information service’ developed in the Modification of Final Judgment breaking up the Bell system.” Report to Congress, *Federal-State Joint Board on Universal Service*, 13 FCC Rcd 11501 (Apr. 10, 1998) (responding to inquiry from Sen. Stevens and thus known as the “*Stevens Report*”); *see also Brand X*, 545 U.S. at 976 (statutory distinction “originated” in pre-1996 regulatory regimes).

passage of the 1996 Act, which superseded it.¹⁰³ During that period, the Bell companies were monopolists controlling nearly 100% of their respective local exchange markets. The MFJ subjected them to several line-of-business restrictions designed to quarantine them in those local telephony markets and prohibit them from harming competition in adjacent markets through cross-subsidization or discriminatory access to local exchange facilities. *See Initial MFJ Order*, 552 F. Supp. at 142, 173, 179, 186-95. Of particular relevance here, the MFJ prohibited the Bell companies from offering “information services,” subject to case-by-case exemptions entered by the MFJ court. *See id.* at 186, 189-91, 194-95.¹⁰⁴

The MFJ court expansively construed this overall category of “information services,” which it divided into two subclasses: (1) “content-based information services” and (2) “information services *needed for transmission that only insignificantly affect content.*” *United States v. Western Elec. Co.*, 673 F. Supp. 525, 592, 595 (D.D.C. 1987) (“1987 MFJ Decision”) (emphasis added). The court treated *both* subclasses as “information services” and distinguished between them simply to identify the types of information services that it would or would not allow the Bell companies to provide under service-specific exemptions from the

¹⁰³ *United States v. AT&T Co.*, 552 F. Supp. 131, 229 (D.D.C. 1982) (attaching MFJ as appendix) (“*Initial MFJ Order*”), *aff’d sub nom, Maryland v. United States*, 460 U.S. 1001 (1983). Under the MFJ, a “telecommunications service” was “the offering for hire of telecommunications facilities, or of telecommunications by means of such facilities,” and “telecommunications” in turn was “the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content.” *Id.* “Information service” under the MFJ included nearly everything else: “the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information which may be conveyed via telecommunications, except that such service does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.” *Id.* The final (“except that”) clause in the definition was the MFJ’s counterpart to the FCC’s “adjunct-to-basic” doctrine (see below), and it played a similarly limited role.

¹⁰⁴ The MFJ court eventually eliminated the “information services” line-of-business restriction altogether. *See United States v. Western Elec. Co.*, 993 F.2d 1572 (D.C. Cir. 1993).

MFJ's line-of-business restriction. It explained: "Although the Court is denying the requests for removal of the information services restriction insofar as they relate to the provision of information content, a separate analysis is required to determine whether so much of *that restriction should be lifted* as to enable the Regional Companies to acquire and operate the infrastructure necessary for *the transmission of information services generated by others.*" *Id.* at 587 (emphasis added; internal cross-reference omitted).¹⁰⁵

The services for which the MFJ court granted exemptions reveal the vast scope of the "information service" category—and show that it encompassed the antecedents of today's Internet access services. For example, the Bell companies wished to offer mass-market "videotex" services modeled on the French "Teletel/Minitel" system, which was a primitive precursor to web browsing. *See id.* at 587-588. The court rejected claims that the MFJ already permitted the Bell companies to "transmit information services" (and thus to offer gateway services) on the ground that "the transmission of such services actually involves the performance of a number of services that by *any fair reading* of the term 'information services' would be included in that definition." *Id.* at 587 n.275 (emphasis added).

Thus, to accommodate the Bell companies' request to offer such services, the Court granted "an appropriate amendment of the decree" to allow the Bell companies to enable an end user "to use an abbreviated code or signal provided to him in order to access [a third party] information service provider in lieu of dialing the telephone number of the desired provider." *Id.*

¹⁰⁵ The Department of Justice, which represented the public in the MFJ proceedings, adopted a similarly expansive view of the definition of "information service." As it explained, the definition "covers a wide variety of services" and "include[s], at one extreme, low-level code and protocol conversion services, which merely provide electronic translation to facilitate communication between electronic devices by packetizing and reconfiguring data." Report & Recommendations of the United States Concerning the Line of Business Restrictions Imposed on the Bell Operating Companies by the MFJ, Civ. Act. No. 82-0192, at 105 (D.D.C. Feb. 2, 1987).

at 593 & n.308. Similarly, the court found it necessary to “grant a modification of the decree” to the Bell companies to offer “a sophisticated and effective system of information transmission,” in which “the network perform[s] those protocol conversion functions that are necessary to enhance transparency of communication between consumers and information service providers”—*i.e.*, make it easier for consumers to reach those third-party providers. *Id.* at 593-94.

These functionalities—the use of “abbreviated codes” rather than numerical sequences to reach third-party databases, and the use of “protocol conversion” to “enhance transparency of [such] communication”—are direct analogues to the Internet access functions that modern ISPs provide to their own end users. As discussed in more detail below, Internet access is thus every bit as much an “information service” under the 1996 Act as the earlier functions were “information services” under the MFJ. Indeed, as discussed below, Internet access involves even more data-processing functionalities than these predecessor services.

The Computer Inquiries. Although Congress pulled the statutory terms and definitions of “telecommunications service” and “information service” directly from the MFJ, it also intended for those categories “to parallel the definitions of ‘basic service’ and ‘enhanced service’ developed in [the Commission’s] *Computer II* proceeding,” *Stevens Report* ¶ 21, which were closely similar to the corresponding MFJ definitions.

Computer II combined (1) a broad definition of unregulated “enhanced services”—the forerunner of today’s “information services”—with (2) an unbundling requirement designed to check monopoly abuses. The Commission defined “enhanced services” to include “any offering over the telecommunications network which is more than a basic transmission service,”¹⁰⁶ and

¹⁰⁶ Final Decision, *Amendment of Section 64.702 of the Commission’s Rules and Regulations (Second Computer Inquiry)*, 77 F.C.C.2d 384 ¶ 97 (1980) (“*Computer II*”).

stressed that such services “were themselves not to be regulated under Title II of the Act, *no matter how extensive their communications components*,” *Stevens Report* ¶ 27 (emphasis added). To address discrimination concerns, the Commission separately required telephone companies to “unbundle” the transmission functionalities underlying any enhanced service they offered: *i.e.*, tariff those functionalities as separate common carrier services so that unaffiliated enhanced service providers could obtain them on the same terms as the telephone companies themselves.¹⁰⁷

Significantly, the *retail* service remained unregulated, whether offered by the telephone company or some other provider, even though the “unbundling” rule required the telephone company to sell the underlying transmission inputs to requesting providers as a regulated *wholesale* service. The *USTelecom* panel majority misunderstood this point when it asserted that “DSL providers that supplied the phone lines and the internet access” to end user customers were understood to “offer[] both a telecommunications service and an information service.” 825 F.3d at 692; *see also id.* at 710. In fact, those providers were always understood to offer *only* an enhanced service (and after 1996, only an “information service”) to their retail customers, exempt from Title II regulation. They offered a Title II “basic service” only when, as required by the unbundling rule, they sold the transmission component separately to wholesale customers such as Earthlink and other enhanced service providers/ISPs that lacked last-mile facilities of their own. The Commission abolished the unbundling rule many years ago, given the rise of

¹⁰⁷ *See, e.g., Title II Order* ¶ 311 (“[I]n *Computer II* and *Computer III* the Commission required telephone companies that provided ‘enhanced services’ over their own transmission facilities to separate out and offer on a common carrier basis the transmission component underlying their enhanced services.”); *id.* ¶ 311 n.799 (citing *Computer Inquiry* orders). Broadly speaking, *Computer II* required a common carrier to provide enhanced services through a separate corporate affiliate, whereas *Computer III* eliminated that requirement in favor of accounting and other nonstructural safeguards.

intermodal competition from cable and other broadband providers.¹⁰⁸ What retains enduring significance from the *Computer II* regime, however, is the Commission's antecedent decision to define a very broad class of retail "enhanced services" that are not themselves subject to Title II common carrier regulation.

The Commission's orders throughout the pre-1996 period underscore just how expansively it defined this category of unregulated enhanced services. Any offering was an "enhanced service" if it "involve[d] subscriber interaction with stored information." 47 C.F.R. § 64.702(a).¹⁰⁹ Thus, any "gateway" functionality designed to give end users access to third-party databases was deemed an "enhanced service," with a narrow "adjunct-to-basic" exception for computerized functionalities designed merely to facilitate the completion of voice telephone calls. In the Commission's words, "[a]n offering of access to a data base for the purpose of obtaining telephone numbers may be offered as an adjunct to basic telephone service; *an offering of access to a data base for most other purposes is the offering of an enhanced service.*"¹¹⁰

One example of the latter was a Bell Atlantic service that allowed consumers to enter "key words" into home or office equipment as an intuitive means of reaching third-party

¹⁰⁸ See Report and Order, and Notice of Proposed Rulemaking, *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, 20 FCC Rcd 14853 (Sept. 23, 2005) ("*Wireline Broadband Order*"), *aff'd* *Time Warner Telecom, Inc. v. FCC*, 507 F.3d 205 (3d Cir. 2007).

¹⁰⁹ "[T]he term enhanced service shall refer to services, offered over common carrier transmission facilities used in interstate communications, which employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored information. Enhanced services are not regulated under title II of the Act." *Id.*

¹¹⁰ Mem. Op. and Order, *North American Telecom's Ass'n*, 101 F.C.C.2d 349, ¶ 26 (May 29, 1985) ("*NATA Centrex Order*") (emphasis added). *Accord* Order, *US West Communications Petition for Computer III Waiver*, 11 FCC Rcd 1195, ¶¶ 27-31 (Nov. 6, 1995); see generally *Computer II* ¶ 98; First Report and Order, *Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934*, 11 FCC Rcd 21905, ¶ 107 (Dec. 24, 1996) ("*Non-Accounting Safeguards Order*").

enhanced service providers over Bell Atlantic’s data network. The Commission found in 1988 that this functionality was itself an unregulated enhanced service because it “involve[d] subscriber interaction with stored information” and “employ[ed] protocol processing.”¹¹¹ That “key word” enhanced service was a direct analogue to today’s DNS lookup functionality, which likewise enables end users to reach third-party databases by means of intuitive web addresses. See § II.A.3, *infra*; see also *Stevens Report* ¶ 75 (“gateways” provided the same “functions and services associated with Internet access”).

In short, under both the MFJ and the *Computer Inquiries* regime, the “information service”/“enhanced service” category encompassed services that provided the same functions as, and bore a striking resemblance to, the most pared-down Internet access services available today—as the Commission noted shortly after the 1996 Act was enacted.¹¹² The *USTelecom* panel majority nonetheless brushed aside the pre-1996 Act regulatory scheme on the grounds that “classification of broadband turns . . . on the factual particulars of how Internet technology works and how it is provided,” and “nothing in the [1996] Act suggests that Congress intended to freeze in place the Commission’s existing classifications of various services.” 825 F.3d at 703 (internal quotation marks omitted). That misses the point. The relevant issue is not whether the Act froze in place prior classification decisions, but whether Congress intended to codify the pre-1996 Act *legal standards* for determining whether a service was an enhanced service. No one

¹¹¹ Mem. Op. and Order, *Bell Atlantic Telephone Companies Offer of Comparably Efficient Interconnection to Providers of Gateway Services*, 3 FCC Rcd 6045, ¶ 7 (Sept. 30, 1988) (“*Gateway Services Order*”).

