Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20544

In the Matter of)	
Framework for Broadband Internet Service)))	GN Docket No. 10-127
Open Internet Rulemaking)))	GN Docket No. 14-28

REPLY COMMENTS OF VERIZON AND VERIZON WIRELESS

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I. INTRODUCTION AND SUMMARY

The record in this proceeding reflects widespread agreement that Internet openness is extremely important, and that consumer interests must serve as the lodestar for effective broadband policy. The fundamental question posed in these dockets is not *whether*, but *how best*, to preserve openness and promote consumer welfare. The answer, as the record makes clear, is for the Commission to adhere to the successful bipartisan policy approach to broadband dating back to the Clinton era. That consensus approach recognizes that consumers are best served by light-touch regulatory policies that promote innovation and deployment of nextgeneration services and that overly prescriptive regulation, however well intentioned, is likely to undercut rather than advance the public interest. In particular, the Commission should continue with a framework that provides broadband providers with flexibility that will encourage continued innovation and investment, while relying in the first instance on informed consumer choice, facilitated by the Commission's existing transparency rule, to guide the Internet marketplace. While competition and effective multi-stakeholder processes will continue to minimize the likelihood of harmful practices developing, if the Commission decides that new rules are needed, it should not go down an untested and risky path of prescriptive regulation, much less ill-fitting utilities-style regulation. Instead, the Commission should allow continued flexibility while providing a backstop on a case-by-case basis to address unreasonable practices that harm competition or consumers on the Internet, if they should ever develop.

In contrast to the doomsday depictions of advocates for heavy regulation, the broadband and Internet services available to consumers remain open, and continue to improve at a steady pace. As we highlighted previously, Verizon has committed to its customers to provide them Internet access services that let them go where they want and do what they want online, using their choice of compatible applications and devices.¹ Other broadband providers have similarly committed to supporting the open Internet. Moreover, we and other providers continue to invest heavily to improve broadband in the U.S. For the third year in a row, AT&T and Verizon ranked numbers 1 and 2 on the Progressive Policy Institute's list of U.S. "investment heroes," having invested more than \$35 billion in capital expenditures in 2013 (and more than \$100 billion over the last three years).² The 25 "investment heroes" on the list collectively invested \$152 billion last year, and \$46 billion of that was made by broadband providers. *Id.* at 4. Not surprisingly, the result is broadband networks that are becoming more widely available and more robust all the time. Moreover, competition throughout the Internet ecosystem is dynamic, and providers like Verizon face competition from a large and growing number of other providers, both

¹ See Verizon's Commitment to Our Broadband Internet Access Customers: Our Customers Get Everything the Open Internet Has to Offer,

 $http://www.verizon.com/about/sites/default/files/Verizon_Broadband_Commitment.pdf.$

² See Diana Carew and Dr. Michael Mandel, U.S. Investment Heroes of 2014: Investing at Home in a Connected World, PROGRESSIVE POLICY INSTITUTE, at 3-5 (Sept. 2014), <u>http://www.progressivepolicy.org/wp-content/uploads/2014/09/2014.09-Carew_Mandel_US-Investment-Heroes-of-2014_Investing-at-Home-in-a-Connected-World.pdf ("U.S. Investment Heroes"</u>).

traditional and non-traditional, while also increasingly partnering with a wide range of players to develop and offer new services and offerings to consumers.

As the record makes clear, the fundamental premise of those urging expansive regulation here—that there is an openness "problem" that must be fixed—is bankrupt. The comments seeking aggressive new rules are long on rhetoric and unsupported "what ifs," but utterly bereft of real-world examples in which any American broadband provider has harmed consumers by blocking or degrading traffic at any time since the Commission first began considering open Internet rules in the late 2000s. Lacking such examples, proponents of prescriptive regulation assert that broadband providers have theoretical "incentives" to undercut openness. Such claims are fanciful, ignoring the power of consumer demand. Verizon's wireline services, for example, face stiff and near-ubiquitous competition from next-generation cable services. Similarly, consumers generally have a choice of at least four mobile broadband providers, all of whom are in various stages of deploying advanced 4G LTE services. Given these competitive options, we and other broadband providers know too well that dissatisfied customers will simply change providers. Under these circumstances, there would be no basis for finding that Verizon has market power (whether for policy, statutory, or constitutional purposes) and the ability to harm competition or consumers in any particular geographic region, much less nationwide.

Moreover, Verizon itself relies on Internet openness for many of its services and will increasingly do so going forward. In addition to our ISP and backbone operations, Verizon now provides cloud-based services, content delivery network (CDN) services, and over-the-top services. But our wireline network is regional and only covers a small portion of the country, and we must rely on other providers' networks, particularly the high speed wireline services offered by cable operators, to deliver our services in most parts of the country. Diminished

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openness would threaten these strategic Verizon businesses. For this reason, Verizon and companies like it are themselves reliant on Internet openness, and face powerful incentives to maintain an open network.

Given the absence of both actual harm and any incentive or ability to inflict such harm going forward, the highly regulatory approach urged by some in this docket would badly undermine consumer interests by deterring the innovation and investment that has been central to the Internet's success and by replacing the differentiation that has been the lifeblood of Internet competition with a commodifized, one-size-fits-all Internet experience. The risks of harm from unnecessary regulation are heightened in the context of mobile broadband services. In the 2010 Open Internet Order,³ the Commission wisely recognized that "wireless is different." The record shows that, in fact, robust competition in the mobile broadband marketplace has led to the rapid development of cutting-edge services, and that this innovation is, if anything, accelerating. Moreover, the unique challenge posed by limited spectrum and other operational challenges warrant a mobile-specific regulatory regime. In light of these distinctions, the Commission should decline to apply broad new rules to mobile broadband providers. Only maintaining the current flexible approach will facilitate the mobile platform's continued development into a more effective competitor against high-capacity fixed services such as those offered by cable providers.

In all events, the Commission should resist calls to reclassify broadband as including a distinct "telecommunications service" component regulated under Title II. Reclassification would endanger today's high level of investment and innovation in broadband infrastructure and

³ See Preserving the Open Internet; Broadband Industry Practices, Report and Order, 25 FCC Rcd 17905 (2010) ("Open Internet Order")

disrupt the consumer experience as a result of the forced unbundling of what are today userfriendly, integrated services. Reclassification also could jeopardize virtually the entire Internet ecosystem and open the door to pervasive international regulation of the Internet. For these reasons, the Commission has correctly and repeatedly classified broadband Internet access service as an information service, and it would be unlawful to do otherwise. The record makes clear, moreover, that broadband is even more of an integrated information service today than it was in the 2000s, because Internet access is inseparably integrated with ever-more-advanced features and capabilities.

Finally, the record does not support extending any new rules beyond mass market Internet access services offered over fixed broadband networks. The long and successful history of voluntary, market-based Internet interconnection agreements continues to provide flexibility and incentives that drive investment and allow space for the Internet to evolve. The Commission should reject self-interested proposals from Netflix and its vendors seeking mandatory, free interconnection. This approach would inevitably chill investment and unfairly shift network costs from large content providers (and their customers) onto ISPs' subscribers, including those who never access these content providers' content. Moreover, there is widespread agreement that specialized services should remain exempt from the open Internet rules because there is no evidence that broadband providers have used nascent specialized service offerings to undermine the open Internet. There is also no reason to apply open Internet rules to the highly competitive market for enterprise services.

The Commission's light-touch approach to broadband—borne of a long-standing, bipartisan policy consensus—has allowed competition and innovation to flourish, thereby ensuring that the marketplace is responsive to consumer demand. In this docket, the

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Commission should look beyond the special pleading by those seeking short-term gain and the prophecies of doomsayers who lack any sound argument that their forecasted calamities will come to pass. It should retain its focus on the interests of consumers. These include not only the very real interest in maintaining openness, but also the interest in continuing to enjoy the ever-expanding and ever-more-diverse Internet offerings that have made the Internet so valuable to so many in so few years.

II. THE RECORD CONTAINS NO EVIDENCE OF A PROBLEM THAT WOULD JUSTIFY ONEROUS NEW OPEN INTERNET RULES.

As explained in Verizon's opening comments,⁴ a light-touch regulatory policy has been a key driver behind the Internet's success in keeping pace with rapidly changing consumer demands. This approach has allowed competition and innovation to flourish, thereby ensuring that the marketplace is responsive to consumer demand. In light of the success of a light-touch approach, and the uncertainties inherent in any new rules, Verizon agrees with Akamai that the Commission "should proceed with caution and humility to ensure it does more good than harm" and "should take only those actions that are necessary and narrowly tailored to promote competition, innovation, and the growth of broadband networks that inure to the benefit of the public."⁵ Here, there is no evidence of an existing problem that new rules are needed to solve.

Proponents of new rules can only speculate about broadband providers' *hypothetical* incentives and abilities to engage in anticompetitive behavior, but this speculation ignores the fact that Verizon and other broadband providers have committed to Internet openness because their customers demand it and their business models rely on it. As explained in our opening comments, Verizon has strong incentives to embrace Internet openness not only because our

⁴ Verizon Comments at 10-14.

⁵ Akamai Comments at 11.

subscribers demand it, but also because our own business operations increasingly depend on it. For example, Verizon is moving aggressively into such areas as cloud-based services, over-thetop services, and CDN services that reach subscribers on other providers' networks. Verizon's wireline territory covers less than one quarter of households in the United States, and we currently provide wireline broadband to less than ten percent of American households. Moreover, we face strong competition from advanced cable broadband services throughout that limited coverage area, and virtually everywhere that we offer our fiber-based services. Therefore, Verizon must itself rely on the last-mile networks of other broadband providers to reach the large majority of Internet end users. The openness of third-party networks is thus central to Verizon's business model. Other broadband providers have similar incentives.

Moreover, where we *are* the customer's broadband provider, Verizon's incentives—like those of other ISPs—are to make our broadband service as appealing as possible. The costs of broadband deployment are high, and providers depend on maintaining customer relationships over time to recover these costs. Broadband providers do this by ensuring that users can access the content and services they desire and avoiding practices that would cause customers to terminate their services. These incentives are why Verizon and other broadband providers have committed to following open Internet principles.⁶

Other commenters confirm this logic. Cox, for example, notes that "network operators have a powerful incentive in today's competitive broadband marketplace to ensure that their customers can access whatever online content and services they desire while enjoying the best possible service."⁷ CenturyLink explains that broadband providers have "every incentive to

⁶ See Verizon Comments at 8-9 (summarizing Verizon's commitment); Comcast Comments at 12-13 (summarizing other broadband providers' commitments).

⁷ Cox Comments at 2.

design and maintain broadband networks that meet or exceed end-user expectations of openness."⁸ These incentives apply equally to mobile network operators, who, in T-Mobile's words, "promote Internet openness without [open Internet] requirements because their customers demand access to the content, applications, and devices of their choice."⁹ Put another way, "[b]roadband providers are in the business of carrying traffic, including the traffic that their customers want."¹⁰ Thus, as NCTA explained, "[i]t would be irrational for broadband providers to undermine the very openness that has long buoyed their businesses for some short-term gain, or to block or degrade access to Internet content that competing providers make readily available."¹¹ Verizon agrees.

The few isolated and dated incidents of alleged problems identified by the Commission do not justify new rules. As Verizon has explained, the Comcast/Bit Torrent and Madison River examples identified in the Commission's previous open Internet proceeding were quickly resolved without open Internet rules in place.¹² As evidence that open Internet "concerns" have arisen since the 2010 *Open Internet Order*, the Commission mentions restrictions that AT&T placed on Apple's mobile wireless FaceTime when that application first became available for use on AT&T's wireless network.¹³ But these temporary limitations do not evidence any market failure: AT&T publicly disclosed its activities, defended the restrictions as reasonable network management, and soon lifted them entirely. If anything, the AT&T/FaceTime incident

⁸ CenturyLink Comments at 13.

⁹ T-Mobile Comments at 1.

¹⁰ United States Telecom Association ("USTelecom") Comments at 10.

¹¹ National Cable & Telecommunications Association (NCTA) Comments at 14.

¹² See Verizon and Verizon Wireless Reply Comments, *Preserving the Open Internet*, GN Docket No. 09-191; *Broadband Industry Practices*, WC Docket No. 07-52, at 31-32 (Apr. 26, 2010).

¹³ See Protecting and Promoting the Open Internet, Notice of Proposed Rulemaking, 29 FCC Rcd 5561, ¶ 41 (2014) ("NPRM").

demonstrates that the broadband marketplace works: issues are quickly identified and quickly resolved.

Likewise, references to Verizon's consent decree regarding tethering¹⁴ misunderstand that dispute, which had nothing to do with the routing or treatment of Internet traffic whatsoever or other net neutrality concerns. Instead, it related to low-level communications between Verizon and Google concerning the availability of certain tethering applications in the Google Play store and whether those communications were consistent with Verizon's C Block obligations. These few instances of alleged open Internet problems in the United States do not reflect a pattern of blocking or degrading access to lawful content that needs to be addressed, let alone any systemic problem resulting in harm to competition or to consumers.

Proponents of regulation fare no better than the Commission in identifying violations of open Internet norms, and the more recent examples that they choose to highlight only provide further evidence of risks that new regulation would take choices away from consumers. They attack innovative, pro-consumer service offerings—such as AT&T's Sponsored Data and T-Mobile's Music Freedom—as threats to an open Internet.¹⁵ As Verizon has explained, however, such arrangements can allow broadband providers, content providers, and edge providers to distinguish themselves in their respective markets, and can benefit consumers by giving them additional choices – for example, by allowing them to access particular content without using their monthly data allowance. Such arrangements thus help offset the substantial costs of infrastructure deployment and upgrades faced by broadband providers without increasing costs

¹⁴ See id. See also Electronic Frontier Foundation Comments at 23-24; Voices for Internet Freedom *et al.* Comments at 23.

¹⁵ See Public Knowledge, Benton Foundation and Access Sonoma Broadband ("Public Knowledge") Comments at 21.

to consumers.¹⁶ And, contrary to the claims of opponents, these innovative offerings create new opportunities for emerging and non-traditional content and applications providers. Indeed, the Minority Media and Telecommunications Council lauded T-Mobile's Music Freedom for "ma[king] history by opening its national wireless platform to diverse-owned enterprises."¹⁷ Such innovative service offerings are not evidence of a "problem" for which new open Internet rules are needed.