¹¹² See *Stevens Report* ¶75 (the Commission “consistently classed such services as ‘enhanced services’ under *Computer II*”). As the Commission found, the 1996 Act’s definition of “information services” was intended to include, among other services, “all ‘enhanced services.’” *Non-Accounting Safeguards Order* ¶ 103 (emphasis added); see also *id.* (finding “enhanced services” completely included within “information services”).

disputes that Congress intended to codify the pre-1996 Act tests for determining which services qualify as enhanced/information services. And no one can reasonably dispute that the most basic forms of broadband Internet access qualify as such under those pre-1996 Act tests.

2. Any Broadband ISP Offers the “Capability” of Interacting with Stored Data on the Internet Within the Plain Meaning of the Statutory Definition.

Quite apart from these historical considerations, the statutory text confirms on its face that broadband Internet access is an “information service” and not a “telecommunications service” for the most basic of reasons: by definition, it offers the “capability” of interacting with stored data. That fact, particularly when combined with the service definitions contained in sections 230 and 231 of the Communications Act (see below), obviates any need to focus on the more technical functionalities of broadband Internet access—which confirm the same conclusion (*see* § II.A.3, *infra*).

As noted, Congress defined “information service” expansively in 1996 to encompass any service that “offer[s]” the “capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available, information via telecommunications.” 47 U.S.C. § 153(24). As the NPRM observes (§ 27), Internet access qualifies under *each* of the eight, independent parts of that definition. It “offer[s]” consumers the “capability” to “acquir[e]” and “retriev[e]” information from websites, to “stor[e]” information in the cloud, to “transform[]” and “process[]” information by translating plain English commands into computer protocols, to “utiliz[e]” information through computer interaction with stored data, and to “generat[e]” and “mak[e] available” information to other users by sharing files. Indeed, the whole point of Internet access is to offer the “capability” to obtain and manipulate the information stored on the

millions of interconnected computers that constitute the Internet.¹¹³ Inexplicably, the *USTelecom* panel majority overlooked this basic statutory point.

Because it is an information service, Internet access cannot be a “telecommunications service” because the Commission has long found—and no one today seriously disputes—that the categories of “information service” and “telecommunications service” are “mutually exclusive”: a single service cannot be both. *See Stevens Report* ¶ 36. In any event, the same conclusion follows from the statutory definition of the latter term. A “telecommunications service” is “the offering of telecommunications for a fee directly to the public,” 47 U.S.C. § 153(53), and “[t]elecommunications” in turn means pure “transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content.” *Id.* § 153(50). Any broadband Internet access service contradicts that definition in several basic respects.

To begin with, it necessarily involves more than pure transmission. As the Commission and Solicitor General explained in *Brand X*, Internet access inherently offers the capability to “click[] through” to third-party websites and obtain the “contents of the requested web page[],” allowing a subscriber to “interact[] with stored data.” FCC Reply Br. at 5, *Brand X* (Mar. 18, 2005) (No. 04-277) (“FCC *Brand X* Reply Br.”). The Supreme Court agreed, noting that “subscribers can reach third-party Web sites . . . and browse their contents, [only] because their service provider offers the ‘capability for . . . acquiring, [storing] . . . retrieving [and] utilizing . . . information.’” *Brand X*, 545 U.S. at 1000. As a result, the Court held, the “service that Internet access providers offer to members of the public is Internet access, not a transparent ability (from

¹¹³ *See, e.g.*, Letter from Christopher M. Heimann, AT&T Services Inc., to Marlene H. Dortch, Secretary, FCC, GN Docket Nos. 14-28 & 10-127, at 6 (Feb. 2, 2015).

the end user's perspective) to transmit information." *See id.* at 1000 (*quoting Stevens Report* ¶ 79). The Commission's reclassification decision erroneously turned this point on its head, finding that Internet access is a pure transmission service because it "is useful to consumers today primarily as a conduit for reaching modular content, applications, and services that are provided by unaffiliated third parties." *Title II Order* ¶ 350. To the contrary, it is precisely because Internet access is useful to consumers for these purposes that it falls squarely within the statutory definition of information service.

Beyond that, Internet access cannot qualify as a "telecommunications service" because its transmissions are rarely, if ever, "between or among points specified by the user, of information of the user's choosing, without change in the form or content." 47 U.S.C. § 153(50). As the NPRM explains (¶ 29), "Internet users do not typically specify the 'points' between and among which information is sent online." Consider a typical request for web content. When an end user enters a URL for a news story reported on cnn.com, he may receive the main text content of the webpage from a centralized CNN server or, more likely, from various cache servers maintained closer to his location. If the webpage is accompanied by video content, that content may well be sent from a separate server. In addition, various locations on the webpage are populated by advertisements, which the user did not specifically request, but which are sent to him from disparate locations operated by ad networks (such as Google/DoubleClick).

The ISP handles all of these transmissions on the end user's behalf by means of the ISP's DNS functionality and related information-processing services. But the end user does not himself "specify" any of the potentially dozens of "points" from which those various transmissions are sent, all in the course of allowing him to download a single webpage. In addition, much of the transmitted information (such as the ad content) is not "of the user's

choosing.” And the entire transmission is subject to constant protocol conversions (“change[s] in the form or content”) to ensure transparent delivery across multiple technologies on the Internet. In short, even this relatively simple interaction with an ISP does not remotely fit the “telephone call” model for which Congress drafted the definition of “telecommunications service”: the “offering” (47 U.S.C. § 153(53)) of “transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content” (*id.* § 153(50)).

Congress included two other definitional provisions in the Communications Act that confirm its understanding that broadband Internet access services should not be classified as “telecommunications services.” *See* NPRM ¶¶ 31-32. The first is section 230, which was enacted as part of the same 1996 legislation that added the definitions of “information service” and “telecommunications service” to section 3 of the Communications Act.¹¹⁴ Section 230 establishes that it is “the policy of the United States” “to preserve the vibrant and competitive free market that presently exists for the *Internet and other interactive computer services, unfettered by Federal or State regulation.*” 47 U.S.C. § 230(b)(2) (emphasis added); *see also* Preamble, Telecommunications Act of 1996 (Congress passed the 1996 Act to “promote competition and *reduce* regulation”) (emphasis added). Section 230(f)(2) then provides that “[a]s used in this section,” those “interactive computer service[s]” encompass any “information service, . . . *including specifically a service . . . that provides access to the Internet.*” *Id.*

¹¹⁴ *See* Telecommunications Act of 1996 § 3, 110 Stat. 56, 58-60 (1996) (amending definitions in 47 U.S.C. § 153); *id.* at Tit. V, § 230, 110 Stat. at 137-39 (adding new section codified at 47 U.S.C. § 230).

§ 230(f)(2) (emphasis added). In other words, section 230 expressly confirms that Congress viewed “access to the Internet” as a type of “information service.”

Because “the normal rule of statutory construction assumes that ‘identical words used in different parts of the same act are intended to have the same meaning,’” *Sorenson v. Sec’y of the Treasury*, 475 U.S. 851, 860 (1986), section 230 confirms that, throughout the Communications Act, the defined term “information service . . . includ[es]” Internet access services. The *USTelecom* panel majority rejected this argument on the ground that giving section 230 its plain meaning would be “an oblique” way to “settle the regulatory status of broadband Internet access.” 825 F.3d at 703 (citations omitted). But it is hardly “oblique” for Congress to confirm in section 230 that Internet access should be classified as an unregulated information service when elsewhere in the same legislation Congress codified a definition of “information services” (47 U.S.C. § 153(24)) that was long understood to include gateway services such as Internet access. And Congress underscored the same conclusion by stating in section 230 itself that it wished to keep the Internet “unfettered by . . . regulation.” *Id.* § 230(b)(2).

As the NPRM notes (¶ 32), section 231 provides further confirmation that broadband Internet access is an information service. That provision—which Congress enacted in October 1998, approximately seven months after the *Stevens Report* confirmed that Internet access is an information service—states:

The term “Internet access service” [as used in section 231] means a service that enables users to access content, information, electronic mail, or other services offered over the Internet, and may also include access to proprietary content, information, and other services as part of the packages of service offered to consumers. Such term does not include telecommunications services.

47 U.S.C. § 231(e)(4); *see* Pub. L. 105-277, Tit. XIII, § 1403, 112 Stat. 2681 (1998). This language reinforces two points. First, it indicates congressional agreement with the Commission’s conclusion in the just-released *Stevens Report* that Internet access provides the

“capability” to “acquir[e]” and “retriev[e]” “information” and is thus an “information service” within the meaning of section 153(24). Second, and equally important, the final sentence of section 231(e)(4) indicates once more that Congress agreed with the Commission that an Internet access service is not a “telecommunications service” within the meaning of section 153(53).

3. Any Broadband ISP Also Offers Consumers Computer Processing and Data-Service Capabilities of Its Own as Integral Parts of Internet Access.

As just discussed, broadband Internet access service qualifies as an “information service” for an extremely straightforward reason: by definition, it offers consumers the “*capability* for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available, information” provided by third parties on the Internet. 47 U.S.C. § 153(24) (emphasis added). But even if ISPs had to provide “data-processing” or “data storage” functionalities *of their own* before Internet access could qualify as information service, Internet access would still qualify as such because it invariably provides such functionalities, including those involving the Domain Name System (“DNS”).

DNS is a highly sophisticated and decentralized mechanism for storing and distributing user- and data-location information throughout the Internet.¹¹⁵ Because it translates human language (*e.g.*, the name of a website) into the numerical data (*i.e.*, an IP address) that computers can process, it is indispensable to ordinary users as they navigate the Internet. This simplified diagram (below) from the National Academy of Sciences illustrates the core “DNS look-up” service provided by all ISPs:¹¹⁶

¹¹⁵ Declaratory Ruling and Notice of Proposed Rulemaking, *Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*, 17 FCC Rcd 4798, ¶ 37 (Mar. 15, 2002) (“*Cable Broadband Order*”).

¹¹⁶ National Academy of Sciences, *Signposts in Cyberspace: The Domain Name System and Internet Navigation* 25, Fig. 1.1 (2005), <http://www.nap.edu/catalog/11258.html>. As this diagram

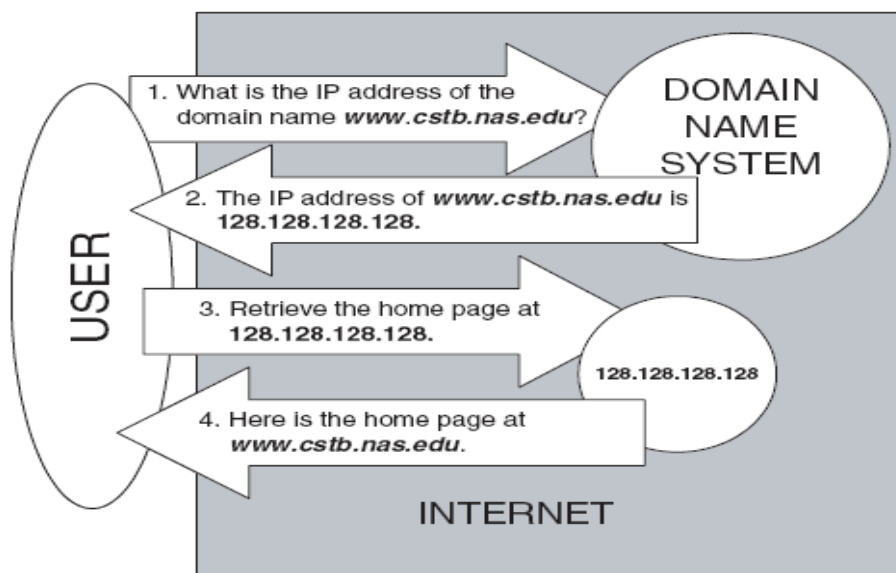


Figure 1: Simplified depiction of DNS (from NAS report)

DNS is what allows “click through” access from one web page to another, and its computer-processing functions analyze user queries to determine which website (and server) would respond best to the user’s request. As AT&T explained in its prior comments, “[v]irtually all consumers today rely on their broadband ISP to include DNS look-up functionality as an integral part of broadband Internet access service.”¹¹⁷

Mass-market consumers would find broadband services without DNS utterly useless for accessing the Internet. For example, without DNS, consumers could not access a website by

illustrates, DNS, as offered by ISPs, is part of the “Internet” under any definition of that term, and it is thus absurd to characterize ISP functionality as anything else, such as a mere “on-ramp.” The National Academy report also indicates that the summary provided in this diagram “is quite simplified,” and “there are many discrete technical processes that are not articulated here.” *Id.* at 45 n.12 (discussing corresponding verbal description). For a more complete description of those processes, see pages 79-151 of the report and the discussion immediately below discussing additional “smart” DNS-related functionalities integrated with broadband Internet access service.

¹¹⁷ Comments of AT&T Services Inc., *Protecting and Promoting the Open Internet*, GN Docket No. 14-28, at 48 (July 15, 2014) (“AT&T 2014 Comments”); see also Reply Comments of AT&T Services Inc., *Protecting and Promoting the Open Internet*, GN Docket No. 14-28, at 32 (Sept. 15, 2014) (“AT&T 2014 Reply Comments”); Letter from Gary L. Phillips, AT&T Services Inc., to Marlene H. Dortch, Secretary, FCC, GN Docket Nos. 14-28 & 10-127, at 4 (Feb. 18, 2015) (“AT&T Feb. 18, 2015 Ex Parte”).

typing its advertised name (e.g., cnn.com or netflix.com). To find any content on the Internet, they would have to know the IP address of the server where that content is located. Consumers also could not access a web page by clicking on a hypertext link. As the Commission previously explained, it is only because DNS is part of retail broadband Internet access that consumers can visit any website without knowing its IP address and thereafter click through links on that website to other websites. *See Wireline Broadband Order* ¶ 15 (“[A]n end user of wireline broadband Internet access service cannot reach a third party’s web site without access to the Domain Nam[e] Service (DNS) capability The end user therefore receives more than transparent transmission whenever he or she accesses the Internet.”).

The Supreme Court agreed with the Commission on this point in *Brand X*. Indeed, that is why the Court *rejected* the challengers’ argument that a consumer “uses ‘pure transmission’” when he “accesses content provided by parties other than the cable company.” *Brand X*, 545 U.S. at 998. The Court noted that a “user cannot reach a third-party’s Web site without DNS,” and concluded that “[f]or an Internet user, ‘DNS is a must. . . . [N]early all of the Internet’s network services use DNS. That includes the World Wide Web, electronic mail, remote terminal access, and file transfer.’” *Id.* at 999 (quoting P. Albitz & C. Lui, *DNS and BIND* 10 (4th ed. 2001)). As a result, the “service that Internet access providers offer to members of the public is Internet access, . . . not a transparent ability (from the end user’s perspective) to transmit information.” *Brand X*, 545 U.S. at 1000.

Similarly, ISPs routinely arrange for the use of caching to enhance their customers’ ability to acquire information. Caching technologies use powerful information-processing algorithms to determine what to cache, where to cache it, and how long the content should be cached. *See AT&T Feb. 18, 2015 Ex Parte* at 4. The *Stevens Report* cited this fact, too, as a

basis for characterizing Internet access as an information service. *See Stevens Report* ¶ 76 (noting that, when “subscribers . . . retrieve files from the World Wide Web, they are . . . interacting with stored data, typically maintained on the facilities of either their own Internet service provider (via a Web page ‘cache’) or on those of another”). Again, the Supreme Court agreed. *See Brand X*, 545 U.S. at 999-1000 (Internet service “facilitates access to third-party Web pages by offering consumers the ability to store, or ‘cache,’ popular content on local computer servers,” which means that Internet service providers offer “the ‘capability for . . . acquiring, [storing] . . . retrieving [and] utilizing information’”).

The prevalence of caching confirms not only that broadband Internet access falls within the scope of “information service” (because by definition it consists of “storing” and “retrieving” information), but also that it falls *outside* the scope of “telecommunications service.” Even if a user identifies particular information (such as a web file) that she wants to retrieve or a particular website she wants to access, she will not know, much less specify, the location of the server on which that information or website content is stored and from which it will be retrieved by her ISP. For this reason, too, the ISP’s transmission of such content to her thus cannot be classified as a “telecommunications service” because it does not involve transmission “between or among points specified by the user.” 47 U.S.C. § 153(50).

The *Title II Order* (¶ 365) sought to dismiss the significance of DNS and caching on the ground that they constitute “management of a telecommunications service” under the final clause of the statutory definition of “information service.” That argument grossly distorts the significance of that definitional exception.

As noted in section II.A.1, the “telecommunications management” exception codifies the identically worded exception in the MFJ’s definition of “information service” as well as the

“adjunct to basic” exception to the Commission’s pre-1996 category of enhanced services. *See Non-Accounting Safeguards Order* ¶ 107. Both of those historical antecedents were “narrow” exceptions that did not encompass even rudimentary “data gateway” services (such as “videotex” access) and applied only to voice-oriented functionalities designed to “facilitate use of the basic network without changing the nature of basic *telephone* service.” *NATA Centrex Order* ¶ 28 (emphasis added). In the Commission’s words, an “offering of access to a data base for purpose of obtaining telephone numbers” was an “adjunct to basic telephone service,” but “an offering of access to a data base for most other purposes is the offering of an enhanced service,” now an information service. *Id.* ¶ 26. DNS, of course, offers access to databases for purposes that are almost always unrelated to obtaining telephone numbers.

In addition, to fall within the “adjunct to basic” or “network management” exceptions, a functionality needed to enable the telephone company to prescribe, for *its own benefit*, a clear dedicated path for any given call through the company’s network *without user interaction*. The quintessential example was the SS7 signaling system, which telephone companies used to route calls from the calling party to the facilities serving called parties, all without any involvement by the end users involved. In contrast, if “storage and retrieval functions ... provide information that is useful to end users, rather than carriers, ... those functions are not adjunct services and cannot be classified as telecommunications services.” Mem. Op. and Order, *Bell Operating Companies Petitions for Forbearance from the Application of Section 272 of the Communications Act*, 13 FCC Rcd. 2627, ¶ 18 (Feb. 6, 1998) (“272 Forbearance Order”).

The DNS look-up function provided with any broadband Internet access service falls squarely on the latter side of the line because it provides information that is “useful to end users” and, unlike the SS7 network, involves direct interaction by end users through their personal

devices.¹¹⁸ When an end user types a domain name into her browser and sends a DNS query to an ISP, the ISP does not, in the course of answering that query, set up any type of path for the subsequent data session—as the SS7 signaling system does for ordinary telephone calls. Instead, throughout a complex multi-step process, the ISP interacts with other DNS servers and converts the human-language domain name into a numerical IP address, and it then conveys that information back to the end user (more specifically, the end user’s browser, in the case of web applications).¹¹⁹ Equipped with this new information, the *end user* (via his browser) thereafter sends a follow-up request for the Internet resources located at that numerical IP address. Little or nothing in this DNS look-up process is designed to help a provider “manage” its network; instead, DNS look-up functionalities provide stored information to *end users* to help *them* navigate the Internet.

The information services characteristics of DNS are further underscored by “DNS assist” capabilities, included as a standard part of many broadband Internet access services.¹²⁰ Where a user types a URL that does not properly identify a webpage, an ISP’s DNS server may respond with a “URL redirect” that reflects a judgment about which webpage the user meant to reach, or

¹¹⁸ See AT&T 2014 Reply Comments at 40-42; Comments of AT&T Inc., *Framework for Broadband Internet Serv.*, GN Docket No. 10-127, at 36-38 (Aug. 12, 2010) (“AT&T Docket 10-127 Reply Comments”).

¹¹⁹ See, e.g., Kurose & Ross, *supra*, at 133; National Academy of Sciences, *Signposts in Cyberspace: The Domain Name System and Internet Navigation*, *supra*, at 25, Fig. 1.1, 81, Fig. 3.1.

¹²⁰ See, e.g., AT&T, About the Search Results Page, <http://www.att.net/dnserrorassist/about/> (last visited July 11, 2017) (“You’re seeing these results because AT&T has configured its Web servers to offer you a more convenient Internet experience. These servers are central computers named DNS (Domain Name Service), and they allow you to access and search the Web using words and names (for example, www.att.com) instead of the difficult numeric addresses computer systems use, like 123.45.6.7. However, sometimes we enter a wrong web address, or maybe the website we want is no longer in service. If this happens, the DNS service automatically searches for similar or related terms and presents you some results that may be useful for you.”); see also AT&T Feb. 18, 2015 Ex Parte at 4; AT&T 2014 Reply Comments at 40.

may instead present the user with a menu of alternatives to the original query. Likewise, ISPs' DNS functionality enables users to perform "reverse look-ups"—*i.e.*, to access stored information to convert a numeric IP address into a domain name. AT&T 2014 Reply Comments at 40. In the legacy circuit-switched environment, the Commission had found analogous, but less sophisticated, reverse direct assistance to be an information service.¹²¹

Before 2015, the Commission readily acknowledged the information-service characteristics of DNS and indeed predicated its legal position in *Brand X* on them. In 2002, the Commission found (correctly) that DNS does not "manage telecommunications" within the meaning of the statutory exception, but instead "constitutes a general purpose information processing and retrieval capability that facilitates the use of the Internet in many ways." *Cable Broadband Order* ¶ 37 (emphases added). When that position was challenged in the Supreme Court, the Commission told the Court that "information-processing capabilities such as the DNS and caching are *not* used 'for the management, control, or operation' of a telecommunications network, but instead are used to facilitate the information retrieval capabilities that are inherent in Internet access. Their use accordingly does not fall within the statutory exclusion." FCC *Brand X* Reply Br. at 5-6 n.2. The Supreme Court subsequently accepted that position and cited it as a basis for concluding that DNS, like caching, is a sufficient basis for concluding that "the service that Internet access providers offer to members of the public is Internet access, not a transparent ability (from the end user's perspective) to transmit information." *Id.* at 999-1000 (internal citation and quotation marks omitted); *see also id.* at 1000 n.3.

¹²¹ See Mem. Op. and Order, *Petition of SBC Communications Inc. for Forbearance from the Structural Separation Requirements of Section 272 of the Communications Act of 1934*, 19 FCC Rcd 5211, ¶ 28 (Mar. 19, 2004); *see also* Order, *US West Communications Petition for Computer III Waiver*, 11 FCC Rcd 1195, ¶¶ 27-31 (Nov. 6, 1995) (pre-1996 Act finding of "enhanced service").

The *USTelecom* panel majority disregarded all of these points when it upheld the *Title II Order*'s recharacterization of DNS and caching as “telecommunications management.” 825 F.3d at 705. The majority ignored the Commission’s express findings in 2002 that DNS “do[es] not” fit within the management exception, *Cable Broadband Order* ¶¶ 37-38 & n.150, which it repeated to the Supreme Court in *Brand X*. The majority further misread pre-1996 Act precedent when it assumed without explanation that DNS would have fallen within the “adjunct to basic” exception. Again, as the *NATA Centrex Order* and *272 Forbearance Order* make clear, the opposite is true even for plain-vanilla DNS and even more obviously true for advanced DNS functionalities such as DNS assist. Finally, the majority embraced outright self-contradiction when it agreed with the Commission (1) that third parties provide “information services” when *they* offer DNS and caching but (2) that the very same functions, when provided by broadband ISPs, are transformed into “telecommunications management.” 825 F.3d at 706. The Communications Act defines “information services” in terms of the functions and capabilities that are “offered.” 47 U.S.C. § 153(24). The same functions and capabilities offered in connection with the same service cannot be given *opposite* classifications depending on which party offers them.