Lacking evidence of any problem requiring regulatory intervention, proponents of new rules must rely—as they did four years ago—on broadband providers' hypothetical power and incentives to engage in conduct harmful to consumers.¹⁸ But as explained in Verizon's opening comments, these arguments fundamentally misunderstand our business and the broader broadband marketplace.¹⁹ Verizon has invested tens of billions of dollars in its networks, and the only way we can earn a return on our investment is to retain existing customers and attract new customers by giving them access to the open Internet that they demand. Virtually everywhere that Verizon has made heavy investment in fiber, we face head-to-head competition from a cable competitor offering its own next-generation wireline service. And while Verizon has the broadest 4G LTE coverage, we continue to invest heavily to stay ahead of the multiple competitors who are racing to catch up. In other words, Verizon lacks market power or the

¹⁶ See Verizon Comments at 31.

¹⁷ David Honig Statement on T-Mobile's Music Freedom Program, MINORITY MEDIA & TELECOM COUNCIL (Aug. 27, 2014) http://broadbandandsocialjustice.org/2014/08/david-honig-statement-on-t-mobiles-music-freedom-program/.

¹⁸ *See* Public Knowledge Comments at 13 ("Broadband access providers have the means, motives, and incentives to break the open internet and undermine the network compact.").

¹⁹ See Verizon Comments at 5-10.

ability to harm competition or users—our subscribers have competitive alternatives, in specific geographic areas as well as nationwide.²⁰

Proponents of new rules also ignore the fact that other significant players in the Internet ecosystem—such as search providers, operating system developers, app store operators, and device manufacturers—have the same (if not greater) alleged incentives and abilities to affect and shape the consumer experience online.²¹ Rather than adopting prescriptive regulation based on broadband providers' *hypothetical* incentives, the Commission should acknowledge broadband providers' *actual* incentives—and the customer-focused market that has resulted from them—and refrain from issuing new rules.

This position is borne out in the record, not only by broadband providers themselves but also by others throughout the Internet ecosystem. Akamai, for example, observes that "[w]hile the original principles of Internet freedom—freedom to access lawful content, freedom to use applications, freedom to attach personal devices to the network, and freedom to obtain service plan information—remain valid and must be protected, imposing an additional regulatory overlay could slow innovation."²² The Consumer Electronics Association states that, "[t]ogether with the Commission's existing transparency rule, competitive forces should be sufficient to preserve an open Internet without the need for additional regulation."²³ Charter points out that "consumers will punish any broadband provider unwilling or unable to" meet consumers' "demand for unfettered Internet access."²⁴ In a similar vein, AT&T and Cisco each urge the

²⁰ See also infra at 48-49.

²¹ See Verizon Comments at 19-20.

²² Akamai Comments at 9 (internal citation omitted).

²³ Consumer Electronics Association (CEA) Comments at 7 (internal citation omitted).

²⁴ Charter Comments at 21.

Commission to consider whether new regulation is really needed, or simply better enforcement of the rules that survived the appeal.²⁵

III. IF THE COMMISSION ADOPTS NEW RULES, IT SHOULD FOCUS ON A REGIME OF INFORMED CONSUMER CHOICE IN ORDER TO PROMOTE FLEXIBILITY, INNOVATION, AND CONSUMER BENEFITS.

To the extent that the Commission does adopt new rules, the record confirms that those rules should promote consumer choice by preserving flexibility for individualized arrangements. As Verizon previously explained,²⁶ any new rules should protect broadband consumers through the same mechanisms that protect consumers in other industries—informed consumer choice, backed by generally applicable law and, if necessary, flexible legal protections to address bad actors in the event of market breakdowns. The record details the Internet's long history of addressing market failures through multi-stakeholder processes, including the Internet Engineering Task Force, the Internet Society, and the Broadband Internet Technology Advisory Group (BITAG).²⁷ These successful processes are further backstopped by generally applicable antitrust and consumer protection laws.²⁸

The existence of these protections, and the flexibility they allow for innovation, militates strongly against adopting prescriptive rules. Prescriptive rules would only harm consumers by depressing innovation and investment, preventing broadband providers from developing and deploying differentiated service offerings designed to meet their needs. As confirmed by the record, then, the Commission should not adopt prescriptive rules, but should maintain (not expand) the existing transparency requirement, while allowing flexibility for differentiated

²⁵ AT&T Comments at 80; Cisco Comments at 19.

²⁶ Verizon Comments at 16.

²⁷ *Id.* at 17. *See also, e.g.*, Rosslyn Layton Comments at 18-19; Mass. Department of Telecommunications and Cable ("Mass. DTC") Comments at 6-7.

²⁸ Verizon Comments at 17.

services and pro-consumer innovation under the no-blocking and commercial reasonableness rules, respectively.

A. The Commission Should Maintain, But Not Expand, the Existing Transparency Requirement.

The record strongly supports continued reliance on the *existing* transparency rule to protect an open Internet.²⁹ The existing transparency requirement provides consumers with the information that they need to make informed choices that will guide the broadband marketplace, while allowing providers flexibility to determine how to most effectively disclose such information in a manner that is comprehensible and useful to their customers. As Professor Michael Katz, the Commission's former Chief Economist, noted in his Declaration, "[t]ransparency regarding available service offerings and network management practices can promote competition and consumer welfare by allowing consumers to make better-informed choices."³⁰ Thus, an approach that combines appropriate disclosure—such as that required under the current rule—with provider flexibility will maximize consumer welfare, because "[w]ell-informed customers are the best judges of their own preferences."³¹ The existing rule also

²⁹ *See, e.g.*, Alcatel-Lucent Comments at 2; Charter Comments at 21-22; Mass. DTC Comments at 4-5; Tom Cochran, U.S. Conference of Mayors Comments at 2, 4; Verizon Comments at 20-23.

³⁰ Verizon Comments, Katz Decl. ¶ 20.

³¹ *Id.* ¶ 9

broadband providers' services and practices, thus discouraging practices that could harm consumers or competition.³²

Like Verizon, many commenters warn against adopting more detailed disclosure requirements because the additional information would add burdens without helping consumers to make more informed choices, and may instead result in confusion.³³ As Professor Katz explains, there is "a risk that some of the information the Commission seeks to make available may be unintelligible to most end users," and it is "unlikely that the economic benefit of providing potentially esoteric network information to end users would outweigh the economic costs to both providers and end users."³⁴ AdTran likewise points out that much of the additional information the Commission contemplates including in the transparency rule "would likely be confusing (and meaningless) to end users."³⁵ AT&T observes that "[r]equiring ISPs to disclose information about highly technical service metrics would baffle all but the most sophisticated end users, unnecessarily cluttering disclosures and making it more difficult for consumers to ascertain information about other metrics that are actually relevant to their broadband purchasing

³² The Attorneys General of Illinois and New York argue that transparency requirements have little value because consumers have few choices for Internet access and switching costs are high. *See* Comments of Lisa Madigan and Eric Schneiderman, Attorneys General of Illinois and New York at 11 ("Attorneys General of Illinois and New York Comments"). Verizon, however, faces significant competition virtually everywhere that it offers broadband services. Next-generation cable services are almost always available to Verizon's wireline broadband customers, providing robust competition to Verizon's FiOS and DSL offerings. And multiple competing wireless carriers now offer 4G LTE services. Moreover, the suggestion that customers cannot or do not switch providers when dissatisfied is contradicted by significant broadband churn figures. *See infra* at 45.

³³ See, e.g., American Cable Association (ACA) Comments at 33-34; NCTA Comments at 16, 52; Online Publishers Comments at 8-10; TechFreedom & International Center for Law & Economics ("TechFreedom & ICLE") Comments at 12-13; TIA Comments at 22-23; Time Warner Cable (TWC) Comments at 31-34.

³⁴ Verizon Comments, Katz Decl. ¶ 22.

³⁵ AdTran Comments at 42.

decisions (such as throughput speed or data plan prices)."³⁶ Other commenters express similar concerns.³⁷

There also is a significant concern that some additional disclosure requirements could cause harm by disclosing the details of providers' efforts to avert hacking, malware, and other threats. As AdTran states, "there is a risk that detailed reporting of the ISPs' network management practices could provide a roadmap to entities that seek to exploit the network for cybercrime or cyberterror."³⁸ This very real concern should give the Commission pause in imposing any more detailed disclosure requirements. Still worse, overly granular disclosure requirements of the type proposed in the *NPRM* might simply prevent broadband providers from deploying management practices that would benefit consumers—either because they would need to disclose sensitive information in order to use those approaches or because the burdens of detailed disclosure might push a provider towards a less tailored, but more easily described, approach.³⁹

Nor is there any need for separate disclosures specific to edge providers or other

entities.⁴⁰ As Comcast argues:

The current transparency rule already requires broadband providers to disclose information "sufficient for . . . content, application, service, and device providers to develop, market, and maintain Internet offerings." Beyond this, it is unclear what information these entities would need in order to make their offerings available on an open network like the Internet. Indeed, one of the principal

³⁶ AT&T Comments at 88.

³⁷ *See, e.g.*, ACA Comments at 31; Bright House Comments at 11; Cox Comments at 20; Frontier Comments at 6-7.

³⁸ AdTran Comments at 43; *see also* AT&T Comments at 80; CenturyLink Comments at 30.

³⁹ See, e.g., TechFreedom & ICLE Comments at 12-13; Verizon Comments at 23-24.

⁴⁰ See, e.g., Independent Filmmaker & Television Alliance (IFTA) Comments at 5; Microsoft Comments at 29-33; National Association of Regulatory Utility Commissioners (NARUC)Comments at 9; Public Knowledge Comments at 115-17; Vonage Comments at 23-24.

characteristics of the Internet is that any IP-based service can be delivered over it, without special tailoring.⁴¹

NCTA, likewise, points out that "it is completely impractical to require ISPs to make disclosures that are specifically tailored to the business needs of edge providers," and "ISPs have no way to anticipate the needs of millions of content providers."⁴² Further, as Bright House observes, the value of mandating entity-specific disclosures is especially questionable given that edge providers, transiting providers, and others have flourished without such a mandate.⁴³

Additional "transparency" rules would be particularly harmful if they required disclosure of information about factors outside the provider's control. As Professor Katz notes, "[t]o require broadband Internet access providers to disclose performance information unrelated to their own facilities or services is potentially misleading to consumers."⁴⁴ AT&T correctly notes that a "formal regulation requiring ... 'information regarding the source, location, timing, speed, packet loss, and duration of network congestion,' would be impossible for ISPs to comply with given the broad array of external conditions that might affect broadband speed for an end user."⁴⁵ Similarly, Charter notes that "[c]ongestion can arise on edge providers' servers, CDNs, transit provider networks, and on customers' home equipment such as their computer or WiFi router."⁴⁶ ISPs should not be required to report on issues that do not arise on their networks or are out of their control.

⁴¹ Comcast Comments at 16-17.

⁴² NCTA Comments at 52.

⁴³ *See* Bright House Comments at 14.

⁴⁴ Verizon Comments, Katz Decl. ¶ 23.

⁴⁵ AT&T Comments at 88 (internal citation omitted). *See also* Bright House Comments at 11-12.

⁴⁶ Charter Comments at 27.

B. Any New No-Blocking Rule Should Ensure No Blocking of Content on the Customer's Selected Tier of Service But Should Allow Flexibility for Additional Differentiated Services.

To the extent the Commission believes that new no-blocking rules are necessary, it should adopt a rule that prohibits providers from blocking or degrading traffic within the customer's chosen level of best efforts Internet access service based on who sent it. As a baseline, all Internet traffic, regardless of who sent it, should get the same best efforts treatment within the customer's Internet service tier. As we explained in our opening comments, this approach would mean that it would be unnecessary for any edge provider to seek out and enter into individual arrangements with broadband providers in order to reach its customers. Consistent with the approach discussed by the D.C. Circuit in *Verizon*,⁴⁷ however, edge providers, content providers, or others would retain the flexibility to negotiate optional differentiated arrangements with broadband providers if they believe they can provide a service customers may want.⁴⁸

The Commission's proposal to identify and enforce a "minimum level of service" that broadband providers must afford to all content providers would be unworkable. As Cisco states: "Establishing a minimal level of service in this way would be an extraordinarily complicated and difficult task. Broadband providers are in the business of delivering legal content to their customers and, thus, have every business incentive not to block lawful content, applications, or services, or any non-harmful devices on their networks."⁴⁹ The Ad Hoc Telecommunications Users Committee observes that "the [proposed] rule would embroil the Commission in perpetual

⁴⁷ See Verizon v. FCC, 740 F.3d 623 (D.C. Cir. 2014).

⁴⁸ *See*, *e.g.*, Comcast Comments at 18-22; Higher Education and Libraries Comments at 32-33; Verizon Comments at 17-18.

⁴⁹ Cisco Comments at 16.

disputes over the appropriate 'minimum level' based upon changing technical specifications, consumer expectations, provider interests, and market developments."⁵⁰ AdTran points out that a more specific no-blocking rule "would introduce delay and confusion into a vibrant and dynamic industry that has succeeded because, up until now, a light regulatory policy largely has been applied."⁵¹ Other commenters express similar concerns.⁵²

While some criticize the proposed no-blocking rule on the basis that it would allow for differentiated service, the Commission has recognized the benefit when providers have the flexibility to offer differentiated services that provide new choices for consumers. Such programs can allow edge providers to ensure that their customers obtain faster service or greater capacity than the customer herself has paid for at no additional cost to the customer. The record reveals examples of differentiated service programs that benefit consumers, including T-Mobile's new offering that allows consumers to stream music without it counting towards their plans' data-usage.⁵³ Opponents of such arrangements⁵⁴ fail to explain how these arrangements—which in no way affect the speed, capacity, or quality of service of other information accessed over the Internet—are anything other than beneficial to consumers.

⁵⁰ Ad Hoc Telecommunications Users Committee ("Ad Hoc") Comments at 15. To be sure, Verizon disagrees with the view, expressed by Ad Hoc and others, that the Commission should reclassify broadband Internet access as including a "telecommunications service" component in lieu of adopting the NPRM's proposed approach to blocking. *See infra* Part V.

⁵¹ AdTran Comments at 23.

⁵² See, e.g., AT&T Comments at 73; CenturyLink Comments at 32; Comcast Comments at 18-22; NCTA Comments at 57-60; National Public Radio Comments at 9; Sandvine Comments at 8.

⁵³ Verizon Comments at 18.

⁵⁴ *See, e.g.*, Attorneys General of Illinois and New York Comments at 9; IFTA Comments at 4; Public Knowledge Comments at 36; U.S. Senator Ron Wyden Comments at 5.