4. Virtually All Broadband ISPs Further Offer Additional Data-Processing Features As Part of Their Internet Access Services.

For the reasons discussed, even the most stripped-down form of broadband Internet access qualifies as an information service. Substantially all Internet access services further qualify for that classification for yet another independent reason: quite apart from DNS and caching, they also “offer” “email, data storage, parental controls, unique programming content, spam protection, pop-up blockers, instant messaging services, on-the-go access to Wi-Fi

hotspots, and various widgets, toolbars, and applications.”¹²² Under the relevant statutory provisions, these functionalities are plainly information services, and because they are routinely “offer[ed]” with Internet access as part of a service bundle, 47 U.S.C. §153(24), (53), they are independently dispositive of the regulatory classification, as the NPRM recognizes (¶ 28).¹²³

For classification purposes, “what matters is the finished product made available through a service.” *Wireline Broadband Order* ¶ 16; *see* 47 U.S.C. § 153(24) (“information service” classification turns on the “capabilities” that are “offer[ed]” by the provider). For example, while the Commission recognized in 2002 that many consumers *used* third-party content and services in lieu of those offered by their ISP, it concluded nonetheless that broadband is an information service based on consumers’ perception of what broadband providers *offered*. *See Cable Broadband Order* ¶ 38. That perception remains the same whether or not consumers “use all of the functions and capabilities provided as part of the service (*e.g.*, e-mail or web-hosting).” *Wireline Broadband Order* ¶ 15; *accord Cable Broadband Order* ¶ 38.

As even the *Title II Order* acknowledged, broadband providers “still provide various Internet applications, including e-mail, online storage, and customized homepages, in addition to newer services such as music streaming and instant messaging.” *Title II Order* ¶ 347. Even if we assume that consumers use or value those functions differently now than in 2002, that fact is inapposite to the only relevant statutory question: how consumers view what providers “offer.”

¹²² AT&T 2014 Reply Comments at 28; *see also generally id.* at 28-31 (discussing AT&T’s integrated broadband offering, including numerous information processing features); AT&T 2014 Comments at 48-49 (listing information service capabilities and functions included in AT&T’s broadband offering at no extra charge).

¹²³ The NPRM is also correct (¶ 37) that the fact that some ISPs market speed does *not* mean they do not offer an information service. By definition, all information services are provided “via telecommunications.” 47 U.S.C. § 153(24).

See NPRM ¶¶ 27-28. As the Commission explained to the Supreme Court in *Brand X*, a consumer’s decision not to use a given capability “does not eliminate that capability or change the underlying character of the service offering.” FCC *Brand X* Reply Br. at 4; see *Cable Broadband Order* ¶ 38 (classification “turns on the nature of the functions the end user is offered,” “regardless of whether subscribers use all of the functions provided”).

For these reasons, the *USTelecom* panel majority erred when it upheld the Commission’s determination that it could treat obvious information service capabilities (such as email, web hosting, and parental controls) offered by broadband providers as “separate” from broadband Internet access service. See *USTelecom*, 825 F.3d at 704 (citing *Title II Order* ¶ 356). The fact that some consumers obtain these functionalities from third-party alternatives is not, as the panel found, *id.*, a basis for ignoring the capabilities that a broadband provider actually “offers.” By analogy, consumers may value auto navigation systems less than they did ten years ago, now that they can rely on smartphone apps to provide many of the same functions, but no one would suggest that car dealerships have stopped “offering” navigation functionality even when they make available cars equipped with navigation systems.

5. *Brand X* Found No Relevant Statutory “Ambiguity,” Despite the *USTelecom* Majority’s Contrary Assumption.

The *USTelecom* panel majority upheld the *Title II Order* mainly on the premise, which it attributed to *Brand X*, that “the Communications Act is ambiguous with respect to the proper classification of broadband.” 825 F.3d at 701-02. The Court thus accepted the Commission’s primary argument on appeal: that “the ambiguity identified in *Brand X*” entitled the Commission’s Title II classification to substantial deference. Br. for Resp’ts. at 37, *USTelecom*, No. 15-1063 (Sept. 14, 2015); see *id.* at 51-58. That argument grossly misreads *Brand X*, which

in fact identified no statutory ambiguity relevant to the actual regulatory questions answered by the *Title II Order* or the *USTelecom* court.

The challengers in *Brand X* were ISPs *without* last-mile facilities (such as Earthlink) that wished to force ISPs *with* such facilities (cable broadband providers) to make last-mile transmission available to them on regulated terms. Although these “non-facilities-based” ISPs wanted to buy that transmission input as a “telecommunications service,” they did not seek themselves to be regulated under Title II; by widespread consensus, the retail service they provided was an information service. *See generally Stevens Report, supra*. Similarly, no Justice in *Brand X* doubted—and no party disputed—that cable broadband providers likewise offered an “information service” when they provided consumers with the same Internet access functionality. *See* 545 U.S. at 987 (service that “enables users . . . to browse the World Wide Web” is information service); *see id.* at 1008-09 (Scalia, J., dissenting) (same).

The only question on which the Justices disagreed was whether, *in addition to* that information service, a cable broadband provider simultaneously offered its customers a *separate* “telecommunications service” in the form of a high-speed transmission link to a customer’s home. The majority upheld as reasonable the Commission’s determination that, “from the consumer’s point of view,” the delivery of Internet traffic over that transmission link is not a separate offering of a telecommunications service, but rather is “part and parcel of [the information service] and is integral to [the information service’s] other capabilities.” *Id.* at 988, 997 (quoting *Cable Broadband Order* ¶ 39). The dissenters, in contrast, contended that broadband providers do “offer” a separate “delivery service,” just as pizzerias also “offer” delivery of pizzas they bake. *Id.* at 1007, 1010 (Scalia, J. dissenting). What the dissenters would have recognized as a separate telecommunications service was thus the last-mile connection

between “the customer’s computer and the cable company’s computer-processing facilities.” *Id.* at 1010. It was precisely because delivery occurred “downstream from the computer-processing facilities” that provided actual Internet access that Justice Scalia opined that the delivery service “merely serve[d] as a conduit for the information services that ha[d] already been ‘assembled’ by” the cable company. *Id.* at 1007, 1010 (emphasis added).

The dispute in *Brand X* is thus irrelevant here because the *Title II Order* embraced a position that none of the litigants or the Justices accepted: that broadband Internet access is a single, unitary telecommunications service. The *Title II Order* defined, as a telecommunications service, not merely a transmission link connecting a consumer to the broadband provider’s network, but rather the entire Internet access service that the Commission had for decades concluded was an information service. *See, e.g., Title II Order* ¶ 195 (explaining that the defined service extends to the broadband provider’s “exchange of Internet traffic [with] an edge provider,” such as Google or cnn.com).¹²⁴

The panel claimed that this difference is irrelevant because the *Brand X* Court “focused on the nature of the functions broadband providers offered to end users, not the length of the transmission path way.” 825 F.3d at 702. But the *Brand X* Court’s “focus” is precisely the point. Only the last-mile connection to the Internet access provider’s network was at issue in

¹²⁴ Neither the *Title II Order* nor any commenter (to our knowledge) has seriously suggested that consumer perceptions have changed since 2005 on the key issue that divided the *Brand X* Court: whether core Internet access is part of the same offering as last-mile transmission. If anything, the virtual disappearance of dial-up (in which separate companies provided Internet access and last-mile transmission) has made it even *less* likely that broadband consumers would perceive two different services rather than one. In any event, classifying last-mile transmission alone as a separate “telecommunications service” would accomplish few of the objectives sought by advocates of rigid net neutrality rules, because any breach of those rules would likely occur in the “Internet access” service, which would remain an information service. *See* AT&T Docket 10-127 Reply Comments at 22; Reply Comments of AT&T Inc., *Preserving the Open Internet*, WC Docket No. 07-52, at 165-166 (Apr. 26, 2010). That is presumably why the *Title II Order* followed a different legal strategy.

Brand X because it was undisputed that Internet access itself—the making of the pizza, as distinct from its delivery—is an information service. By contrast, the *Title II Order* flatly *rejected* the proposition that Internet access itself—pizza making, not just delivery—is an information service. Nothing in *Brand X* remotely suggests that the Commission retains discretion to make that finding.

6. Controlling Canons of Statutory Interpretation Require an “Information Service” Classification.

Even if, counterfactually, there were some room for debate about whether broadband Internet access service falls within the definition of “information service,” controlling canons of statutory interpretation would compel an affirmative answer. The reason is that an agency may not use a perceived ambiguity in the statutory text as a basis for asserting regulatory authority over an issue of “vast ‘economic and political significance.’” *Utility Air Regulatory Group v. EPA*, 134 S. Ct. 2427, 2444 (2014) (“*UARG*”) (quoting *Brown & Williamson*, 529 U.S. at 160). “When an agency claims to discover in a long-extant statute an unheralded power to regulate ‘a significant portion of the American economy,’ we typically greet its announcement with a measure of skepticism. We expect Congress to speak clearly if it wishes to assign to an agency decisions of vast ‘economic and political significance.’” *Id.* (quoting *Brown & Williamson*, 529 U.S. at 159, 160) (citation omitted). “This major rules doctrine (usually called the major questions doctrine) is grounded in two overlapping and reinforcing presumptions: (i) a separation of powers-based presumption against the delegation of major lawmaking authority from Congress to the Executive Branch, *see Industrial Union Department, AFL-CIO v. American Petroleum Institute*, 448 U.S. 607, 645-46 (1980) (opinion of Stevens, J.), and (ii) a presumption that Congress intends to make major policy decisions itself, not leave those decisions to

agencies.” *USTelecom Reh’g Denial*, 855 F.3d at 419 (Kavanaugh, J. dissenting); see NPRM ¶ 41 (seeking comment on the applicability of *Brown & Williamson* and related precedents).

Here, to say the least, any decision to regulate broadband Internet access as a Title II public utility service assumes “vast ‘economic and political significance.’” *UARG*, 134 S. Ct. at 2444. First, “[t]he financial impact of the rule—in terms of the portion of the economy affected, as well as the impact on investment in infrastructure, content, and business—is staggering.” *USTelecom Reh’g Denial*, 855 F.3d at 423 (Kavanaugh, J. dissenting); see also Econ. Decl. ¶ 20 & n.7 (discussing impact of broadband ecosystem on economy). Second, whether Internet access providers should be regulated as public utilities is also quite obviously an issue of “vast *political* significance.” Indeed, the Commission broke with nearly twenty years of bipartisan consensus in 2015 only after extraordinary intervention by the President himself—an event that “was the result of intensive interest group pressure from groups closely aligned with a few large content providers, who worked with a shadow FCC operating inside the White House.”¹²⁵ This is perhaps the only time in history in which the President has instructed an independent agency not only to pursue a general policy course, but to adopt a particular *legal rationale* for doing so. Finally, the events following the issuance of this very NPRM—the personal threats against Chairman Pai,¹²⁶ the denial-of-service attacks on the Commission’s comment-filing system,¹²⁷

¹²⁵ Larry Downes, *After net neutrality vote, an uncertain future for the Internet*, WASH. POST (Feb. 27, 2015), https://www.washingtonpost.com/news/innovations/wp/2015/02/27/after-net-neutrality-vote-an-uncertain-future-for-the-internet/?utm_term=.d2e66af75d02; see also *USTelecom Reh’g Denial*, 855 F.3d at 423-24 (Kavanaugh, J. dissenting).

¹²⁶ See, e.g., Fred Campbell, Opinion, *Racist Death Threats Over Net Neutrality Part of the Left’s New Normal*, FORBES (May 17, 2017), <https://www.forbes.com/sites/fredcampbell/2017/05/17/racist-death-threats-over-net-neutrality-part-of-the-lefts-new-normal/#18ee561f6477>.

¹²⁷ *FCC CIO Statement on Distributed Denial-of-Service Attacks on FCC Electronic Comment Filing System* (May 8, 2017), https://apps.fcc.gov/edocs_public/attachmatch/DOC-344764A1.pdf.

and the millions of form comments the Commission has already received—underscore the immense “political significance” of this issue.

In upholding the *Title II Order*, the *USTelecom* panel majority found the “major questions” doctrine inapplicable for two reasons, neither of which has merit. First, according to the majority, “the Supreme Court [in *Brand X*] expressly recognized that Congress, by leaving a statutory ambiguity, had delegated to the Commission the power to regulate broadband service.” 825 F.3d at 704. But that rationale merely repeats the majority’s misunderstanding of the “ambiguity” found by the *Brand X* Court. As discussed, the Court found *no* ambiguity on the relevant issue: whether Internet access itself is an information service. In any event, even if Congress had left ambiguity on that point, it would not follow that Congress “delegated to the Commission the power” to resolve that ambiguity. The very point of the major questions doctrine is to reject the usual *Chevron* inference (statutory ambiguity equals implicit delegation) in cases involving questions of vast economic or political significance. In short, the panel’s reasoning on this point illogically assumes the doctrine away before deciding whether it applies.

Second, the panel majority sought to distinguish the Supreme Court precedents underlying the major rules doctrine on the theory that, unlike the agencies in those cases, the Commission did not have to “rewrit[e] clear statutory language” to accommodate its assertion of regulatory authority. *USTelecom*, 825 F.3d at 706. But those precedents are not so limited; indeed, if they were, the major questions doctrine would lack independent doctrinal significance because agencies *never* have authority to “rewrite clear statutory language.”

One case in point is *Brown & Williamson*, in which the Supreme Court rejected the FDA’s assertion of regulatory authority over cigarettes. Although Congress had given FDA broad, general authority over “drugs” and “devices,” the Supreme Court found that regulating

cigarettes as “drugs” would contradict the congressional policy, embodied in other statutes, of protecting ““commerce and the national economy’” to the ““maximum extent consistent with’ consumers ‘be[ing] adequately informed about any adverse health effects.’” *Brown & Williamson*, 529 U.S. at 139 (quoting 15 U.S.C. § 1331). The Court further noted that Congress had been aware that the FDA had interpreted the Food, Drug and Cosmetic Act as not applying to tobacco products and had rejected bills that would have given FDA authority to regulate those products. *Id.* at 144. The Court was therefore “confident that Congress could not have intended to delegate a decision of such economic and political significance to an agency in so cryptic a fashion.” 529 U.S. at 160. The same is true here. Congress could not possibly have intended to give the Commission discretion to reclassify Internet access as a heavily regulated common carrier service, particularly in the same breath in which it voiced an intent “to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation.” 47 U.S.C. § 230(b)(2). To the contrary, it repeatedly rejected legislation that would have given the Commission the sweeping authority it asserts here. *See USTelecom Reh’g Denial*, 855 F.3d at 423-24 (Kavanaugh, J. dissenting). And Congress was aware of—indeed, it codified—the relevant broad definitions in the MFJ and *Computer Inquiry* regimes, under which information (or enhanced) services included gateway services, the direct analogues of Internet access.

Likewise, in *MCI Telecomm’s Corp. v. American Tel. & Tel. Co.*, 512 U.S. 218 (1994), the Court found that the Commission’s authority to “modify” tariff requirements did not allow it to eliminate them because it was “highly unlikely that Congress would leave the determination of whether an industry would be entirely, or even substantially, rate regulated to agency discretion.” *Id.* at 231. The same is true here. At the same time it reclassified broadband Internet access

under Title II, the Commission found it necessary to forbear from 30 separate sections of Title II as well as other relevant provisions of the Communications Act. *See* NPRM ¶ 33. Although the Communications Act gives the Commission forbearance authority, the fact that the Commission had to use it in such a sweeping way to address the clearly poor fit between Title II and broadband Internet was strong evidence that the Commission had made an interpretive mistake in applying Title II to broadband in the first instance.

Moreover, although the Commission disclaimed any intention to engage in *ex ante* rate regulation of broadband providers, it declined to forbear from any regulation of rates under section 201 of the Communications Act. *See Title II Order* ¶¶ 450-452. So long as the Title II reclassification remains in effect, some future Commission could seek to regulate rates more directly or aggressively under section 201. If Congress wanted the Commission to have that discretion, it would have drafted the statute to confer it expressly; it would not have conferred it *sub silentio* through some purported ambiguity in the definition of “telecommunications service.” *See MCI Telecommunications Corp.*, 512 U.S. at 231 (it is “even more unlikely” that Congress would have given the agency the discretion to substantially or entirely deregulate an industry subject to common-carrier regulation by “such a subtle device as permission to ‘modify’ rate filing requirements”).

In short, the “major questions doctrine” is not limited to situations in which an agency had to “rewrite” specific provisions of the statute to accommodate its assertion of regulatory authority. *MCI*, *Brown & Williamson*, and *UARG* establish that the doctrine applies whenever, in the context of the statute as a whole, it is implausible to believe that Congress implicitly delegated to the agency authority to claim significant and far-reaching regulatory authority without expressly providing for such jurisdiction. For the reasons explained above, it is indeed

implausible here to presume that Congress intended to delegate to the Commission the authority to subject broadband Internet access service to the monopoly-era Title II framework.

B. Title III Independently Bars Common Carrier Regulation of Mobile Broadband Internet Access.

For the reasons discussed, any broadband Internet access service—fixed or mobile—is an information service and is thus immune from common carrier regulation under section 3(51) of the Communications Act. Any *mobile* broadband service is also subject to an independent source of immunity from common carrier treatment: it is properly classed as a “private mobile service” under Title III and thus, for that reason too, “shall not ... be treated as a common carrier” service. 47 U.S.C. § 332(c)(2). The NPRM proposes to reaffirm that conclusion, which the Commission had long embraced until 2015. NPRM ¶¶ 55-62. That conclusion is in fact not only consistent with, but indeed compelled by, the plain language of Title III.

1. Mobile Broadband Is a Private Mobile Service.

Section 332 lays out two mutually exclusive categories of mobile service. A “commercial mobile service” is a mobile service that is “provided for profit and makes interconnected service available [to the public].” 47 U.S.C. § 332(d)(1). In turn, an “interconnected service” is a “service that is interconnected with the public switched network (as such terms are defined by regulation by the Commission).” *Id.* § 332(d)(2). A “private mobile service,” in contrast, is any mobile service “that is not a commercial mobile service or the functional equivalent of a commercial mobile service, as specified by regulation by the Commission.” *Id.* Only a commercial mobile service (or its “functional equivalent”) may be regulated as common carriage. In contrast, the provider of “a private mobile service shall not ... be treated as a common carrier for any purpose under [the Communications Act].” *Id.* § 332(c)(1)(A), (c)(2). That prohibition, combined with the more general ban on common carrier

treatment of information services, 47 U.S.C. § 153(51), makes mobile broadband services immune “twice over” from common-carrier regulation. *Cellco P’ship v. FCC*, 700 F.3d 534, 538 (D.C. Cir. 2012).

First, a mobile broadband service is not a “commercial mobile service” because it is not “interconnected” with “the public switched network.” Until the *Title II Order*, the Commission always defined “interconnected service” as a service that “gives subscribers the capability to communicate . . . [with] *all* other users on the public switched network.” 47 C.F.R. § 20.3 (1994) (emphasis added). And before 2015, the Commission had always interpreted “the public switched network” to mean the telephone network—*i.e.*, the “common carrier switched network . . . that use[s] the North American Numbering Plan [*i.e.*, ten-digit phone numbers].” *Id.*¹²⁸ Under these definitions, mobile broadband is obviously not a commercial mobile service “because it is not an ‘interconnected service.’”¹²⁹ Mobile broadband uses Internet Protocol addresses, not the North American Numbering Plan, and it does not connect *at all* with the telephone network. *See Wireless Broadband Order* ¶ 45.

Mobile broadband also cannot be the “functional equivalent” of a service that *is* “interconnected with the public switched network” because no one would view the two as remotely interchangeable. To begin with, a mobile service that does not meet the statutory definition of “commercial mobile service” is “presumed to be a private mobile radio service”

¹²⁸ *See also* Mem. Op. and Order, *Applications of Winter Park Tel. Co.*, 84 F.C.C.2d 689, ¶ 2 n.3 (Jan. 13, 1981) (“[T]he public switched network interconnects all telephones in the country”); Mem. Op. and Order on Reconsideration, *Provision of Access for 800 Service*, 6 FCC Rcd 5421, ¶ 1 n.3 (Sept. 4, 1991) (describing how “800 calls [are] transmitted over the public switched network”).

¹²⁹ Declaratory Ruling, *Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks*, 22 FCC Rcd 5901, ¶ 41 (Mar. 23, 2007) (“*Wireless Broadband Order*”); *see also* Second Report and Order, *Reexamination of Roaming Obligations of Commercial Mobile Radio Services Providers and Other Providers of Mobile Data Services*, 26 FCC Rcd 5411, ¶ 41 (Apr. 7, 2011) (“*Data Roaming Order*”); *2010 Open Internet Order* ¶ 79 & n.247.

exempt from common carrier regulation. 47 C.F.R. § 20.9(a)(14)(i). As the Commission consistently found before 2015, a service can overcome that presumption only if it is “closely substitutable for a commercial mobile radio service”—that is, only if, based on “market research,” changes in price for this service or for commercial mobile service “would prompt customers to change from one service to the other.” *Id.* § 20.9(a)(14)(ii)(B), (C). No one seriously contends that broadband Internet access and voice telephone services are “closely substitutable” in this sense.

2. The *Title II Order* Erred in Classifying Mobile Broadband as a Commercial Mobile Service or Its Functional Equivalent.

The *Title II Order* purported to overcome these independent Title III barriers to common carrier regulation, but in the process it did violence to the relevant statutory definitions. The *Order* first redefined “the public switched network” as *two* mutually incompatible networks: the network using the North American Numbering Plan (the telephone network) *and* the network using “public IP addresses” (the Internet). *Title II Order* ¶ 391. Because these networks are distinct and do not overlap, the Commission also redefined “interconnected service” as a service that reaches “some” (rather than “all”) users on this newly redefined “public switched network.” *Id.* ¶ 402; *compare* 47 C.F.R. § 20.3 (2015) *with id.* (1994). Both steps in that analysis contradict any reasonable construction of Title III.

First, both before and after Congress enacted the relevant statutory definitions in 1993, the Commission and courts routinely used the term “the public switched network” as a term of art denoting the telephone system.¹³⁰ Congress is presumed to have incorporated that

¹³⁰ See *Ad Hoc Telecomms. Users Comm. v. FCC*, 680 F.2d 790, 793 (D.C. Cir. 1982) (public switched network is “the same network over which regular long distance calls travel”); *Public Util. Comm’n v. FCC*, 886 F.2d 1325, 1327, 1330 (D.C. Cir. 1989) (using “public switched network” and “public switched telephone network” interchangeably); Mem. Op. and Order, *Applications of Winter Park*

“established meaning.” *McDermott Int’l, Inc. v. Wilander*, 498 U.S. 337, 342 (1991). Indeed, Congress itself used the terms “public switched network” and “public switched telephone network” interchangeably. Although the House and the Senate versions of the bill that became section 332 both used the term “the public switched network,” the Conference Report characterized the House bill as requiring interconnection “with the [p]ublic switched telephone network.” H.R. Rep. No. 103-213, at 495 (1993) (Conf. Rep.). Moreover, even if we set aside what network Congress had in mind, Congress phrased the term “the public switched network” in the singular and with a definite article. It thus made clear that it meant to address a single, unified network.