C. Any New Commercial Reasonableness Standard Should Allow Flexibility for Pro-Consumer Innovation While Enabling the Commission to Address Specific Harmful Practices on an Appropriate Record.

To the extent that the Commission believes any additional rules beyond an appropriate no-blocking mandate are necessary, then providing the option to broadband providers and content providers to enter into additional, alternative arrangements on commercially reasonable terms would be a balanced approach. As Verizon previously explained,⁵⁵ that approach would allow appropriate flexibility for individualized arrangements that promote innovation and consumer choice, while preserving the Commission's ability to address specific practices that harm consumers or competition if ever they should arise. Although some commenters raise concerns about the workability of such an approach, the record confirms that the Commission can address those concerns by creating safe harbors and rebuttable presumptions for beneficial, commercially reasonable practices. There is general agreement, moreover, that the Commission could use rebuttable presumptions to address any harmful practices, too, so long as it also allows sufficient flexibility for broadband providers to develop other differentiated arrangements. But because negative presumptions of unreasonableness tilt against allowing providers to offer consumers differentiated choices, they should be used sparingly and only upon a finding that a specific practice harms competition or consumers. As needed and on a more surgical basis, then, the Commission could address particular conduct that it finds to be harmful to consumers or competition-such as anticompetitive or otherwise harmful forms of paid prioritizationconsistent with the D.C. Circuit's discussion of the Commission's authority under Section 706, without taking the unwise and unlawful step of reclassification.

⁵⁵ Verizon Comments at 29-38.

The record shows that the proposed commercial reasonableness standard would leave room for flexibility to engage in individualized arrangements that can benefit consumers.⁵⁶ For example, individualized arrangements benefit "new, small-entrant content, application, or service providers" by enabling them to compete against large, established edge providers);⁵⁷ and they benefit consumers through differentiated delivery and pricing arrangements.⁵⁸

Some commenters nevertheless worry that a commercial reasonableness standard could produce uncertainty if the factors relied on by the Commission are too broad or vague.⁵⁹ The Commission could address these concerns by adopting safe harbors and rebuttable presumptions.⁶⁰ Safe harbors and presumptions would be especially appropriate in areas where the likely effects of a practice on consumers and competition are clear. Some commenters thus

⁵⁶ See Free Press Comments at 136 (the proposed rule allows "substantial flexibility for individual deals with different edge providers."); Comcast Comments at 23-24 (a commercial reasonableness standard must "leave sufficient room for individualized negotiation between broadband providers and edge providers") (quotation marks and footnote omitted); Mozilla Comments at 17 (proposed rule "is certainly more flexible" than the 2010 *Open Internet Order*).

⁵⁷ Communications Workers of America and NAACP ("CWA/NAACP") Comments at 16-17.

⁵⁸ See Cisco Comments at 8-9. See also, e.g., Richard Bennett, American Enterprise Institute Comments at 3-8 (fast lanes are more common and more beneficial than opponents realize); CEA Comments at 11(prioritization aids delivery of health-related applications and services that require low-latency); National Minority Organizations Comments at 14 (prioritization could benefit minority entrepreneurs); Sandvine Comments at 2-8 (the commercial reasonableness standard would encompass a range of innovative arrangements that have facilitated broadband adoption and Internet access across the globe); Telefonica Comments at 4-5 (prioritization aids efficiency and competition).

⁵⁹ See Free Press Comments at 141-42; Netflix Comments at 7-8; New America Foundation and Benton Foundation ("New America") Comments at 20-21. In addition, some commenters assert that the proposed case-bycase resolution of complaints would be too cumbersome and time-consuming for edge providers, especially new entrants, and would therefore favor established broadband providers. *See, e.g.*, Netflix Comments at 9; Public Knowledge Comments at 22-23. But the Commission successfully enforces all sorts of rules on a case-by-case basis; in the data roaming context, for example, there has been no problem with enforcement. Fundamentally, this concerns boils down to an issue of business size, which is an endemic feature of markets and affects *most* business practices.

⁶⁰ See New America Comments at 20.

agree with Verizon that there should be, for example, a safe harbor for non-exclusive arrangements with unaffiliated third parties.⁶¹

The record further confirms that a safe harbor would be appropriate for differentiated pricing arrangements—such as usage-based pricing models or sponsored data programs that give edge providers the *option* of paying for usage charges associated with their traffic rather than the consumer paying—that do not involve the differential delivery or handling of traffic. In this respect, the Commission should *reject* Public Knowledge's call for a prescriptive ban on usage-based pricing.⁶² Public Knowledge asserts that usage-based billing could enable broadband providers to create metered and unmetered lanes, supposedly no different than the fast and slow lanes feared with paid prioritization.⁶³ But there is a fundamental distinction between practices that affect last-mile delivery of traffic and those that merely re-allocate the charges for that delivery.⁶⁴ Usage-based pricing thus has become common in the competitive wireless marketplace without raising any concerns of metered and unmetered lanes.⁶⁵ What Public Knowledge actually wants, then, is for broadband providers and their entire customer base to

⁶¹ See CenturyLink Comments at 34; CEA Comments at 11; Verizon Comments at 33.

⁶² See Public Knowledge Comments at 48-60.

⁶³ See id. at 49-50.

⁶⁴ See Sandvine Comments at 1; John Eggerton, *NCTA's Powell: Usage-Based pricing About Fairness, Not Capacity*, Broadcasting & Cable (Jan. 17, 2013), <u>http://www.broadcastingcable.com/news/washington/nctas-powell-usage-based-pricing-about-fairness-not-capacity/61022</u>. Sandvine also shows how concerns that usage-based pricing could supposedly create a structural barrier preventing smaller Internet players from becoming big are unfounded. Sandvine Comments at 7.

⁶⁵ See Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Sixteenth Report, 28 FCC Rcd 3700, ¶ 137 (2013) ("Mobile Competition Report").

shoulder all the costs of ever-increasing usage instead of the heavy users (or edge providers) driving those costs.⁶⁶

The record makes clear, contrary to Public Knowledge's characterization, that usagebased pricing is one way to efficiently allocate costs and is, for that reason, a well-established practice in a variety of industries.⁶⁷ In the broadband marketplace, commenters noted, usagebased pricing has helped promote competition by creating new and different promotions that change how consumers have used broadband service.⁶⁸ Usage-based pricing also provides a way for consumers who are not heavy users to keep their costs down.⁶⁹ Usage-based pricing also promotes broadband adoption in this way by enabling customers to pay for only the services they wish to use, without having to subsidize higher-end users.⁷⁰ The Commission therefore should reject Public Knowledge's proposal and instead create a safe-harbor for usage-based pricing arrangements.

Commenters also correctly observe that the Commission could provide greater certainty, while maintaining appropriate flexibility, by deeming certain commercial practices presumptively reasonable. Indeed, the use of such positive presumptions of reasonableness

⁶⁶ Public Knowledge thus casts AT&T's offer of sponsored data as a "tax" on consumers and edge providers, but fails to explain why broadband providers and their customers alone should shoulder those costs. *See* Public Knowledge Comments at 54. Indeed, CenturyLink helpfully elucidates how edge providers have never covered their full share of network costs, and how even optional two-way pricing could optimally reallocate those costs among broadband providers, edge providers, and consumers. *See* CenturyLink Comments at 4-6, 16.

 $^{^{67}}$ See, e.g., Alcatel-Lucent Comments at 23-24 (third-party payment arrangements benefit lower-income consumers and new entrants); Sandvine Comments at 6-7 (discussing used of sponsored data in global telematics and car manufacturers); Verizon Comments, Katz Decl. ¶ 54 (discussing use of two-sided pricing arrangements by e-reader and automobile manufacturers).

 $^{^{68}}$ Id. ¶ 60 (discussing T-Mobile's recent exemption of certain music services from counting towards its subscribers' data amounts); see Sandvine Comments at 7.

⁶⁹ See Alcatel-Lucent Comments at 23-24; Verizon Comments, Katz Decl. ¶¶ 57-61.

⁷⁰ See CWA/NAACP Comments at 17; Alcatel-Lucent Comments at 23; National Minority Organizations Comments at 9; USTelecom Comments at 21; Verizon Comments at 34. Public Knowledge ironically criticizes Comcast's Xfinity video offering as giving consumers a *choice* in how they watch video content without explaining how providing more choices inherently harms customers. *See* Public Knowledge Comments at 52-53.

would promote flexibility and innovation. For example, Alcatel-Lucent discusses how *userdriven* enhancements—such as those that allow consumers to select enhancements to guarantee low levels of delay for particular traffic, or temporarily boost bandwidth or security—should be presumptively reasonable because they primarily benefit consumers and competition.⁷¹ In particular, user-driven differentiation can help consumers tailor their access and use of specific Internet services—whether telehealth, educational, or commercial services—to fit their own needs and interests.⁷² And as Verizon previously explained,⁷³ a presumption of commercial reasonableness would be appropriate for practices undertaken in a competitive marketplace or previously determined by the Commission to be commercially reasonable. For example, in areas where multiple providers offer higher-speed broadband services, there is diminished likelihood of unreasonable practices harming consumers or competition.

The record reveals widespread agreement that the Commission also could use rebuttable presumptions to provide guidance on specific practices that are demonstrated to be harmful to consumers or competition. Unlike the above-discussed positive presumptions, which encourage beneficial behavior, a presumption that a practice is commercially unreasonable could *chill* potentially beneficial behavior and thus would come at a significant cost to consumers.⁷⁴ To avoid such costs to consumers, the Commission should use this kind of negative presumption only sparingly. In addition, as Verizon has explained,⁷⁵ the Commission should use negative presumptions only where there is demonstrated and clear harm to consumers or competition.

⁷¹ *See* Alcatel-Lucent Comments at 21-22.

⁷² AT&T Comments at 28-29.

⁷³ Verizon Comments at 35.

⁷⁴ As the D.C. Circuit has made clear, any commercial reasonableness standard should allow "considerable flexibility for providers to respond to the competitive forces at play in the mobile-data market." *Cellco P'ship v. FCC*, 700 F.3d 534, 548 (D.C. Cir. 2012); *see Verizon*, 740 F.3d at 657.

⁷⁵ Verizon Comments at 36-38.

Many commenters focus on paid prioritization in this regard, suggesting that some forms of paid prioritization pose a risk to the continued development of the Internet. If harmful or anticompetitive forms of that practice were to emerge, there is widespread agreement—including among broadband providers—that Section 706 provides sufficient authority to address paid prioritization without any need to "reclassify" broadband service under Title II.⁷⁶

IV. THE RECORD CONFIRMS THAT MOBILE WIRELESS BROADBAND WARRANTS A PARTICULARLY LIGHT-TOUCH REGULATORY APPROACH.

The record also reflects widespread agreement that an especially light regulatory touch is warranted for the unique circumstances of mobile wireless broadband.⁷⁷ By preserving the 2010 rules' flexibility with respect to mobile services, the Commission can allow these offerings to continue to grow, develop, and become more effective competitors to faster wireline broadband services, such as those provided over cable. Mobile wireless providers need flexibility to experiment with new and innovative solutions for managing the unique technical and operational constraints of mobile wireless networks and ensuring a high-quality consumer experience. Although some regulatory proponents disagree, they fail to appreciate the significant differences between fixed and wireless broadband.

In the mobile broadband marketplace, robust competition and customer choice have promoted and protected consumer interests and obviated any need for overly prescriptive

⁷⁷ See, e.g., Akamai Technologies Comments at 11-12; Alcatel-Lucent at 25; AT&T at 19; Cisco Comments at 21-22; Competitive Carrier Association (CCA) Comments at 1-2, 3-7, 7-9; CEA Comments at10; CTIA Comments at 14-37; Ericsson Comments at 8-10; GSM Association (GSMA) Comments at 2-8; Information

Technology Industry Council Comments at 8-9; Information Technology & Innovation Foundation Comments at 20-21; Mobile Future Comments at 2, 9-11; Nokia Comments at 3, 13-14; Qualcomm Comments at 2;

⁷⁶ See, e.g., AT&T Comments at 32-33; Cogent Comments at 4; Comcast Comments at 23-24; New America Comments at 21; Georgetown Center for Business and Public Policy ("Professor Mayo") Comments at 4; USTelecom Comments at 44.

Telecommunications Industry Association (TIA) Comments at 3, 14-15, 20, 27-28; *see also* TechFreedom & ICLE Comments at 57-58; T-Mobile Comments at 11-16; Verizon Comments at 39-45.

openness mandates. As the record indicates, mobile wireless providers face stiff competition from *at least* two other providers in the delivery of service to 92 percent of American consumers, and providers almost always must contend with at least one other provider of mobile wireless services.⁷⁸ Indeed, nearly 90 percent of Americans can choose from at least four wireless broadband carriers. Mobile broadband providers therefore must compete vigorously to attract and retain customers with robust mobile wireless broadband services that provide access to the content, applications, and services that consumers demand.

Competition has led mobile wireless broadband providers to embrace openness, even absent prescriptive regulation. As AT&T notes, for most of the Internet's existence, openness has been achieved without *any* regulatory intervention at all.⁷⁹ Verizon and other mobile wireless broadband providers have repeatedly reaffirmed our commitment to Internet openness, even without legally enforceable requirements.⁸⁰ As Verizon has discussed at length, this commitment makes sense. Mobile providers have a strong interest in expanding the use of their networks to maximize the return on their investment,⁸¹ and customers will purchase network services only when the network provides access to the content they desire. Moreover, competition provides a strong incentive for mobile broadband providers to behave reasonably,

http://www.verizon.com/about/sites/default/files/Verizon_Broadband_Commitment.pdf ; Randal Milch, *Verizon Reiterates Its Commitment to the Open Internet*, Verizon Public Policy Blog (Jan. 14, 2014), http://publicpolicy.verizon.com/blog/entry/verizon-reiterates-its-commitment-to-the-open-internet; CTIA Comments at 11-13 (noting the wireless industry's and individual carriers' commitments to open networks).

⁸¹ AT&T Comments at 21, 24; T-Mobile Comments at 12.

⁷⁸ Verizon Comments, Lerner Decl. ¶ 27 (nearly 90 percent of the U.S. population has access to four or more wireless broadband carriers); CTIA Comments at 6 (82 percent of U.S. consumers have access to four or more mobile broadband providers, nearly 92 percent have access to three or more providers, and nearly 98 percent have access to two or more providers); *see also* Cisco Comments at 4; Mobile Future Comments at 2-3; CEA Comments at 7-8; AT&T Comments at 22.