The *Title II Order* nonetheless defined “the public switched network” to encompass two distinct networks—the telephone network and the Internet. *See Title II Order* ¶ 391. That construction is impermissible on two levels. It ignores the accepted meaning of this term of art in 1993. And it butchers basic linguistic principles: no conversant speaker of the English language uses the formulation “the X” to mean “multiple distinct X’s.”

In any event, even if “the public switched network” could somehow be defined to include both the Internet and the telephone network, a mobile broadband Internet access service still would not qualify as a “commercial mobile service” because broadband services are not “interconnected” with telephone services. Although mobile broadband allows subscribers to connect with others on the Internet, it does not itself allow subscribers to dial or receive communications from anyone on the telephone network. The *Title II Order* papered over this

Tel. Co., 84 F.C.C.2d 689, ¶ 2 n.3 (Jan. 13, 1981) (“the public switched network interconnects all telephones in the country”); *see* Mem. Op. and Order on Reconsideration, *Provision of Access for 800 Service*, 6 FCC Rcd 5421, ¶ 1 n.3 (Sept. 4, 1991) (“800 calls [are] transmitted over the public switched network”).

problem by redefining “interconnected service” to include any service that connects to “some” end points on the public switched network—rather than “all” endpoints, as the Commission had always required. *Title II Order* ¶ 402; compare 47 C.F.R. § 20.3 (2015) with *id.* (1994). That sleight of hand defies the plain language of the statute by robbing the word “interconnected” of its clear meaning. That word means “to connect with the other; to connect by reciprocal links.” *Oxford English Dictionary* (Oxford Univ. Press 2017). Clearly two services cannot be “interconnected” if users of one cannot connect to users of the other, as is the case with the Internet and the telephone network.

Unsurprisingly, the D.C. Circuit panel majority embraced none of this tortured statutory logic. It did not endorse the notion that “the public switched network” could be defined as two mutually incompatible networks. And it assumed, as did prior Commissions, that, under the statute’s plain language, mobile broadband can be an “interconnected service” only if it ““gives subscribers the capability to communicate to or receive communication from *all* other users on the public switched network’ as redefined to encompass devices using both IP addresses and telephone numbers.” 825 F.3d at 719 (emphasis added).

Instead, the majority adopted an alternative rationale that the Commission had included in its *Order* but then abandoned on appeal. Compare *Title II Order* ¶ 400 with *FCC USTelecom* Br. 89-101. Under this resurrected rationale, a mobile broadband Internet access service *itself* enables subscribers to reach *all* users on both the Internet and the telephone network because such subscribers can download, install, and use VoIP applications from third parties, like Skype, that have made the interconnection arrangements needed for Internet users to speak with users of the telephone network. *USTelecom*, 825 F.3d at 719.

This position does not withstand scrutiny, as the Commission’s appellate lawyers evidently concluded when they abandoned it. Until the *Title II Order*, the Commission had properly recognized that the statutory definition of “interconnected service” asks whether the mobile service *itself* is interconnected with the telephone network. See 47 U.S.C. § 332(d)(2) (“‘interconnected service’ means service that is interconnected with the public switched network”).¹³¹ Thus, a mobile broadband provider does not provide telephone service merely because its customers can download the Skype app and enter into a contract with Skype, any more than it becomes a video provider because its customers can download the Netflix app and enter into a contract with Netflix.

The panel majority’s analysis of this issue also fundamentally contradicted the Commission’s own rationale for reclassifying broadband Internet access as a “telecommunications service.” As discussed in Section II.A above, the *Title II Order* recharacterized Internet access as nothing more than transmission, holding that “broadband Internet access service is today sufficiently independent of ... information services,” such as “email and cloud-based storage programs,” that “it is a separate offering.” *USTelecom*, 825 F.3d at 698. Indeed, the *USTelecom* majority contended that consumers today use broadband Internet access primarily to access “third-party content,” such as “third-party apps” like “Facebook, Netflix, YouTube, Twitter, or MLB.tv, or . . . to access any of thousands of websites,” which the panel stressed were separate from the broadband provider’s own service. *Id.* The majority even treated the basic offering of the “capability” to acquire and process data from such third-party

¹³¹ See *Wireless Broadband Order* ¶ 45; cf. Memorandum Opinion and Order, *Time Warner Request for Declaratory Ruling*, 22 FCC Rcd 3513, ¶¶ 15-16 (Wireline Comp. Bur. Mar. 1, 2007) (“*Time Warner Cable Declaratory Ruling*”) (holding, in the context of interconnection under Section 251, that the transmission of VoIP traffic “has no bearing” on the regulatory status of the entity “transmitting [the] traffic”).

websites as separate from the “Internet access” service at issue. *Id.* at 703, 704-06. In short, when resolving the threshold “telecommunications service” issue, the panel majority described broadband Internet access in the narrowest of terms, ignoring all of the capabilities and features that the ISP “offers” with transmission.

But when the panel majority turned to Title III, it pivoted to the other extreme, erasing the distinction between the transmission component and the applications that run on top of it—even when those applications are “offered” by *third parties*. Specifically, the majority asserted that attempts to distinguish broadband Internet access service from even third-party information service applications would be “talismanic (and elusive),” on the theory that it does not matter whether the broadband service itself provides a connection or merely “enabl[es] the connection through use of an adjunct application such as VoIP.” *Id.* at 721. In other words, the majority treated the information service “capabilities” the broadband provider itself performs as irrelevant to Title II reclassification, but for Title III purposes the panel treated even third-party capabilities and services as integral to the broadband service itself. These are mutually inconsistent positions. It cannot simultaneously be the case (1) that consumers view broadband Internet access service as offering only pure transmission and (2) that the *same service* in fact offers them all the capabilities of a VoIP app on top of pure transmission.

In contrast, the Commission’s decades-old interpretation of these foundational provisions remains the obvious way to harmonize Title II and Title III. All broadband Internet access services are information services because they offer consumers the capability to acquire, store, and interact with data from distant computers. *Stevens Report* ¶ 21. And mobile broadband is not a commercial mobile service (and thus not common carriage) because the broadband service *itself* does not enable customers to use ten-digit numbers to reach users on the traditional

telephone network. *Wireless Broadband Order* ¶ 41. Those are the only interpretations that are true to the statutory language and history, that are mutually consistent, and that further Congress’s express policy “to preserve the vibrant and competitive free market that presently exists for the Internet . . . , unfettered by Federal or State regulation.” 47 U.S.C. §§230(a)(4), (b)(2). The panel majority’s erroneous rulings, by contrast, result in a substantially rewritten statute at war with itself.

Finally, there no merit to the *Title II Order*’s last-ditch alternative logic: that, even if mobile broadband is not a “commercial mobile service,” it may still be subject to common carrier regulation on the theory that it is the “functional equivalent” of such a service and therefore does not qualify as a “private mobile service” immune from such regulation. *See* 47 C.F.R. § 332(d)(3). That alternative logic, which the *USTelecom* panel did not reach (*see* 825 F.3d at 717), is absurd. If, by hypothesis, mobile broadband is not a “commercial mobile service” because that term denotes only interconnected telephone networks, it also cannot be the “functional equivalent” of such a service because no one could rationally describe “Internet access” and “telephone service” as “functional equivalents.”¹³² The *Title II Order* tried to justify that nonsensical conclusion by noting that, like telephone service, mobile broadband is “widely available” and “allows ... communicat[ion] with the vast majority of the public.” *Title II Order* ¶ 404. But the same is true of the mobile Facebook and Twitter apps, and no one would suggest that those services are “functionally equivalent” to “commercial mobile services.”

¹³² As the Commission has explained, Congress added the “functional equivalent” language to address a single narrow concern: the prospect that a “mobile service [would] not fit within the strict definition of a commercial mobile radio service” even though it was “[f]unctionally ... indistinguishable” from such a service and would thus benefit from an unfair regulatory asymmetry when those two close substitutes competed for customers. Second Report and Order, *Implementation of Sections 3(n) and 332 of the Communications Act; Regulatory Treatment of Mobile Services*, 9 FCC Rcd 1411, ¶ 78 (Mar. 7, 1994) (quoting legislative history). That concern is obviously absent here.

3. The Commission Should Restore Its Pre-2015 Interpretation of These Title III Definitional Provisions.

Nothing in *USTelecom* precludes the Commission from returning to its pre-2015 interpretations of these Title III provisions, and it should now do so. *See* 825 F.3d at 714, 718, 721-23 (deferring to “permissibl[e]” interpretations in *Title II Order* but not finding it compelled). In the words of the *Wireless Broadband Order* (at ¶ 56), excluding mobile broadband from the definition of “commercial mobile service” “avoids ambiguity or conflict between sections 332 and 3 of the Communications Act, avoids any absurd or otherwise irrational results, furthers Congress’s goal of encouraging the development of information services by ensuring that they remain free from common carrier regulation, and serves the Act’s overarching goal of fostering competition by providing a level playing field in the market and removing unnecessary regulatory impediments.” Indeed, until the *Title II Order*, the Commission had consistently found that the costs of significant regulatory intervention in the mobile broadband marketplace far outweighed the purported benefits. *See* 2010 *Open Internet Order* ¶¶ 94-96; 2014 *NPRM* ¶ 105; *see also* *Wireless Broadband Order* ¶¶ 27, 56. Those prior findings remain compelling today: the mobile broadband ecosystem is characterized by rapid innovation and fierce competition. *See* Section I.A.1, *supra*.

The Commission should thus now adopt the NPRM’s specific proposals for interpreting section 332. *See* NPRM ¶¶ 55-62. *First*, the Commission should interpret “public switched network” consistently with “the historical usage of the term”—*i.e.*, “a single, integrated network.” *Id.* ¶ 56. *Second*, as before, the Commission should define “interconnected service” in 47 C.F.R. § 20.3 as a service that provides “the capability to communicate ... [with] *all* other users of the public switched network,” not just some. *Id.* ¶ 57. *Third*, the Commission should clarify that the term “capability” in that provision does not include “capabilities” provided by

separately offered third-party services. *See id.* ¶ 58; *see* § II.B.2, *supra*. Finally, the Commission should confirm that mobile broadband Internet access service is not the “functional equivalent” of commercial mobile service because the two are obviously not economic substitutes. NPRM ¶ 61.

C. As Belt-and-Suspenders, the Commission Should Conditionally Forbear from All Title II Regulation of Broadband Internet Access.

As a belt-and-suspenders approach, the NPRM proposes (¶ 64) to forbear from all common carriage regulation of broadband Internet access, including all regulation under sections 201 and 202. The Commission should follow through on that proposal to address the contingency that a court or future Commission might seek to reinstate the *Title II Order* and the self-executing regulatory consequences of a “telecommunications service” classification.

For the reasons discussed in Section I above, common carrier regulation easily meets the statutory criteria for forbearance. In particular, such regulation is not necessary to ensure that the charges or practices of ISPs are just and reasonable and are not unjustly or unreasonably discriminatory (47 U.S.C. § 160(a)(1)); such regulation is not necessary for the protection of consumers (47 U.S.C. § 160(a)(2)); and forbearance from such regulation is consistent with the public interest (47 U.S.C. § 160(a)(3)). The Commission also has authority to grant such “conditional” forbearance from common carrier regulation even while finding that such regulation is legally precluded because broadband Internet access is an information service immune from common carrier treatment. As the D.C. Circuit held in *AT&T Inc. v. FCC*, 452 F.3d 830 (D.C. Cir. 2006), section 10 is designed in part to reduce regulatory uncertainty, and the mere fact that the applicability of a regulatory obligation is “uncertain or hypothetical” is thus no

basis for declining to consider a forbearance request. *See id.* at 836-37.¹³³ Indeed, in the *Title II Order* itself, the Commission granted forbearance from a broad swath of regulations without “first exhaustively determining provision-by-provision and regulation-by-regulation whether and how particular provisions and rules apply to this service.”¹³⁴

There is also no statutory obstacle to comprehensive forbearance from the entirety of Title II, including sections 201 and 202. Indeed, such forbearance has been granted before, in Verizon’s “deemed granted” petition, with approval from the D.C. Circuit.¹³⁵ The text of the 1996 Act also confirms the Commission’s ability to forbear completely from every requirement of Title II. Section 332(c)(1)(A)—enacted in 1993—previously extended forbearance authority only to commercial mobile services and applied to all Title II provisions, except for “section 201, 202, or 208.” 47 U.S.C. § 332(c)(1)(A). The 1996 Act supersedes that limitation by providing that “the Commission shall forbear from applying ... *any* provision” of the Communications Act once it makes the requisite findings in sections 10(a)(1)-(3). 47 U.S.C. § 160(a) (emphasis

¹³³ Similarly, the mere fact that requested relief could be obtained by other means—here, reclassification—is also not a valid basis for refusing to consider a forbearance request. *Id.* (citing *AT&T Corp. v. FCC*, 236 F.3d 729, 738 (D.C. Cir. 2001)).

¹³⁴ *Title II Order* ¶ 542; *see id.* (“the Commission need not resolve whether or how a provision or regulation applies before evaluating the section 10(a) criteria—rather, it can conduct that evaluation and, if warranted, grant forbearance within the scope of its section 10 authority assuming *arguendo* that the provisions or regulations apply”). *AT&T v. FCC* is relevant in a second respect as well. The forbearance petition at issue there, filed in early 2004, sought forbearance from all “common carrier” regulation of “IP platform services,” *id.* at 837, which encompassed Internet access services. After the Commission denied forbearance on the ground that it had not yet decided whether Title II applied to such services, the D.C. Circuit rejected the Commission’s procedural objections and remanded with instructions to resolve it on the merits. The petition has remained pending on remand ever since.

¹³⁵ In 2006, the Commission failed to act within 15 months on Verizon’s petition for comprehensive Title II forbearance for many of its business data services, and the petition was “deemed granted” by operation of law (*see* 47 U.S.C. § 160(c)). Sprint Nextel sought judicial review of this unusually broad forbearance, but the D.C. Circuit upheld the “deemed granted” determination. *See Sprint Nextel Corp. v. FCC*, 508 F.3d 1129 (D.C. Cir. 2007). *Cf.* Report & Order, *Business Data Services in an Internet Protocol Environment*, WC Docket No. 16-143, FCC Docket No. 17-43, ¶¶ 171-77 (Apr. 28, 2017) (reversing forbearance in part).

added). And the introductory clause of section 10(a) confirms that the Commission must follow that instruction “[n]otwithstanding section 332(c)(1)(A).” *Id.* This “notwithstanding” clause has one purpose: to override section 332’s prior exception for sections 201, 202, and 208.

III. THE COMMISSION HAS LEGAL AUTHORITY TO ADOPT APPROPRIATE BASELINE RULES.

For all the reasons discussed above, the Commission should reject the relevant findings of the *Title II Order* and restore the Internet to the type of light-touch regulatory regime that prevailed before 2015. Again, AT&T would support a set of bright-line rules that require transparent disclosures of network-management practices and prohibit blocking and throttling of Internet content without justification under appropriately flexible principles of reasonable network management. Such rules are acceptable because they reflect long-standing industry norms and are thus essentially cost-free. And as the Commission explained in the NPRM that preceded the *Title II Order*, Title II classification is unnecessary to support such rules as a legal matter. *See 2014 Open Internet NPRM ¶¶ 4, 89, 93.*

A. The D.C. Circuit Provided a Blueprint for Imposing a No-Blocking/No-Throttling Rule Without Invoking Section II.

The D.C. Circuit and the Tenth Circuit have held that the Commission has affirmative rulemaking authority under section 706 to adopt targeted measures promoting broadband deployment. *See* 47 U.S.C. § 1302; *Verizon*, 740 F.3d at 636-649; *In re FCC 11-161*, 753 F.3d 1015, 1054 (10th Cir. 2014) (upholding section 706 as basis for USF broadband subsidies). The *2010 Open Internet Order* justified all of its rules under section 706, including the transparency rule and the prohibition on blocking and throttling.¹³⁶ In *Verizon*, the D.C. Circuit upheld the

¹³⁶ The “no blocking” rule adopted in the *2010 Open Internet Order* included a subsidiary prohibition on “throttling” by barring “broadband providers from impairing or degrading particular

transparency rule, struck down the no-blocking/no-throttling rule as part of an impermissible scheme of common carriage regulation, and yet provided, in the Commission’s words, a “blueprint” for reinstating that rule under section 706. *2014 Open Internet NPRM* ¶ 4.¹³⁷

Specifically, the *Verizon* court held that section 706 affirmatively authorizes the Commission to adopt a no-blocking/no-throttling rule in the absence of a conflict with some other provision of law. *See* 740 F.3d at 635-49. Indeed, that holding largely constituted the first half of the *Verizon* decision. The *Verizon* court ultimately invalidated the original no-blocking/no-throttling rule only because the Commission had not adequately explained why, given its 2010 near-ban on paid-prioritization, the rule did not constitute a form of common carriage regulation, which the Communications Act prohibits insofar as broadband Internet access is classified as a non-Title II information service. *See* 740 F.3d at 657-58 (citing 47 U.S.C. § 153(51)). In the court’s view, the no-blocking/no-throttling rule effectively forced ISPs to “sell ... all [edge providers] who ask” standard access to their end user customers “at a price of \$0.” *Id.* at 657. That was a problem, the court reasoned, because the combination of that rule with an effective flat ban on paid prioritization left “no room at all for ‘individualized bargaining’” and thus amounted to prohibited common carriage treatment. *Id.* at 657 (quoting *Cellco*, 700 F.3d at 548).

content, applications, services, or non-harmful devices.” *2010 Open Internet Order* ¶ 66; *see also Title II Order* ¶ 106 & n.241.

¹³⁷ The Commission proposed to follow that blueprint at the outset of the *Title II* proceeding but thereafter ignored it. *See id.* ¶ 89 (no-blocking/no-throttling rules would comport with the *Verizon* holding so long as they require a “minimum level of access” and permit broadband providers to negotiate “individualized, differentiated arrangements” above that level); *id.* ¶ 93 (“The [*Verizon*] court intimated that the no-blocking rule could pass scrutiny, however, if broadband providers could engage in individualized bargaining while subject to the rule.”); *see also* Letter from Henry G. Hultquist, AT&T Services Inc., to Marlene H. Dortch, Secretary, FCC, GN Docket Nos. 14-28 & 10-127, at 4-5 (Oct. 24, 2014).

By the same token, the court indicated that it would *approve* such rules under a non-Title II framework if the overall net neutrality regime (1) guarantees edge providers free access as usual to the best-effort Internet platform but (2) avoids any flat ban on paid prioritization arrangements. *See id.* at 658. The court posited the following scenario: “Verizon might, consistent with the anti-blocking rule—and again, absent the antidiscrimination rule—charge an edge provider ... for high-speed, priority access while limiting all other edge providers to a more standard service” (*i.e.*, access to the best-effort platform in use everywhere today). *Id.* The Court indicated that this fix to the overall regulatory scheme would likely keep no-blocking/no-throttling rules from violating the ban on common carrier treatment of information services:

[I]f the relevant service that broadband providers furnish [to edge providers] is access to their subscribers generally, as opposed to access to their subscribers at the specific minimum speed necessary to satisfy the anti-blocking rules, then these rules, while perhaps establishing a lower limit on the forms that broadband providers’ arrangements with edge providers could take, might nonetheless leave sufficient ‘room for individualized bargaining and discrimination in terms’ so as not to run afoul of the statutory prohibitions on common carrier treatment.

Id. (citing *Cellco*, 700 F.3d at 548). The court withheld an ultimate resolution of the issue only because “the Commission advanced nothing like [this rationale] either in the underlying *Order* or in its briefs before this court” and indeed “ma[de] no distinction at all between the anti-discrimination [*i.e.*, anti-paid-prioritization] and anti-blocking rules” for legal purposes. *Id.*

Of course, the Commission can now make that distinction, and any no-blocking/no-throttling rule will likely be upheld if the Commission follows the *Verizon* court’s blueprint. Again, mass-market paid prioritization arrangements are today only a theoretical possibility. *See* § I.A.3, *supra*. But as a legal matter, the Commission could craft no-blocking/no-throttling rules consistent with the *Verizon* decision simply by making clear that ISPs and edge providers can make use of such arrangements if and when they become commercially feasible. And as

explained in Section I.A.3 above, there is no sound policy basis for a flat ban on such arrangements in the first place.

If the Commission relies on section 706 as a source of rulemaking authority, however, it should observe three critical limiting principles.¹³⁸ *First*, as the *Verizon* decision illustrates, section 3(51) of the Communications Act prohibits the Commission from imposing common-carriage-type regulation on information services.¹³⁹ Congress imposed that restriction for good reason: common carrier regulation subverts the spirit of innovation and experimentation that characterizes the Internet ecosystem. This limitation in section 3(51) dovetails with the main purpose of section 706 itself: “remov[ing] barriers to infrastructure investment.” 47 U.S.C. § 1302(a); *accord* 47 U.S.C. § 1302(b). As discussed in Section I.B, common carrier regulation *erects* barriers to such investment, and it certainly does not “remove” them.

Second, to the extent that section 706 authorizes the Commission to regulate broadband network practices, it does so only insofar as the Commission has a strong empirical basis for concluding that such regulation is necessary to promote broadband investment by ISPs. Section 706 addresses only regulatory measures taken to promote “infrastructure investment” in “advanced telecommunications capability,” not to promote any other goal, such as the interests of edge providers. *See* 47 U.S.C. § 1302(a), (b); *see also id.* § 1302(c) (defining “advanced telecommunications capability”).¹⁴⁰ Thus, the Commission must justify whatever rules it adopts

¹³⁸ *Cf. AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366, 388 (1999) (“the Act requires the FCC to apply some limiting standard, rationally related to the goals of the Act”).

¹³⁹ 47 U.S.C. § 153(51) (a provider may be “treated as a common carrier ... only to the extent that it is engaged in providing telecommunications services”); *Verizon*, 740 F.3d at 655-59.

¹⁴⁰ Specifically, section 706(a) directs the Commission to encourage “advanced telecommunications capability” through means such as “regulatory forbearance,” “measures that promote competition in the local telecommunications market,” and “other regulatory methods that remove barriers to infrastructure investment.” 47 U.S.C. § 1302(a). Section 706(b) directs the Commission in certain circumstances to take steps to “accelerate” deployment of advanced local networks by “removing barriers

under this provision with real-world evidence that the rules will increase ISPs' incentives to invest in additional broadband deployment.