⁷⁹ AT&T Comments at 11.

⁸⁰ See, e.g., Verizon, Verizon's Commitment to Our Internet Access Customers: Our Customers Get Everything the Open Internet Has to Offer,

and they have done so, even though the Commission has never applied a comprehensive noblocking rule or a non-discrimination rule to mobile broadband services.

Moreover, competition among wireless broadband providers takes place in an ecosystem that includes various interrelated products and services, including wireless devices, operating systems, applications, and other services.⁸² These offerings sometimes complement mobile broadband, and sometimes act as substitutes for functions also provided by mobile broadband. For example, Apple iPhones and iPads come with the iMessage application pre-installed. Although provided on devices that complement providers' connectivity, iMessage competes directly with providers' own text and media messaging services, allowing users to exchange such messages with users of other Apple devices while bypassing providers' own messaging services. The same is true of "BBM," which comes preinstalled on BlackBerry devices. Given these dynamics, and the great multiplicity of mobile wireless offerings available to consumers,⁸³ mobile wireless providers compete with one another not only in terms of the services they provide, but also by offering consumers access to popular mobile devices, operating systems, applications, and content.⁸⁴ At the same time, they compete *against* the providers of devices, operating systems, applications, and other offerings. Providers that fail to deliver the content, applications, and services that consumers demand risk losing business, because consumers can

⁸² Verizon Comments, Lerner Decl. ¶ 29.

⁸³ See Verizon Comments at 41.

⁸⁴ Verizon Comments, Lerner Decl. ¶ 28.

switch to another provider if they are unhappy with their service.⁸⁵ In this manner, competition incentivizes providers to adopt network management practices and business models that promote consumer welfare.⁸⁶

Customer choice and competition also have ensured a differentiated marketplace in which providers routinely develop innovative offerings designed to outcompete competitors' offerings. For example, Syntonic Wireless, a Seattle-based start-up, recently launched On-Ramp Education Services. On-Ramp provides Internet access limited to school district-approved online content to students—many of whom lack broadband at home—using Google Chromebook computers with 4G mobile functionality.⁸⁷ T-Mobile recently introduced its Music Freedom plan, which exempts streaming music services from subscribers' monthly data allowances, and includes mechanisms for any lawful new services to be covered by the offering.⁸⁸ AT&T, for its part, introduced the Sponsored Data program, which permits consumers to access specific content without having that associated usage count against their monthly data allowance. These

⁸⁵ Despite claims to the contrary, *see* Consumers Union Comments at 13-14; Microsoft Comments at 23-24, consumers can and do switch wireless carriers readily, and carriers have taken a number of steps to ease the switching process, including by prorating ETFs and paying off ETFs of users that switch to their services. Verizon Comments, Lerner Decl. ¶ 28, 33. For instance, in April 2014 Sprint launched an initiative where it would pay up to \$350 in early termination fees and \$300 for an old phone if a subscriber switched to Sprint and enrolled in a "Framily" plan. *Id.* at 28 (citing Bank of America Merrill Lynch, "1Q14: Preview & Model Book – Everybody's Doing It," April 14, 2014 at 5). Moreover, there has been significant switching by wireless consumers, with average wireless subscriber monthly churn rates between 2.0 percent and 2.5 percent since at least 2005. This indicates that approximately 25 percent of customers churn in a year. *Id. ¶* 33.

⁸⁶ Verizon Comments, Katz Decl. ¶ 35.

⁸⁷ See Syntonic Reply Comments at 11 ("Syntonic On-Ramp Education ServicesTM was launched in September, 2014 with the Highline School District in Washington State to bring improved connectivity to schools and to the community they serve. There are numerous school districts nationwide that lack quality Internet access, and even in broadband-equipped schools, many students lack affordable Internet access at home. Syntonic's On-Ramp services can help bridge this gap. A participating school district can distribute digital mobile devices to students that are dedicated exclusively to educational purposes. The school district can limit student access to curriculum-approved applications and content, which provides a cost-efficient alternative to traditional broadband access and allows the district to avoid the costs and security risks of unauthorized personal use of school-provided devices.").

⁸⁸ *See* http://www.t-mobile.com/offer/free-music-streaming.html.

offerings expand the options available to consumers, and reflect the types of differentiated services that have been at the core of America's mobile broadband success. A regime providing flexibility to test the appeal of such offerings in the competitive marketplace does not undercut Internet openness.

Flexibility is particularly critical given the rapid innovation in the mobile broadband sector. Some commenters work to undercut the *Open Internet Order*'s approach by arguing that mobile broadband service has "matured" in the years since 2010.⁸⁹ Notably, these claims are advanced most vociferously by fixed broadband providers with no mobile offerings or affiliates—i.e., those parties most interested in frustrating competition from mobile offerings and preventing those offerings from developing into more effective competitors to higher speed wireline broadband services, such as cable.⁹⁰

But while mobile services have indeed advanced dramatically during that period, the record confirms that they continue to develop and evolve at a breakneck pace. As CTIA and others point out,⁹¹ mobile wireless providers have produced generation after generation of cutting-edge services, and these services will keep evolving rapidly as providers continue to develop and deploy technologies that build upon the nascent foundation of high-speed mobile service.

⁸⁹ See, e.g., Vonage Comments at 30 ("The capabilities of wireless broadband networks have greatly increased and matured since 2010."); Media Alliance Comments at 6 ("The mobile market has not only matured, but has consolidated with only a handful of major providers. It is no longer appropriate to give dispensations to the mobile industry due to its young age or its overly competitive marketplace.").

⁹⁰ See, e.g., Bright House Comments at 5; CenturyLink Comments at 24; Comcast Comments at 40-41; Cox Comments at 9-10; Frontier Comments at 9; ITTA Comments at 4; NCTA Comments at 71-73; TWC Comments at 27-28.

⁹¹ CTIA Comments at 7, 25 (identifying high-definition voice, Voice over LTE (VoLTE), LTE Advanced, and LTE broadcast as some of the new services and technologies currently being developed and deployed by mobile providers); *see also* Mobile Future Comments at 3, 11-12; Cisco Comments at 21; T-Mobile Comments at 5; CEA Comments at 5; TIA Comments at 27.

Indeed, claims as to mobile wireless broadband's maturity run directly contrary to findings by the Commission's own expert Open Internet Advisory Committee. In a report released just last year, the Committee described the mobile broadband ecosystem as "complex and dynamic, with a variety of players affecting the user experience and the incentives for further innovation and investment."⁹² According to the report, the dynamism of the mobile broadband market "suggests that the future of user choice and experience delivery will continue to grow and expand, with increasing value delivered by the expanded ecosystem."⁹³

Similarly, Andrew Lippman of MIT's Media Lab states that mobile broadband service "is far more open to innovation than wired access" and "proportionately less mature."⁹⁴ Flexibility is needed to preserve this dynamic so that mobile wireless broadband can reach its full potential and become a more competitive alternative to fixed broadband offerings for more consumers.⁹⁵ The approach to mobile service embodied by the 2010 rules would promote such flexibility and thus enhance competition in the broadband marketplace. More restrictive requirements for mobile wireless broadband, in contrast, would limit flexibility and potentially discourage investments needed for mobile wireless services to provide an effective competitive alternative to wired broadband services.⁹⁶

In addition to rapid change, the unique features of the mobile environment—such as sharing of limited spectrum and the challenges of mobility itself—warrant different regulatory

⁹² FCC OPEN INTERNET ADVISORY COMMITTEE, 2013 ANNUAL REPORT 64 (2013), *available at* <u>http://transition.fcc.gov/cgb/oiac/oiac-2013-annual-report.pdf ("OIAC 2013 Report")</u>.

⁹³ Id.

⁹⁴ Andrew Lippman, MIT Media Lab ("MIT") Comments at 12.

⁹⁵ See Akamai Comments at 11-12; CCA Comments at 3-7; Qualcomm Comments at 10; T-Mobile Comments at 5-7.

⁹⁶ Verizon, Katz Decl. ¶ 39.

treatment. The Commission's efforts to make more spectrum available for wireless broadband services is helpful.⁹⁷ But despite these efforts, commenters agree that still more spectrum is needed for wireless broadband services and that this finite resource is becoming increasingly scarce as end users' consumption of mobile data continues to grow exponentially.⁹⁸ Mobility itself adds further challenges and complexity to the provision of mobile wireless services, requiring the use of complex and dynamic spectrum management techniques as the number and mix of users served by a cell site changes in sometimes highly unpredictable ways. Although mobile wireless providers can and do innovate to maximize the traffic that can be transmitted using available spectrum resources, it is crucial that they retain the flexibility needed to continue managing their networks efficiently.⁹⁹

Arguments favoring expansive rules for mobile broadband are unpersuasive. Several commenters contend that mobile service's increasing ubiquity warrants more restrictive open Internet rules, raising concern that a "light-touch" approach to mobile wireless broadband would create "two Internets" and relegate mobile broadband users to second-class status.¹⁰⁰ This claim misunderstands the rationale for subjecting mobile broadband to more flexible rules than fixed

⁹⁷ See, e.g., Senator Al Franken Comments at 4; CTIA Comments at 16.

⁹⁸ *See, e.g.*, CTIA Comments at 14-16; T-Mobile Comments at 6; Mobile Future Comments at 9-10; CCA Comments at 3-6; AT&T Comments at 23-24; Verizon Comments at 42.

⁹⁹ See, e.g., Akamai Comments at 11-12; Alcatel-Lucent Comments at 25; AT&T Comments at 23-24; Cisco Comments at 21-22; CCA Comments at 1-2; CEA Comments at 10; CTIA Comments at 14-21; Ericsson Comments at 8-10; GSMA Comments at 4; Public Knowledge et al. Comments at 30; Qualcomm Comments at 2, 8; TIA Comments at 3, 14-15, 20, 27; T-Mobile Comments at 5-7, 11-16; Verizon Comments at 41-42.

¹⁰⁰ See, e.g., Bright House Networks Comments at 5; Voices for Internet Freedom et al. Comments at 22. See also MIT Comments at 13 ("[I]n short order wireless access will be a social requirement, just as wired broadband is today. We cannot, as a society, allow the regulation of information flow in that environment to be left solely to corporate interest and concerns."); ITTA Comments at 5 ("There is one Internet, and it should remain open for consumers and innovators alike, regardless of whether it may be accessed through different technologies and services."); Microsoft Comments at 19 ("If the Commission wants to preserve an open Internet—now and into the future—there is no question that mobile broadband access services must be subject to the same legal framework as fixed broadband access services."); Public Knowledge Comments at 27 ("The Commission's proposal to exempt wireless from discrimination and impose lowered nonblocking standards will result in a two-tiered internet. Such an exemption would relegate wireless to a second-class service.").

broadband, and fails to recognize that disparate rules are meant to *protect* the interests of mobile users. First, as Verizon and others have explained, a different approach to wireless services is needed precisely so that mobile providers can manage their far more limited network resources to provide end users an experience more comparable to the fixed broadband experience than would otherwise be possible. If anything, the greatest risk of creating "two Internets" stems from applying uniform rules to mobile and fixed platforms, when these platforms present quite different technical and operational characteristics. Rules that might not unduly impede fixed services could badly disrupt mobile offerings, discouraging innovation and experimentation with traffic management solutions that can optimize network performance and make more efficient use of available spectrum resources.¹⁰¹

Second, the fact that many people are relying on mobile broadband does not ameliorate, but rather exacerbates, the technical hurdles faced by mobile broadband service.¹⁰² Because the limited availability of spectrum is a particular challenge for wireless broadband, the success of the mobile broadband ecosystem hinges on industry investment and innovation to develop the technological solutions needed to satisfy consumers' ever-increasing appetite for mobile data.¹⁰³ Observers expect mobile data traffic to grow *eightfold* between 2013 and 2018 in the U.S. and

¹⁰¹ See Verizon Comments, Katz. Decl. ¶ 37-40. Applying identical rules to fixed and mobile services thus could especially disadvantage those who rely on mobile broadband exclusively. *See, e.g.*, ColorofChange.org Comments at 11 ("We further urge the Commission to extend these rules to wireless networks since it may be the only way for low-income, immigrant, and minority communities to fully realize the potential of the Internet.").

¹⁰² CCA Comments at 3-7; T-Mobile Comments at 5-7; *see also* TIA Comments at 27. This is true even considering consumers' greater use of Wi-Fi networks. As CCA explains, despite some increased use of Wi-Fi by mobile subscribers, wireless Internet access remains primarily a mobile service. CCA Comments at 6. Less than a third of mobile data traffic may be carried over Wi-Fi networks, even in areas with dense Wi-Fi deployments, such as college campuses. *See* OAIC 2013 Report at 61. At present, Wi-Fi networks are not ubiquitous and are not yet capable of handing off data sessions seamlessly. Thus, Wi-Fi cannot truly replicate a mobile wireless experience. CCA Comments at 6.

¹⁰³ See Verizon Comments, Lerner Decl. \P 47. As Verizon and others have noted, mobile data traffic reportedly will grow *eightfold* between 2013 and 2018 in the U.S. and Canada.

Canada, and predict that the evolving "Internet of Things" will drive even further growth in mobile data consumption.¹⁰⁴ As AT&T explains, "[c]onsumers' near-insatiable demand for mobile broadband Internet access services, coupled with the exploding number of applications and services used over mobile broadband networks, . . . present the same serious 'operational constraints' that the Commission concluded justified distinct mobile rules in 2010."¹⁰⁵ These challenges are likely to increase, and mobile wireless providers must retain flexibility to reasonably manage them by developing and deploying new technology, experimenting with new business models, and/or acquiring additional spectrum as it becomes available.¹⁰⁶

Third, the continued growth of mobile Internet services in an open manner belies any suggestion that new rules are needed to ensure mobile openness. Because the mobile broadband market is intensely competitive, mobile wireless providers have a strong incentive to employ network management practices and business models that promote consumer welfare—and to avoid practices that will prompt customers to change providers. Thus, even in the absence of prescriptive open Internet rules, consumers will continue to have access to the lawful content, applications, and services of their choice while on mobile networks, as they do today. Given the high level of innovation and investment in mobile networks, and the strong competitive incentives to preserve openness, regulatory intervention poses substantial risks to competition

¹⁰⁴ By 2020, the number of connected devices is expected to grow nearly 30-fold to 26 billion units globally, a figure more than three times the number of smartphones, tablets, and PCs. *See Gartner Says the Internet of Things Installed Base Will Grow to 26 Billion Units By 2020* (Dec. 12, 2013), http://www.gartner.com/newsroom/id/2636073.

¹⁰⁵ AT&T Comments at 24.

¹⁰⁶ *Preserving the Open Internet*, Notice of Proposed Rulemaking, 24 FCC Rcd 13064, ¶ 172 (2009) ("Bandwidth-intensive Internet services already create challenges for wireless networks, and these challenges are likely to increase, although the effects may be ameliorated by new technology, investment, innovation in business models, and/or additional spectrum.").

and consumer welfare that clearly outweigh any potential benefits, particularly in the mobile environment.

Finally, numerous commenters suggest that the Commission should apply more expansive requirements to mobile broadband than the previous rules, but promise to account somehow for the platform's unique characteristics by considering those characteristics in assessing whether a practice is "reasonable."¹⁰⁷ This approach, however, would chill investment and innovation and promote gamesmanship by potential complainants.¹⁰⁸ In the fast-paced mobile broadband sector, providers must constantly adapt to new consumer demands and offer products that satisfy those demands while maintaining sufficient network resources for all users. In this context, any Commission rules or interpretations concerning the reasonableness of particular network management practices would likely, at best, only make sense at one snapshot in time, but could later tie the hands of operators and make it more challenging to meet consumers' needs as circumstances continue to evolve. Indeed, a regime that subjected each and every decision to post-hoc "reasonableness" review would stymie this adaptive process, raising the risk that critics would challenge any new development, no matter how customer-friendly. And the record shows that some would, indeed, challenge such customer-friendly practices— Public Knowledge, for example, criticizes both T-Mobile's Music Freedom and AT&T's Sponsored Data, even though (as described above) both reduce costs and expand choice for the end user.¹⁰⁹ Thus deprived of any certainty, a mobile broadband provider would be forced to weigh the risk that every new offering or practice, no matter the benefits to the experience of

¹⁰⁷ See, e.g., Center for Democracy & Technology (CDT) Comments at 28; Cox Comments at 10-11; ITTA Comments at 3-4; Microsoft Comments at 27.

¹⁰⁸ See CTIA Comments at 34; T-Mobile Comments at 14; Verizon Comments at 45.

¹⁰⁹ Public Knowledge Comments at 21, 25-26.
most consumers, might be challenged and potentially deemed "unreasonable." In many cases, a provider simply might choose not to move forward with a new practice at all. Indeed, this would be true even if the provider could be confident that decision-makers would always permit customer-friendly practices, because the process of defending each and every challenged practice would itself impose substantial costs.

In Syntonic's words, "The goal of the Open Internet proceeding should be to protect consumers by promoting innovation," but the "sweeping prophylactic policies" advocated by some "would *reduce* the ability to innovate in the broadband market."¹¹⁰ A marketplace in which innovative offerings could not be put before customers and left to succeed or fail on their merits would destroy the constant and pervasive differentiation that drives the mobile wireless industry's competitiveness and that has vastly expanded customer welfare since the dawn of the wireless era. It would, in short, substitute the monochromatic vision of a small handful of advocates for the full-color, diverse and dynamically changing demands of actual consumers.

V. THE RECORD CONFIRMS THAT RECLASSIFICATION OF BROADBAND INTERNET ACCESS SERVICE—IN WHOLE OR IN PART—WOULD BE DANGEROUS AND UNLAWFUL.

Many regulatory proponents suggest that reclassification would be the "safest" route for adopting new open Internet rules. But as Verizon previously explained,¹¹¹ reclassifying broadband as a "telecommunications service," in whole or in part, would be a radical, risky reversal of successful policy and would face insurmountable legal hurdles. Contrary to the casual assumption of reclassification proponents, coupling reclassification with forbearance from the vast majority of Title II's provisions would not cure these significant policy and legal concerns. Indeed, reclassification proponents overlook several critical issues: the problematic

¹¹⁰ Syntonic Reply Comments at 1-2 (emphasis added).

¹¹¹ Verizon Comments at 46-69.

effects that this heavy-handed regulatory approach plainly would have on broadband investment; the contemporary, factual reality of broadband service that precludes its reclassification as a telecommunications service; the serious legal problems with reclassification; and the tremendous regulatory uncertainty that extensive forbearance would engender. And as the record makes clear, none of these problems would disappear if the Commission pursued the proposed "fallback options" to reclassification.

A. Reclassification Would Be a Dangerous Reversal of Successful Policy.

The record confirms that Title II regulation would place at risk today's high level of investment and innovation in broadband services. Over the last three years, broadband providers have invested more than \$193 billion in capital and created more than 270,000 new jobs, including jobs for minorities at rates comparable to, or better than, the national average.¹¹² And the Progressive Policy Institute recently confirmed that the broadband industry leads the way among its list of "U.S. investment heroes," with AT&T and Verizon in the top two slots for the third straight year, with combined investments for these two providers of more than \$35 billion last year and well over \$100 billion over three years.¹¹³ The potential for heavy-handed regulation by the Commission would threaten to undo this resounding success. In particular, it would harm small businesses and entrepreneurs by stifling innovation, removing incentives for investment, and creating uncertainty as to which elements of Title II would apply.¹¹⁴ The resultant "diminished infrastructure investments and a weakened climate for innovation" would,

¹¹² CWA/NAACP Comments at 8-9, 12.

¹¹³ U.S. Investment Heroes, at 3-5.

¹¹⁴ See SBE Council Comments at 4-5; see also ACA Comments at 62 (Title II regulation will have immediate and significant adverse economic impact on small broadband Internet providers).

in turn, disproportionately burden minority and low income communities.¹¹⁵ And that would be only the beginning: the destabilizing effect of regulatory uncertainty could extend to virtually all players in the Internet ecosystem.¹¹⁶ In short, reclassification "would throw a cloud of uncertainty over the Internet that could throttle investment throughout the Internet ecosystem."¹¹⁷

Reclassification proponents try to downplay just how dangerous Title II regulation could be by trying to correlate regulatory regimes with isolated periods of investment in broadband infrastructure.¹¹⁸ But to gauge the *long-term* effects of a public-utility approach to broadband, the Commission need only consider the investment-deterring consequences of the "more heavyhanded regulatory approach" in Europe.¹¹⁹ A study earlier this year by Professor Christopher Yoo of the University of Pennsylvania Law School confirmed that the divergent regulatory approaches between the US and EU explain why the US considerably outpaces the EU in download speeds, price, investment, and fiber and LTE deployment.¹²⁰ A far greater percentage

¹¹⁵ See National Minority Organizations Comments at 9-10.

Akamai thus predicts that reclassification could "lead to litigation uncertainty and force industry into regulatory limbo." Akamai Comments at 10. Many commenters recognize the perilously slippery slope that reclassification would create. *See, e.g.*, CTIA Comments at 50; GSMA Comments at 14; Larry Downes Comments at 4; ICLE & TechFreedom Comments at 31.

¹¹⁷ AT&T Comments at 63. Numerous other commenters warn of the regulatory uncertainty that reclassification could cause. *See, e.g.*, Akamai Comments at 10 ("[A]n unnecessarily regulatory framework could discourage continued investment in broadband infrastructure."); CTIA Comments at 48 ("Application of [Title II] requirements to mobile broadband would have drastic consequences for innovation and investment."); GSMA Comments at 10 ("investment in broadband networks would suffer under Title II regulation."); Professor Mayo Comments at 4 ("[Title II regulation] would create the profound risk of stifling the rich innovation that has become the hallmark of the high-tech sector.").

¹¹⁸ See, e.g., Free Press Comments at 90-125; Qualcomm Comments at 5.

¹¹⁹ GSMA Comments at 10.

¹²⁰ Christopher S. Yoo, *U.S. vs. European Broadband Deployment: What Do the Data Say?* 11-12 (June 2014), https://www.law.upenn.edu/live/files/3352-us-vs-european-broadband-deployment; *see also* Martin H. Thelle & Dr. Bruno Basalisco, Copenhagen Economics, Europe Can Catch Up with the US: A Contrast of Two Contrary Broadband Models 3-4 (June 2013),

http://www.copenhangenconomics.com/Website?news.aspx?PID=3058&M=NewsV2&Action=1&NewsId=708 (concluding that the lighter regulatory touch in the US partly explains why "the US generally comes out better in terms of broadband supply, quality, and price.").

of U.S. households thus have access to Next Generation Networks (25 Mbps)—82 percent in the US vs. 54 percent in the EU—with twice as high a rate of fiber deployment (23percent vs. 12 percent) and three times the rate of 4G LTE deployment (86 percent vs. 27 percent).¹²¹ On a per household basis, US broadband providers have invested more than double what European broadband providers have invested (\$562 vs. \$244 per household).¹²² This has led to ever increasing consumer demands on US network resources, including a more than 50% increase in broadband usage annually, with Internet video consumption expected to grow 12 times over the next 8 years, from 90 Exabytes to 1.1 *Zettabytes*.¹²³ Reclassification would threaten to slow or even reverse each of these long-term trends.

Reclassification proponents also overlook how regulators around the globe are likely to follow the Commission's lead and make "similar moves towards greater regulation, ultimately leading to negative consequences on investment and innovation across the value chain."¹²⁴ Title II reclassification thus would represent a "dangerous international precedent"¹²⁵ that could invite "a patchwork of burdensome regulations around the world that could harm all Internet users".¹²⁶ As GSMA warns, reclassification would provide not simply a justification for reciprocal publicutility regulation, but also a spur for some countries to impose "top-down control over online activities," including surcharges, censorship, and forced registration of bloggers and social media

¹²⁵ Giovanni Amendola, Telecom Italia Comments at 11.

¹²¹ Yoo, *supra* n.120, at 4, 7-8.

¹²² Yoo, *supra* n.120, at 13.

¹²³ Alcatel-Lucent Comments at 5-7.

¹²⁴ Telefonica Comments at 6.

¹²⁶ Akamai Comments at 11. *See also* Comcast Comments at 50 ("A reclassification decision . . . 'could be employed as a pretext or as an excuse for undertaking public policy activities that we would disagree with pretty profoundly.") (quoting John Eggerton, *FCC's Net Neutrality Proceeding Means More Work for State Department*, Broadcasting & Cable, http://www.broadcastingcable.com/news/washington/fccs-net-neutrality-proceeding -meansmore-work-state-department/57276 (Mar. 17, 2010)).

outlets.¹²⁷ Accordingly, the record confirms the grave risks of reversing the Commission's successful light-touch policy.

B. The Commission Has Correctly—and Repeatedly—Classified Broadband as an Information Service and Cannot Reverse Course Now.

In order to avoid the dangers of reclassification, the Commission has found—four times over—that broadband Internet access service is an information service.¹²⁸ As the Supreme Court held in *Brand X*, that classification was "proper[]" because broadband Internet access service is a single, integrated offering of both data transmission and data processing components.¹²⁹ The record confirms that that classification was appropriate in 2002 and is even more appropriate today. As a result, the Commission cannot now *re*classify broadband as a telecommunications service simply because it finds reclassification expedient.

Reclassification proponents try to escape this inevitable conclusion by claiming that the Commission had classified broadband as a distinct "telecommunications service" before the Supreme Court's *Brand X* decision.¹³⁰ This is revisionist history. Prior to the *Cable Modem Order*, which *Brand X* affirmed, the only distinct telecommunications service offered by broadband providers was a wholesale transmission service offered *to other information service*

¹²⁷ GSMA Comments at 14-16.

¹²⁸ See Appropriate Regulatory Treatment for Broadband Access to the Internet over Wireless Networks, Declaratory Ruling, 22 FCC Rcd 5901(2007) ("Wireless Broadband Order"); United Power Line Council's Petition for Declaratory Ruling Regarding the Classification of Broadband over Power Line Internet Access Service As an Information Service, Memorandum and Opinion, 21 FCC Rcd 13281 (2006); Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 14853 (2005); Inquiring Concerning High-Speed Access to the Internet over Cable and Other Facilities, Declaratory Ruling and Notice of Proposed Rulemaking, 17 FCC Rcd 4798 (2002) ("Cable Modem Order").

¹²⁹ NCTA v. Brand X Internet Servs., 545 U.S. 967, 998 (2005).

¹³⁰ See, e.g., Netflix Comments at 22 ("Beginning in 2002, the FCC made a series of decisions shifting classification of the access or transmission component of broadband Internet access from Title II to Title I . . ."); Public Knowledge Comments at 60 ("The Commission has consistently defined this offer to use the TCP/IP protocol suite to transport information created by the customer on the customer's own equipment as the 'telecommunications component' of broadband access service.").

providers.¹³¹ The retail Internet access service they offered end-user customers, by contrast, has always been an information service and has never been required to be tariffed or otherwise regulated as a common carriage service.¹³²

Public Knowledge and Free Press next try to argue that the Commission made a "profound mistake" or "fundamental error" in classifying broadband as an information service.¹³³ According to Public Knowledge, that erroneous classification rested primarily on the fact that broadband used DNS service to facilitate data transmission—even though DNS should have been excepted from the definition of an information service as a "capability for the management, control, or operation of a telecommunications system."¹³⁴ But this exact argument was raised in *Brand X*—by the dissent—and rejected by both the majority and, previously and since, by the Commission.¹³⁵ Moreover, Public Knowledge ignores how both the Commission and the Supreme Court emphasized that a number of *other* information service aspects—such as web caching, email, and user webpages—were integrated into broadband service, as well.¹³⁶ The

¹³¹ See Appropriate Framework for Broadband Access to the Internet over Wireline Facilities; et al., Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 14,853, ¶ 85 (2005) ("Wireline Broadband Order") ("Our long-standing *Computer Inquiry* regulations, which apply only to wireline facilities-based carriers, have required wireline carriers to provide wholesale transmission for Internet access.").

¹³² See, e.g., Cisco Comments at 23.

¹³³ Public Knowledge Comments at 68 ("The Commission applied this framework and found that cable modem service was an information service. But in doing so, the Commission made a fundamental error."); Free Press Comments at 55 ("The Commission's classification of broadband access services as inextricably intertwined information services was a profound mistake.").

See Public Knowledge Comments at 69 (discussing 47 U.S.C § 153(20) [now codified at 47 U.S.C. § 153(24)]).

¹³⁵ See Brand X, 545 U.S. at 1000 n.3 ("The dissent claims that access to DNS does not count as use of the information-processing capabilities of Internet service because DNS is 'scarcely more than routing information But the definition of information service does not exclude 'routing information.'... The dissent's argument therefore begs the question because it assumes that Internet service is a 'telecommunications system' or 'service' that DNS manages ...'); *Cable Modem Order*, 17 FCC Rcd at 4,822 ¶ 38 & n.150.