To date, the Commission has paid only lip service to that limiting principle. Under the “triple-cushion-shot” theories it has previously invoked, *see Verizon*, 740 F.3d at 643, the Commission has used section 706 to justify nearly any regulatory benefit it decides to confer on edge providers. It has dubiously reasoned that such benefits promote a “virtuous cycle of innovation and growth” that always somehow culminates in greater broadband investment.¹⁴¹ Such abstract speculation lacks any analytical rigor and underscores the observation of Wheeler-era Chief Economist Tim Brennan that the *Title II Order* is an “‘economics-free zone.’” *USTelecom*, 825 F.3d at 764 (Williams, J., dissenting in relevant part). Even if section 706 is an independent source of authority, it is not a blank check for regulatory intervention. It was intended primarily as a *deregulatory* mandate, emphasizing the need to engage in “regulatory forbearance” and other methods to “*remove* barriers to [broadband] investment,” including regulatory ones. 47 U.S.C. § 1302(a) (emphasis added). The Commission undermines that overall objective whenever it adopts vague or overbroad prohibitions on new broadband business plans.

Third, any exercise of section 706 authority must avoid raising First Amendment concerns. Judges Srinivasan, Tatel, and Kavanaugh all agreed at the *en banc* stage in the *USTelecom* litigation that any binding net neutrality rules—*i.e.*, any rules that ISPs cannot

to infrastructure investment and by promoting competition in the telecommunications market.” *Id.* § 1302(b).

¹⁴¹ *See* Econ. Decl. ¶ 73 (broadband providers already have powerful incentives to make investments facilitating demand for their services); *Verizon*, 740 F.3d at 667 (Silberman, J., dissenting in relevant part) (“Firms can generally be relied upon to know their own best interest.”).

readily extricate themselves from—trigger First Amendment review.¹⁴² Indeed, Judges Srinivasan and Tatel, the two judges in the *USTelecom* panel majority, rejected First Amendment concerns solely by positing that the current rules are not actually mandatory and that a broadband provider may exempt itself so long it informs consumers that it is offering something other than standard Internet access service.¹⁴³ To the extent that the Commission wishes to impose more binding rules, those rules must, at a minimum, survive intermediate scrutiny under *Turner Broadcasting System, Inc. v. FCC*, 512 U.S. 622 (1994), which requires a showing that the rules are narrowly tailored to promote—and do in fact promote—substantial government interests. Rules resting on sloppy economic speculation will fail that test. To survive scrutiny, they will have to rest on sound economic principles and empirical data.¹⁴⁴

¹⁴² See *USTelecom Reh’g Denial*, 855 F.3d 389-90 (Srinivasan, J., joined by Tatel, J., concurring); *id.* at 417-435 (Kavanaugh, J. dissenting).

¹⁴³ See *id.* at 390 (Srinivasan, J., joined by Tatel, J., concurring) (“In the event that an ISP ... were to choose to hold itself out to consumers as offering them an edited service rather than indiscriminate internet access ... it could then bring itself outside the rule. In that sense, the rule could be characterized as voluntary, but in much the same way that just about any regulation could be considered voluntary, insofar as a regulated entity could always transform its business to such an extent that it is no longer in the line of business covered by the regulation.”) (internal quotation marks and citation omitted); see also Hank Hultquist, *The Surprising (to me) Narrowness of the D.C. Circuit’s Title II Decision*, AT&T Public Policy Blog (May 31, 2017), <https://www.attpublicpolicy.com/consumer-broadband/the-surprising-to-me-narrowness-of-the-d-c-circuits-title-ii-decision/>.

¹⁴⁴ For similar reasons, the Commission should eliminate the last sentence of the definition of “broadband Internet access service,” which reads: “This term also encompasses any service that the Commission finds to be providing a functional equivalent of the service described in the previous sentence, or that is used to evade the protections set forth in this Part.” 47 C.F.R. § 8.2(a). The Commission raises substantial First Amendment concerns when it reserves to itself such open-ended discretion to restrict curated services that it deems the “functional equivalent” of broadband Internet access. See, e.g., *City of Lakewood v. Plain Dealer Pub. Co.*, 486 U.S. 750 (1988). Such concerns are particularly acute because the Commission has repeatedly misapplied the “functional equivalent” concept in other contexts. See *AT&T Corp. v. FCC*, 841 F.3d 1047 (D.C. Cir. 2016) (rejecting Commission application of “functional equivalent” standard in 47 C.F.R. § 51.903(d)(3)); *Title II Order* ¶ 404 (irrationally finding that mobile telephone service and mobile broadband Internet access are “functional equivalents” for purposes of 47 U.S.C. § 332(d)).

B. The Commission Could Alternatively Rely on Ancillary Authority.

If the Commission does not wish to rely on section 706 as its primary basis for substantive rules, it could alternatively invoke “ancillary” Title I authority.

The doctrine of ancillary jurisdiction traces back to *United States v. Southwestern Cable*, 392 U.S. 157 (1968). In that case, the FCC had sought to protect the local advertising revenues of television broadcasters by (among other things) keeping then-nascent cable operators from transmitting the signals of distant television stations. The Supreme Court upheld such regulation as reasonably ancillary to the Commission’s undisputed responsibility under Title III to protect the nation’s broadcasting industry, even though Congress had not yet added Title VI to the Communications Act and the Commission thus lacked direct regulatory authority over cable television service. *See id.* The Court further elaborated on this doctrine in *United States v. Midwest Video Corp.*, 406 U.S. 649 (1972) (“*Midwest Video I*”), in which it upheld several additional restrictions on cable companies under the same basic theory of ancillary jurisdiction. In 1979, however, the Court identified key limiting principles for the doctrine when it held that the Commission may assert ancillary authority only to the extent necessary “to ensure the achievement of [its] statutory responsibilities. *FCC v. Midwest Video Corp.*, 440 U.S. 689, 706 (1979) (“*Midwest Video II*”). In particular, the Court invalidated certain “public access channel” requirements that the Commission had sought to impose on cable companies because they would have constituted a form of prohibited common carrier treatment if the Commission had imposed the same requirements on Title III broadcasters. *See id.* at 702-08.

In the intervening decades, the D.C. Circuit has decided a number of cases under the ancillary jurisdiction doctrine, in each case illustrating the doctrine’s basic contours and limits. *See, e.g., Comcast Corp. v. FCC*, 600 F.3d 642 (D.C. Cir. 2010) (invalidating certain theories of ancillary authority as a basis for net neutrality liability); *American Library Ass’n v. FCC*, 406

F.3d 689 (D.C. Cir. 2005) (invalidating “broadcast flag” rules); *MPAA, Inc. v. FCC*, 309 F.3d 976 (D.C. Cir. 2002) (invalidating “video description” rules); *Computer & Comm’ns Indus. Ass’n v. FCC*, 693 F.2d 198 (D.C. Cir. 1982) (upholding certain *Computer Inquiry* safeguards to prevent regulated monopolists from inflating regulated telephone rate base through cross-subsidized enhanced services). The core lesson of these cases is that, even if the Commission has subject-matter jurisdiction over a particular service under Title I because it involves interstate electronic communications, the Commission may not regulate that service under its ancillary authority simply “to pursue a stand-alone policy objective,” but must instead confine any regulatory measures to those designed “to support its exercise of a specifically delegated power” under Title II, III, or VI. *Comcast*, 600 F.3d at 659. In other words, “the Commission’s ancillary authority ‘is really incidental to, and contingent upon, *specifically delegated powers under the Act.*’” *Id.* at 658 (quoting *NARUC v. FCC*, 533 F.2d 601 (D.C. Cir. 1976)) (emphasis in original).

Under these standards, the Commission could invoke ancillary authority to prohibit certain types of broadband network practices. For example, the *Madison River* controversy (*see* § I.A.1, *supra*) involved an attempt by a local telephone monopoly to preserve its ample access charges by blocking the VoIP ports of its broadband Internet customers. The Commission reasonably alluded to its Title I ancillary authority as a basis for the consent decree resolving that controversy.¹⁴⁵ Although the Commission did not elaborate on its rationale, *Madison River*’s efforts to foreclose over-the-top VoIP competition to its regulated interstate telephone services

¹⁴⁵ *See* Consent Decree, *Madison River Comm’ns LLC*, No. EB-05-IH-0110, ¶ 1 (2005), https://apps.fcc.gov/edocs_public/attachmatch/DA-05-543A2.pdf (citing, *inter alia*, “section[] 4(i) ... of the Communications Act”).

threatened to frustrate the Commission’s obligation to ensure that the charges for those services were just and reasonable.

More generally, the Commission could invoke ancillary authority to prohibit an ISP from anticompetitively excluding online services that directly compete with its own regulated services whenever doing so “is necessary to further [the Commission’s] regulation of activities over which it [has] express statutory authority” under Titles II, III, or VI. There are limits to that approach. For example, the *Comcast* court rejected the Commission’s argument that prohibiting an ISP from throttling video file-sharing applications is reasonably ancillary to the Commission’s section 623 authority over cable rates. *See* 600 F.3d at 661 (discussing 47 U.S.C. § 543). But the court did not preclude use of ancillary authority in this area altogether, and it withheld any ruling on the merits of certain Title I theories that the Commission itself had formulated on appeal but not in the underlying *Order*. *See Comcast*, 600 F.3d at 660 (citing *Chenery* issues); *see also* AT&T 2010 Net Neutrality Comments at 208.

As an alternative to substantive rules, the Commission could also invoke ancillary authority to impose transparency requirements governing blocking, throttling, or paid-prioritization practices.¹⁴⁶ As an initial matter, the Commission has broad authority (under section 706, ancillary authority, or both) to impose transparency requirements that facilitate marketplace competition. Although the *Verizon* majority relied primarily on section 706 to uphold the transparency rules in the *2010 Open Internet Order* (*see* 740 F.3d at 659), Judge Silberman in dissent contended that ancillary jurisdiction offered a “firmer ground” for such rules because they are “reasonably ancillary to [the Commission’s] duty” to “make triennial

¹⁴⁶ Of course, if the Commission imposes legally valid rules prohibiting blocking and throttling, there would be no such practices to disclose.

reports to Congress on ‘market entry barriers’ in information services” under section 257. *Id.* at 668 n.9 (Silberman, J., concurring in part and dissenting in part); *but cf. Comcast*, 600 F.3d at 659 (rejecting Commission’s use of section 257 as broad source of ancillary authority). The Commission could also adopt a variation on this theme. Whether or not section 706 is a source of rulemaking authority, it explicitly instructs the Commission to make annual reports to Congress “concerning the availability of advanced telecommunications capability to all Americans.” 47 U.S.C. § 1302(b). As with section 257, the Commission could thus justify disclosure obligations on the ground that disclosures help provide the market information needed to satisfy those annual reporting obligations.

Thus, in lieu of substantive restrictions on broadband practices, the Commission could require broadband providers to make prominent disclosures to consumers if they wish to engage in blocking and throttling unjustified by reasonable network management principles. Such disclosures would shine a bright spotlight on any nonstandard industry practices by particular broadband ISPs. And they would place consumers on clear notice of any limitations in the Internet service they have purchased, enabling them to vote with their feet if they oppose those limitations for any reason. Of course, any ISP would also be subject to sanctions if it engaged in such practices without providing the required disclosures. *Cf.* note 7, *supra* (noting need to pare back certain needless and burdensome transparency obligations).

CONCLUSION

The Commission should restore the pre-2015 consensus that broadband Internet access is an information service immune from Title II regulation; it should conditionally forbear from all Title II regulation in the event a court or future Commission seeks to reimpose it later; and it should rely on non-Title II sources of authority to impose light-touch open Internet rules.

Respectfully submitted,

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