¹³⁶ See Brand X, 545 U.S. at 987, 999-1000; Cable Modem Order, 17 FCC Rcd at 4,822 ¶ 38 ("Accordingly, we find that cable modem service. . . . is an information service. This is so regardless of whether subscribers use all of the functions provided as a part of the service, such as e-mail or web-hosting . . . ").

Commission has taken this same approach with numerous other services, such as a type of VoIP that, like broadband, "offers [] members a number of computing capabilities."¹³⁷ To adopt Public Knowledge's view, then, would risk undermining the Commission's consistent (and correct) approach to distinguishing information services from telecommunications services.

Regardless, the record shows that, in light of subsequent advances, broadband has become even more clearly an information service since the *Brand X* decision. Alcatel-Lucent explains how "consumers increasingly view broadband Internet access service as a single offering, providing access to and interaction with the Internet."¹³⁸ That integrated offering now includes even more data processing functions that consumers expect than ever before: from spam filters and security features to cloud computing, storage, and even certain video content.¹³⁹

Reclassification proponents nevertheless attack these latter services too, asserting that "the Commission's rationales about homepages, email services, newsgroups and DNS services are all currently incorrect when applied to today's broadband access service."¹⁴⁰ They assert that third-parties provide services such as email, while broadband providers offer primarily the transmission of data.¹⁴¹ But those commenters ignore how there are a growing number of information service components—such as parental controls, security features, and cloud-based processing services—that are part and parcel of broadband providers' Internet access offering to

¹³⁷ Petition for Declaratory Ruling that pulver.com's Free World Dialup is Neither Telecommunications Nor a Telecommunications Service, Memorandum Opinion and Order, 19 FCC Rcd 3307, ¶ 11 (2004) (quotation omitted); see id. ¶ 12 ("The fact that the information service Pulver is offering happens to facilitate a direct disintermediated voice communication . . . does not remove it from the statutory definition of information service To find otherwise would . . . ignore the capabilities described above that FWD makes available to its members.").

¹³⁸ Alcatel-Lucent Comments at 11.

¹³⁹ See *id.*; AT&T Comments at 48; CenturyLink Comments at 42-45; Cisco Comments at 25-26; CTIA Comments at 44-45; USTelecom Comments at 24-27.

¹⁴⁰ Free Press Comments at 70-71.

¹⁴¹ See, e.g., Ad Hoc Comments at 5-6; Public Knowledge Comments at 69-70.

consumers. With each of these services, commenters explained, data transmission cannot occur without concomitant data processing: the two are an integrated, inseparable whole.¹⁴²

In any event, the Commission cannot now reclassify broadband as a telecommunications service subject to Title II regulation without satisfying heightened judicial scrutiny under *FCC v*. *Fox Television Stations*, 556 U.S. 502 (2009). *Fox* held that, where an agency seeks to change course, it "must" provide a "more detailed justification" if its "new policy rests upon factual findings that contradict those which underlay its prior policy" and its "prior policy has engendered serious reliance interests."¹⁴³ Any reclassification decision here would trigger both circumstances and would be unable to survive heightened scrutiny.¹⁴⁴

This would be doubly true for reclassifying wireless broadband service.¹⁴⁵ The Commission has properly classified wireless broadband as a "private mobile service," not a "commercial mobile service," because wireless broadband does not give users the ability to connect to all other users on the public switched telephone network (PSTN).¹⁴⁶ Under Section 332(c)(2) of the Communications Act, the Commission cannot treat providers of private mobile

¹⁴² See Alcatel-Lucent Comments at 11; AT&T Comments at 48-49; CenturyLink Comments at 43-44; Cisco Comments at 26-27; Comcast Comments at 57; CTIA Comments at 44; USTelecom Comments at 26; Verizon Comments at 61.

¹⁴³ Fox, 556 U.S. at 515. Some proponents of reclassification maintain that *Fox* requires only the *same* justification as required for a *de novo* decision. *See, e.g.*, Free Press Comments at 86-87 ("*Fox* affirms the conclusion that changes in agency policy receive the same deference accorded to an initial policy determination."); Public Knowledge Comments at 101 ("It is now a settled part of administrative law that an agency does not need to provide a more detailed explanation when it changes course than when it grapples with an issue *de novo*."). But *Fox* clearly noted that there were exceptions to this general rule and held that an agency "must" "provide a more detailed explanation than what would suffice for a new policy created on a blank slate . . . when, for example, its new policy rests upon factual findings that contradict those which underlay its prior policy; or when its prior policy has engendered serious reliance interests." 556 U.S. 515.

¹⁴⁴ *See, e.g.*, Alcatel-Lucent Comments at 11-12; CTIA Comments at 45-46; TechFreedom & ICLE Comments at 48-51; Verizon Comments at 59-61.

¹⁴⁵ See CTIA Comments at 38-42.

¹⁴⁶ Wireless Broadband Order, ¶ 45; see CTIA Comments at 39-40 (discussing why wireless broadband cannot be classified as a commercial mobile service).

service as common carriers "for any purpose." As a result, and as the D.C. Circuit has explained, wireless broadband providers "are statutorily immune, perhaps twice over, from treatment as common carriers."¹⁴⁷

Accordingly, as numerous commenters recognize, there is no lawful way under *Fox* for the Commission to go back on its original—and repeated—classification decisions with respect to wireline and wireless broadband.¹⁴⁸ To reverse course now would upset settled reliance interests and require a greater explanation that the Commission simply cannot provide.

C. Imposing Heavy-Handed Common Carriage Regulation on Broadband Providers Also Would Be Risky and Unlawful.

Regulatory proponents overstate the appeal of Title II reclassification by calling it "deregulatory" or claiming that it would be good for investment, but both characterizations are fantasy. The record clearly demonstrates that reclassification would strangle investment precisely because common carriage is the quintessence of heavy-handed regulation. Common carriage would therefore be an unqualified disaster in a competitive marketplace such as that for broadband; and *compelled* common carriage would contravene both the Communications Act and the Constitution. The record thus reveals no adequate—much less compelling—rationale for reclassification.

Free Press and other regulatory proponents claim that Title II is "deregulatory" and makes sense in the broadband market, but this is fiction.¹⁴⁹ It is undisputed that Title II was

¹⁴⁷ *Cellco*, 700 F.3d at 538. In the *Verizon* decision, the D.C. Circuit again relied on Section 332(c)(2) to overturn the no-blocking rule as applied to mobile broadband providers. *See* 740 F.3d at 650.

¹⁴⁸ See AT&T Comments at 47-48; CenturyLink Comments at 42-45; Comcast Comments at 54-59; CTIA Comments at 43-46; USTelecom Comments at 23-28; Verizon Comments at 57-61.

¹⁴⁹ See, e.g., Free Press Comments at 39 ("Title II Common Carriage Is A Highly Deregulatory Policy Framework") (emphasis removed); Cogent Comments at 3 ("Title II reclassification does not . . . portend a heavyhanded set of rules that will discourage investment in, much less pose an existential threat to, the Internet.")

developed to regulate monopolists.¹⁵⁰ It is undisputed that, when the Commission has sought a "light-touch" regulatory approach to promote investment and competition in broadband Internet access, it has consistently refused to adopt the Title II regulatory framework.¹⁵¹ And it is undisputed that the Commission's decision to eschew common carriage requirements and adopt, instead, a "relaxed regulatory environment" has been a "key factor contributing to investment and innovation" in broadband.¹⁵²

The only way in which commenters can posit that Title II is "deregulatory" is thus by observing that the Commission could forbear from applying all but the core Title II provisions— Sections 201, 202, and 208.¹⁵³ In other words, reclassification proponents concede that the Title II framework *is* heavy-handed, but opine that it might amount to a *less* heavy-handed approach via the forbearance mechanism. But that is like hoping that the horse won't wander far once it has been let out of the barn. As AT&T observes, "When nearly everyone agrees that significant modifications would need to be made to the Title II regime to render it a suitable framework for

¹⁵⁰ Free Press concedes as much, citing the Commission's own statement that Sections 201 and 202 of Title II "were enacted in a context in which virtually all telecommunications services were provided by monopolists." Free Press Comments at 30 (quoting *Personal Communications Industry Association's Broadband Personal Communications Services Alliance's Petition for Forbearance for Broadband Personal Communications Services*, Memorandum Opinion and Order and Notice of Proposed Rulemaking, 13 FCC Rcd 16,857, ¶ 15 (1998)); *see, e.g.,* US Chamber of Commerce Comments at 1-2; USTelecom Comments at 16; Verizon Comments at 47.

¹⁵¹ See, e.g., Cable Broadband Order, ¶ 5 ("broadband services should exist in a minimal regulatory environment that promotes investment and innovation in a competitive market."); Wireline Broadband Order, ¶ 1("a minimal regulatory environment for wireline broadband Internet access services to benefit American consumers and promote innovative and efficient communications."); *id.*, ¶ 44 ("It is precisely this negative impact [that reclassification would have] on broadband infrastructure that led the Commission to eliminate other broadband-regulated regulation over the past two years.").

¹⁵² Akamai Technologies Comments at 9; *see, e.g.*, CWA/NAACP Comments at 7-14 (discussing how the Commission's approach under Title I has successfully balanced regulation with incentives for investment in broadband and Internet technologies).

¹⁵³ *E.g.*, Free Press Comments at 39-46.

regulating IP-enabled services, that is a powerful indication that reclassification is inconsistent with the text, structure, and design of the Communications Act and therefore inappropriate."¹⁵⁴

In addition to being inaccurate, the tale that reclassification proponents tell about Title II is internally inconsistent. Their speculation that forbearance could defang Title II regulation is at odds with their exhortations that the Commission adopt *additional* rules prohibiting certain practices as *per se* unreasonable.¹⁵⁵ In addition, reclassification of broadband would require the radical step of forcibly unbundling the transmission component of broadband, with adverse consequences for consumers and broadband investment alike. That is, the only way that the Commission can reclassify Internet access service as a telecommunications service subject to Title II is to *mandate* that broadband providers unbundle that service from all of their other information services, currently offered as part of an integrated package and subject to Title I requirements. Professor Yoo shows, however, that in Europe such unbundling has contributed to slower access speeds, less deployment of Fiber and LTE, and higher prices¹⁵⁶—to say nothing of the burdens and disruptions to consumers if they were forced to purchase and manage two separate services. These are precisely the reasons why, as Akamai explains, Title II regulation risks "unnecessarily . . . discourag[ing] continued investment in broadband infrastructure."¹⁵⁷

¹⁵⁴ AT&T Comments at 64.

¹⁵⁵ See, e.g., Free Press Comments at 47-53.

¹⁵⁶ See Christopher Yoo, supra n.120, at i-ii ("Disparities between European and U.S. broadband networks stemmed from differing regulatory approaches. Europe has relied on regulations that . . . focus on promoting service-based competition, in which new entrants lease incumbents' facilities at wholesale cost (also known as unbundling). The U.S. has generally . . . focused on promoting facilities-based competition, in which new entrants are expected to construct their own networks.").

¹⁵⁷ Akamai Comments at 10; *see also* USTelecom Comments at 16 ("Regulating the Internet under a Title II framework would be a profound mistake. . . . Application of Title II to broadband services would do nothing to promote investment in network infrastructure.").

Regulatory proponents nevertheless suggest that Title II would be an appropriate regulatory framework because broadband providers have a terminating access monopoly that could be abused by charging edge providers excessive fees for access to end users.¹⁵⁸ But there is simply no terminating access monopoly in the broadband context as there once was in the telephone context. As USTelecom details, "end users . . . are not deterred by the costs of switching service providers"¹⁵⁹—and for good reason. In the interest of customer service, broadband providers have worked to make it easier to change service providers. Verizon, for instance, has minimized the cost of cancellation by offering no-contract options, prorating early termination fees on contracts, and offering easy equipment return; and it has made sign-up easier than ever by eliminating activation fees and allowing customers to schedule installation appointments online.¹⁶⁰ As a result, the Commission has found "significant" churn in the broadband industry:¹⁶¹ in a 2010 study, 36 percent of Internet users had switched broadband service providers within the past three years; and in every year since 2005 (at least), about 25 percent of wireless customers have switched broadband service providers.¹⁶² These numbers confirm that consumers have competitive choices, and their willingness and ability to act on those choices would correct any alleged terminating access monopoly problem.

¹⁵⁸ See, e.g., Ad Hoc Comments at 7-13; Comptel Comments at 27-30; Free Press Comments at 145-47; Netflix Comments at 12-16.

¹⁵⁹ USTelecom Comments at 12. USTelecom exhaustively surveys current data, the Commission's own prior data, and current practice by broadband providers to demonstrate that (1) customers have multiple choices for broadband providers and platforms (*id.* at 11-12); and (2) customers readily utilize those choices to change broadband providers, particularly to decrease costs or increase download speeds (*id.* at 12-13).

¹⁶⁰ *Id.* at 13-14.

¹⁶¹ Federal Communications Commission, *Broadband Decisions: What Drives Consumers to Switch—or Stick With—Their Broadband Internet Provider*, at 3 (Dec. 2010), <u>https://apps.fcc.gov/edocs_public/attachmatch/DOC-303264A1.pdf</u>. The ease with which customers can switch broadband providers results in annual churn of between 28.8 percent and 36 percent for some broadband providers. J.Gregory Sidak & David J. Teece, *Innovation Spillovers and the "Dirt Road" Fallacy: The Intellectual Bankruptcy of Banning Optimal Transactions for Enhanced Delivery over the Internet*, J. COMP. L. & ECON. 521, 564-65 (2010).

¹⁶² See Verizon Comments, Lerner Decl. ¶¶ 46, 73.

Some commenters worry nevertheless that switching broadband providers may not be so easy in areas where there is only one wireline provider, or where the only wireline options are more advanced cable and slower-speed DSL.¹⁶³ Their main concern is that, if DSL is not a competitive alternative to broadband, then consumers will not readily choose to switch providers. But even in those areas the Commission should strive to promote additional competition rather than to stifle the existing marketplace. By keeping burdens off of wireless, for example, the Commission could foster the development of a competitive alternative to broadband. Similarly, encouraging more widespread investment in fiber addresses this concern directly. Regardless, though, concerns about these discrete areas where cable is the only higher speed wireline option currently available cannot justify across-the-board regulation in other areas with robust competition, such as where fiber and broadband compete head-to-head.

Regulatory proponents also suggest that reclassification would be appropriate because allowing two-sided arrangements would result in a "market failure," where an edge provider would be powerless to "disciplin[e] excessive charges by the subscriber's Internet access service provider."¹⁶⁴ But edge providers are not powerless: in fact, as CenturyLink shows, they exert considerable control over end user experience and can thereby influence end users with a view towards choosing the most cost-effective broadband provider.¹⁶⁵ Moreover, broadband providers have proposed that two-sided arrangements be an *additional* option for content providers to reach price-sensitive customers who might not consume their product if they also must bear the costs of bandwidth consumption. Where employed, those additional arrangements actually "ensure[] that the costs of content and applications causing greater bandwidth consumption are

¹⁶³ See, e.g., Ad Hoc Comments at 8; Public Knowledge Comments at 14-16; Vonage Comments at 4.

¹⁶⁴ Ad Hoc Comments at 11, 12.

¹⁶⁵ See CenturyLink Comments at 17-20.

ultimately passed on to the subscribers who use those services . . . [and] communicated to edge providers."¹⁶⁶ Far from producing a market failure, then, two-sided pricing can enhance the market by signaling and allocating the true costs of Internet access.¹⁶⁷

The record further confirms that reclassification would violate the Communications Act and the Constitution. As Verizon has explained,¹⁶⁸ the Commission cannot ask whether it *should* apply Title II to broadband Internet access service, as if that were a purely discretionary policy choice, because common carrier status attaches only if a provider chooses to "undertake[] to carry for all people indifferently"—*i.e.*, if it does not "make individualized decisions, in particular cases, whether and on what terms to deal." ¹⁶⁹ Free Press and Public Knowledge claim that broadband providers do offer their service to the public indifferently because the websites, commercials, and flyers of broadband providers simply list the rates, terms, and conditions of the service.¹⁷⁰ And they claim that customers, not broadband providers, control what content is sent over the Internet.¹⁷¹

Neither argument, however, is convincing. Broadband providers have consistently exercised their right to negotiate individualized contracts with customers who present competing offers from other broadband providers.¹⁷² And some content providers, such as ESPN, require

¹⁶⁶ *Id*.at 6.

¹⁶⁷ See id. ("A two-sided market approach . . . overall[] produces the optimal economic outcome.").

¹⁶⁸ Verizon Comments at 65-66.

¹⁶⁹ NARUC v. FCC, 525 F.2d 630, 641& 642 (D.C. Cir. 1976) ("NARUC I"); see NARUC v. FCC, 533 F.2d 601, 608 (D.C. Cir. 1976) ("NARUC II") ("[T]he primary sine qua non" of the analysis is whether the carrier "holds himself to serve indifferently all potential users.").

¹⁷⁰ See Free Press Comments at 65; Public Knowledge Comments at 79.

¹⁷¹ *See* Free Press Comments at 65; Public Knowledge Comments at 79.

¹⁷² See, e.g., Vishesh Kumar, Cable Bill high? Phone Costs Up? Now, Let's Talk, WALL STREET JOURNAL, http://online.wsj.com/news/articles/SB123248760842899491 (Jan. 21, 2009) (last visited Sept. 15, 2014)

agreements with ISPs before the ISP's end-users can access certain content. Broadband providers' strong commitment to providing Internet access to the public has not vitiated their right to exercise that commitment on individualized terms.

In any case, reclassification proponents offer no rationale for how the Commission could *compel* ISPs to provide common carriage—and there is none. Compelled common carriage would violate both the Due Process Clause and the First Amendment.¹⁷³ First, compelled common carriage would force broadband providers to dedicate their networks to the use of others—that is, it would constitute a *per se* taking. Historically, such obligations have been permissible only where carriers agreed to hold themselves out as willing to serve all in exchange for a government-granted franchise with limited or no competition.¹⁷⁴ In exchange for that government guarantee, carriers were permitted to charge a rate that would provide an adequate return; this assured return and restrictions on market entry by others allowed carriers to recoup their investment. None of that, however, applies to broadband. There is no monopoly and no government restriction on entry.¹⁷⁵ The Commission thus cannot possibly commit such an

^{(&}quot;Behind the scenes . . . [cable] companies are much more accommodating. Many are offering steep discounts to keep, win, or win back customers. . . . [C] ompanies are often happy to make deals with customers—particularly if that allows them to poach them from rivals.").

¹⁷³ CenturyLink Comments at 61-71; TechFreedom & ICLE Comments at 93-96; Verizon Comments at 66-68.

¹⁷⁴ See NARUC I, 525 F.2d at 642 (concept of common carrier "developed as a sort of quid pro quo whereby a carrier was made to bear a special burden of care, in exchange for the privilege of soliciting the public's business"); AT&T Submarine Sys., Inc.; Application for a License to Land and Operate a Digital Submarine Cable System Between St. Thomas and St. Croix in the U.S. Virgin Islands, Memorandum Opinion and Order, 13 FCC Rcd 21,585, ¶¶ 7-9 (1998) ("AT&T Submarine Cable Order") (the decision to impose common carriage depends on whether "the public interest . . . require[s] the carrier to be legally compelled to serve the public indifferently" because the carrier "has sufficient market power").

¹⁷⁵ See NARUC I, 525 F.2d at 640; Verizon Commc'ns Inc. v. FCC, 535 U.S. 467, 477-89 (2002) (describing how hallmarks of common carriage regulation developed to offset monopoly power in early history of the telephone industry).

extraordinary taking absent a clear mandate from Congress¹⁷⁶ and a finding of "sufficient market power."¹⁷⁷ Yet reclassification proponents point to no such mandate here, and, given significant competition in the broadband marketplace, the Commission could not even arguably make the required finding of market power whether for Verizon¹⁷⁸ or nationwide, let alone in areas where fiber has been deployed and is competing with cable broadband.¹⁷⁹ The case for market power would be even weaker in the context of wireless services, where multiple nationwide competitors compete head-to-head. Free Press is therefore wrong to claim that market power has "absolutely no relation to" common carriage¹⁸⁰—that is true only if the providers *voluntarily* undertake to be common carriers (which, by and large, they do not).

Second, because broadband providers are the modern-day equivalents of printing presses using their platforms to "engage in and transmit speech,"¹⁸¹ they cannot be conscripted for

¹⁷⁶ See Bell Atlantic Tel. Cos. v. FCC, 24 F.3d 1441, 1444-46 (D.C. Cir. 1994); see also Ramirez de Arellano v. Weinberger, 745 F.2d 1500, 1510 (D.C. Cir. 1984) (en banc) ("When there is no authorization by an act of Congress or the Constitution for the Executive to take private property, an effective taking by the Executive is unlawful because it usurps Congress's constitutionally granted powers of lawmaking and appropriation."), overturned on other grounds, 471 U.S. 1113 (1985).

¹⁷⁷ See, e.g., Virgin Islands Tel. Corp. v. FCC, 198 F.3d 921, 925-27 (D.C. Cir. 1999); Nat'l Ass'n of Regulatory Util. Comm'rs v. FCC, 525 F.2d 630, 641-42 (D.C. Cir. 1976); AT&T Submarine Order, ¶ 9. In fact, the Commission refused to make a finding of market power in the Open Internet Order (¶ 32 & n.87), and it could not make such a finding here.

¹⁷⁸ The Commission could not make a finding of market power with regard to Verizon for at least the following basic reasons: like all broadband providers, we experience significant churn; we have a limited wireline footprint and must rely on the services of other ISPs to serve our own customers; and we face steep competition from other high-speed wireline options, especially wherever we have fiber. *See* Verizon Comments at 7-8.

¹⁷⁹ As Verizon explained in our opening comments (at 10-12), "churn" in the broadband marketplace has led broadband providers to compete by developing better and faster Internet access services. *See also* Verizon Comments, Lerner Decl. *passim*. The record confirms that there is significant competition that would plainly preclude a finding of "sufficient market power" necessary for compelling broadband providers to unbundle their services. *See, e.g.*, CenturyLink Comments at 8-13; Comcast Comments at 5-11; CTIA Comments at 6-11; NCTA Comments at 13-14; TechFreedom & ICLE Comments at 93-96.

¹⁸⁰ See Free Press Comments at 28-29.

¹⁸¹ *Turner Broad. Sys., Inc. v. FCC*, 512 U.S. 622, 636 (1994) (describing similar First Amendment rights of cable programmers and cable operators).

speech on the government's terms.¹⁸² Although Free Press notes that broadband providers typically do not *alter* the messages transmitted by end users,¹⁸³ "their voluntary choice to do so cannot be replaced by a government mandate that effectively eliminates their right to exercise editorial control."¹⁸⁴ The record therefore makes it abundantly clear that the Commission lacks legal authority to impose Title II's common carriage requirements on broadband providers.

D. Exercising Significant Forbearance Would Foster Only Greater Legal Uncertainty and Would Chill Investment and Innovation in Broadband Infrastructure.

In recognition of the potentially disastrous consequences of reclassification, most reclassification proponents urge the Commission to forbear extensively from applying Title II requirements to broadband providers. Cogent, Mozilla, and New America, for example, all suggest that the Commission forebear from adopting many provisions of Title II beyond the rules proposed in the *NPRM* itself.¹⁸⁵ But they are incorrect when they suggest that reclassification combined with forbearance would provide *greater* regulatory certainty or would encourage, not chill investment.¹⁸⁶ As we already have explained,¹⁸⁷ and as the record confirms, forbearance would not solve the problems of reclassification, for at least two reasons.

¹⁸⁷ Verizon Comments at 51.

¹⁸² See, e.g., Citizens United v. FEC, 558 U.S. 310, 441 (2010) (noting that the First Amendment "reject[s] the premise that the Government has an interest in equalizing the relative ability of individuals and groups to have their voices heard") (internal citation omitted); *Miami Herald Publ'g Co. v. Tornillo*, 418 U.S. 241, 257 (1974) ("Government-enforced right of access inescapably dampens the vigor and limits the variety of public debate.") (internal quotation omitted).

¹⁸³ See Free Press Comments at 65-67.

¹⁸⁴ CenturyLink Comments at 63; *see* TechFreedom & ICLE Comments at 92-93.

¹⁸⁵ See Cogent Comments at 11; Mozilla Comments at 13; New America Comments at 25-26; see also Ad Hoc Comments at 2.

¹⁸⁶ See, e.g., New America Comments at 25 ("Title II reclassification of broadband Internet access service would provide certainty to both Internet access service providers and to content providers about what conduct would be regulated and how, and would limit the potential for regulatory overreach.").

First, it is "inevitable" that the scope of any forbearance under Title II would prompt protracted disputes both at the Commission and in subsequent judicial challenges.¹⁸⁸ Numerous commenters point out that the legal uncertainty resulting from reclassification would chill investment in broadband infrastructure.¹⁸⁹ For example, reclassification could prevent the creation of new jobs and stifle the rollout of high-speed services to unserved and underserved areas where manufacturers invest and grow their businesses.¹⁹⁰ That is because there is no guarantee of how future Commissions will act: the grace of forbearance today might become the sledgehammer of regulation tomorrow.

Second, *no proponent of reclassification* suggests that the Commission forbear from the core provisions of Title II—such as Sections 201, 202, and 208, on rates, non-discrimination, and enforcement. Mozilla, for example, specifically urges that the Commission "keep those provisions of Title II applicable to the remote edge delivery service, and no others. Of these the most crucial are sections 201, 202, and 208."¹⁹¹ Yet it is these provisions that are the traditional basis for many of the most troublesome aspects of common carriage regulation, including price regulation. Even with forbearance, therefore, Title II reclassification would create a significant

¹⁸⁸ Alcatel-Lucent Comments at 13. On the one hand, "those who favor maximum regulation of the Internet ... could be expected to fight tooth and nail against forbearance from burdensome monopoly-era common-carrier requirements." AT&T Comments at 64. On the other, an order reclassifying broadband Internet access service and exercising forbearance would only "broaden" the legal challenges that those subject to common-carriage regulation are "certain" to bring. Comcast Comments at 49.

See Alcatel-Lucent at 13-16; AT&T Comments at 65; Cisco Comments at 24-25; Comcast Comments at 48; Larry Downes Comments at 4; National Minority Organizations Comments at 8; TechFreedom & ICLE Comments at 32-45; Verizon Comments at 51.

¹⁹⁰ See National Association of Manufacturers Comments at 2.

¹⁹¹ Mozilla Comments at 13. *See also* AT&T Comments at 65 (recognizing that the Commission might not provide forbearance on Sections 201 and 202); Comptel Comments at 22 (advocating application of nine sections, including Sections 201, 202, and 208); New America Comments at 25 (pointing to section 201 as lynchpin for prohibiting blocking, discrimination, and access fees); Public Knowledge Comments at 88-89 ("specific statutes the Commission should not simply forbear from . . . involve . . . the bare minimum recognized in Section 332(c) as the minimum needed to protect consumers—Sections 201, 202, and 208.").

drag on broadband investment and innovation.¹⁹² Forbearance is no panacea for the ills of reclassification.

E. The Record Confirms That None of the Fallback Arguments Offered by Proponents of Reclassification Is Viable.

The two "fallback" options offered by Congressman Waxman and Mozilla/Timothy Wu do not solve any problems with reclassification—if anything, they only introduce additional problems.¹⁹³ The record confirms that Congressman Waxman's "springing" Title II approach would be arbitrary and capricious, and that Mozilla's approach cannot be reconciled with either the facts of or law on broadband service. As a result, the proposals have had "very few" supporters and have been opposed even by *proponents* of reclassification.¹⁹⁴

Congressman Waxman suggested "proceed[ing] under Section 706 but us[ing] Title II as a 'backstop authority.'"¹⁹⁵ But using Title II in this fashion ultimately suffers from the same fatal problems as using Title II as a primary authority. Moreover, even proponents of reclassification recognize additional legal problems with this approach. For example, Professor van Schewick underscores that Congressman Waxman's approach would be the very definition of "arbitrary and capricious" because it would require simultaneously classifying broadband service as *both* a telecommunications service *and* an information service.¹⁹⁶ Reclassification at some future date would be doubly arbitrary because it would "need[] to be based on the facts at

¹⁹² *See*, *e.g.*, Alcatel-Lucent Comments at 15.

¹⁹³ See Verizon Comments at 62-63, 68.

¹⁹⁴ See Ex Parte Letter from Marvin Ammori, Ammori Group to Marlene Dortch, FCC, *Promoting and Protecting an Open Internet*, GN Docket No. 14-28, at 3 (July 31, 2014) ("*Ammori Ex Parte*"); see, e.g., Cogent Comments at 10; Ex Parte Letter from Sarah Morris, New America Foundation - Open Technology Institute, to Marlene Dortch, FCC, GN Docket Nos. 10-127 & 14-28, at 1-2 (Aug. 25, 2014); Ex Parte Letter from Barbara van Schewick, Professor, Stanford Law School to Marlene Dortch, FCC, GN Docket Nos. 09-191 & 14-28, at 1 (Aug. 12, 2014) ("*Professor van Schewick Ex Parte*").

¹⁹⁵ *NPRM* ¶ 150 (describing letter from Representative Henry Waxman).

¹⁹⁶ *Professor van Schewick Ex Parte*, at 1-2; *see* NCTA Comments at 44.

that time, not on the facts today."¹⁹⁷ Yet, as Professor van Schewick explains, the Commission cannot make that required factual determination now because it cannot predict what broadband Internet access service would look like should Title II ever be needed as a backstop authority.¹⁹⁸ Any Title II classification based on the Waxman proposal would thus be the epitome of an arbitrary and capricious rule.

Mozilla's argument for classifying broadband as two distinct services—one as an information service for end users, the other as a telecommunications service for edge providers likewise fails on factual and legal grounds. Factually, Mozilla tries to characterize broadband providers as doormen delivering packages from edge providers to end users who live in the doormen's building.¹⁹⁹ Mozilla's claim is that some doormen might leave the packages in the mailroom to sit for a couple days unless the edge provider were to pay the doormen extra for prompt delivery.

But the doormen analogy only underscores the point that broadband providers do *not* offer a separate "telecommunications service" for edge providers. Instead, they offer edge providers access to the same integrated bundled service that is offered to end users. The fact that payments could be two-sided as in the case of sponsored data plans does not change this fact. Mozilla tacitly acknowledges this problem when it concedes that there is no "technologically distinct" "service that includes the offering of delivery of traffic, upstream and downstream, to a remote edge provider." ²⁰⁰ As a result, Mozilla's attempts to segregate broadband service into neat "calls" and "responses" only belie the current reality of broadband service, which includes

¹⁹⁷ *Professor van Schewick Ex Parte*, at 2; *see* NCTA Comments at 44.

¹⁹⁸ See Professor van Schewick Ex Parte at 2.

¹⁹⁹ See Mozilla Comments at 10.

²⁰⁰ *Id*.

"the content provider's response to the subscriber's request for data [as] 'part and parcel' of 'a single, integrated offering."²⁰¹

In other words, Mozilla's proposal would require a radical unbundling of Internet access service into its component parts—with disastrous consequences for consumers forced to navigate the resulting confusion and to pro-consumer innovation alike. Yet as Verizon previously explained,²⁰² such unbundling would have harmful effects on consumers and investment. Broadband providers would face prohibitive complexities in delivering distinct information and telecommunications services. Unbundling thus would threaten the quality of service that consumers receive, to say nothing of the added costs, confusion, and complication of having to pay for and manage both types of services. This would be an unqualified disaster for the Internet community, as it would drive consumers and providers away from broadband, thereby harming investment in broadband and forcing edge providers to offer the information service capabilities currently bundled into broadband.

Mozilla's proposal would harm edge providers in another way, too. A "telecommunications service" subject to Title II regulation is, by definition under the Communications Act, an offering of telecommunications "*for a fee*."²⁰³ The Mozilla proposal thus would *require* edge providers to pay a fee to broadband providers. To avoid this untenable result, Mozilla tries to redefine a "fee" as the indirect benefit that broadband providers receive from their own customers for accessing edge providers' content.²⁰⁴ But as Marvin Ammori

²⁰¹ See id. USTelecom Comments at 33 (emphasis added). Public Knowledge maintains that the *Verizon* decision is predicated on the existence of two distinct services, but this argument merely restates the Mozilla proposal and fails for the same reasons. *See* Public Knowledge Comments at 104-06.

²⁰² Verizon Comments at 63-64.

²⁰³ 47 U.S.C. § 153(46) (emphasis added); see Professor van Schewick Ex Parte, at 1; Ammori Ex Parte, at 3.

²⁰⁴ See Mozilla Comments at 12.

notes, "it is difficult to see how consumers paying a fee for *another* service (access to the Internet) would transform the supposedly distinct service offered to edge providers into a service offered for a fee."²⁰⁵ And contrary to the expressed preferences of Mozilla, the Commission would be unable to use its Title II authority to prohibit such access fees: it would be arbitrary and capricious for the Commission to use its Title II authority to ban the very access fees that purportedly gave the Commission a Title II statutory hook in the first place.²⁰⁶

Even beyond these factual problems, Mozilla's proposal suffers from major legal flaws because it contradicts both the Communications Act and decades of Commission and judicial precedent. The *Stevens Report*²⁰⁷ recognized that telecommunications services and information services are mutually exclusive: "a service offered to consumers on a functionally unified basis cannot be said to consist of *both* a 'telecommunications service' *and* an 'information service."²⁰⁸ Both the Commission²⁰⁹ and the Supreme Court²¹⁰ already have rejected the idea that broadband comprises distinct services for end users and edge providers. And for good reason: the two services are technologically identical, and classifying even just part of broadband service as a telecommunications service, as Mozilla advocates, would create a dangerous slippery slope that

²⁰⁵ *Ammori Ex Parte*, at 3 (emphasis in original).

²⁰⁶ See Ammori Ex Parte, at 3; Professor van Schewick Ex Parte, at 1. USTelecom correctly maintains that sponsored data agreements still would not be offerings of telecommunications to edge providers: "[the broadband provider] would only be offering edge providers a billing arrangement; it is not selling 'the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received." *Id.* at 38-39 (quoting 47 U.S.C. § 153(50)).

²⁰⁷ Federal-State Joint Board on Universal Service, Report to Congress, 13 FCC Rcd 11,501 (1998) ("Stevens Report").

AT&T Comments at 42.

²⁰⁹ See Cable Broadband Order, ¶ 39 ("Cable modem service is not itself and does not include an offering of telecommunications service . . . [Its] telecommunications component is not . . . separable from the data-processing capabilities of the service."); FCC Brand X Opening Br. at 6 ("The Commission rejected arguments that the telecommunications component of an information service should be isolated and viewed separately as an offering of telecommunications.") (citing Stevens Report, ¶ 40).

²¹⁰ See Brand X, 545 U.S. at 999-1000 (describing how edge provider content sent to consumers is part of the information service provided by broadband Internet access service).

could implicate players throughout the Internet ecosystem. Like reclassification proposals more generally, therefore, the Waxman and Mozilla proposals are anything but "minimal" proposals and lack a factual and legal basis.

VI. THE RECORD CONFIRMS THAT THE COMMISSION SHOULD REFRAIN FROM IMPOSING ANY NEW RULES ON INTERNET INTERCONNECITON ARRANGEMENTS, SPECIALIZED SERVICES, OR ENTERPRISE OFFERINGS.

If the Commission adopts new open Internet rules, it should not extend them beyond the scope of the earlier rules, but should maintain a focus on mass-market Internet access services offered over fixed broadband networks. First, the record does not support imposing any new rules on Internet interconnection arrangements. The longstanding system of voluntary, commercially negotiated agreements has worked well for decades and continues to provide flexibility for new and innovative interconnection arrangements that accommodate new business models and changes in end users' demands. The Commission should reject requests by a handful of parties—led by Netflix—to replace this successful market-based approach with rigid rules requiring zero-cost interconnection. Whatever short-term gain these commenters hope to achieve, such rules would needlessly destroy a well-functioning market, would inevitably chill investment, and would unfairly shift network costs from large content providers to ISPs' subscribers.

Similarly, the Commission should adopt its tentative conclusion to refrain from applying any new open Internet rules to specialized services. Specialized services offer the promise of giving more choices to consumers, and there is no evidence that specialized services have undermined the open Internet.

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Finally, the Commission should adopt its tentative conclusion to continue to exclude enterprise services from any new open Internet rules. Imposing such rules on this highly competitive marketplace could render certain enterprise services uneconomic and/or undesirable.

A. The Record Shows That There Is No Reason to Apply Open Internet Rules to Internet Interconnection Arrangements.

As Verizon explained in our opening comments,²¹¹ arrangements concerning the interconnection of Internet networks and the exchange of Internet traffic have always been the province of voluntary, commercially negotiated arrangements, and the exact nature of these arrangements has evolved along with the Internet. The flexibility enabled by that long-standing approach has allowed the Internet to evolve over time to support changes in the way that users—both end users and content providers—connect to and use the Internet, and continues to encourage investment in network infrastructure and flexibility to interconnect and exchange traffic in innovative ways that are more efficient and that better serve customers. Given this long and successful history of market-based interactions, the Commission should adopt its tentative conclusion to exclude Internet interconnection arrangements from any new rules it may adopt.²¹²

1. The System of Voluntary Commercial Agreements for Internet Traffic Exchange is a Resounding Success.

The market for Internet interconnection has worked well for decades and continues to do so. As new business models have arisen—such as streaming video websites and applications the Internet has shifted from a hierarchical network involving interconnection between large Internet backbones, smaller backbones, and ISPs serving content providers and end users, to a more complex ecosystem in which networks and content providers interconnect in a multitude of ways. Today, a content provider can connect to an ISP indirectly through a variety of CDNs or

²¹¹ Verizon Comments at 70-76.

²¹² NPRM ¶ 59.

transit providers, or a content provider can connect directly by reaching an agreement with the ISP. Verizon has hundreds of agreements involving the exchange of U.S. Internet traffic with our backbone and last-mile networks. These include agreements for Internet access, transit, peering, colocation, hosting, and content distribution. The parties on the other side of these agreements include Internet backbone providers, transit providers, ISPs, CDNs, and edge providers. And this marketplace continues to work well, with new arrangements emerging on a regular basis to provide for efficient network planning and traffic delivery, as well as improved service for customers as their demands for Internet services continue to grow. In fact, today the majority of traffic destined for our end-user subscribers is delivered to Verizon over paid, direct connections with CDNs and large content providers, not over connections with our traditional, settlement-free peering partners. These voluntarily-negotiated arrangements ensure high quality service for consumers and predictability and efficiency for Verizon and its interconnection partners.

As Verizon has explained,²¹³ all forms of Internet interconnection have always been premised on the mutual exchange of value between networks, whether in the form of payment or otherwise. For transit agreements, in which one provider agrees to ensure that another provider's traffic will reach its destination, this exchange of value has always involved payments. For peering relationships, in which networks interconnect directly and exchange traffic, the agreements may or may not involve payment, depending on traffic flow. If parties exchange roughly equal amounts of traffic and they provide roughly equal value to each other across a range of other factors, then the parties may exchange traffic on a settlement-free basis. However, when the traffic exchange is not roughly balanced, then the net sending party typically makes a

²¹³ Verizon Comments at 70-71.

payment in order to help compensate the net receiving party for its greater relative costs to handle the other party's traffic.

Similarly, for many years now paid interconnection agreements have been common to support CDNs, large content providers, or others with large, asymmetric traffic flows who seek direct connections to ISP networks. Content delivery networks, which evolved to deliver video and other high-bandwidth content, have long paid for such interconnection, given the imbalanced traffic flows generally associated with their services. A variety of significant Internet content providers and CDNs voluntarily have purchased these arrangements from Verizon for years, given the mutual benefits of reliable, predictable capacity that allow them to serve end-user customers well. As noted above, Verizon has agreements in place that provide for paid, direct connections with CDNs and content companies that account for a majority of peak period Internet traffic.

Verizon also has arrangements in which we pay for interconnection with other ISPs. Verizon's EdgeCast content delivery network, for example, typically sends much more Internet traffic than it receives, and therefore EdgeCast has many agreements under which it pays other ISPs for interconnection. As Verizon negotiates Internet interconnection agreements that include both Verizon's traditional network traffic and EdgeCast's CDN traffic, it is entirely possible that Verizon will be a net payer with some network operators. Thus, Verizon has interconnection agreements under which it pays for interconnection, receives payment for interconnection, and/or interconnects on a settlement-free basis.

The breadth and variety of the voluntary Internet interconnection agreements—both paid and settlement-free—reflect that the market for Internet interconnection has been and continues to be a resounding success. Although there are occasionally bumps in the road as content

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providers and networks grapple with the effects of newer business models, new services, shifting traffic flows, or growing volume—such as the introduction of Netflix's streaming video service in 2007 and the rapid growth of that traffic in subsequent years—the players in the Internet ecosystem have been able to resolve issues through negotiations for new types of interconnection arrangements rather than in contentious, drawn-out proceedings before the Commission. As researchers at MIT led by David Clark recently noted, there is not a "widespread congestion problem among the U.S. providers."²¹⁴ In fact, the report noted that most of the observed congestion related to Netflix traffic, and that "it would appear that all parties are moving toward adequate resolution."²¹⁵ Thus, Netflix's recent agreements with AT&T, Comcast, Time Warner Cable, and Verizon are not symptoms of a problem, as some have claimed.²¹⁶ Instead, these agreements are examples of the continued success of market-based arrangements in accommodating the continued explosive growth and evolution of the Internet.

2. The Calls By Netflix and Others For Heavy Regulation of Internet Interconnection With ISPs Are Nothing More Than An Effort to Reduce the Costs of Their Particular Business Models. There Is No Reason For the Commission to Intervene In This Well-Functioning Market.

Despite this long history of success, a group of commenters led by Netflix, Cogent, and Level 3 suggests that the Commission extend regulation to control all aspects of Internet interconnection. Their proposals include rules requiring ISPs to provide free interconnection, requiring ISPs to promptly increase interconnection capacity whenever there is congestion, and prohibiting ISPs from entering into interconnection arrangements that give any content provider

²¹⁴ MIT Information Policy Project, *Measuring Internet congestion: A preliminary report*, at 2 (2014), https://ipp.mit.edu/sites/default/files/documents/Congestion-handout-final.pdf.

²¹⁵ *Id.*

²¹⁶ See Comptel Comments at 9 (stating that "recent developments in the interconnection marketplace (such as Netflix's interconnection contracts with Comcast and Verizon) illustrate broadband providers' incentives to force content providers to pay them directly . . . ").

a "preference or advantage."²¹⁷ These proposals amount to nothing more than an attempt by Netflix and its allies to reduce the cost of their particular business models and shift all costs to ISPs' subscribers. There is no reason for the Commission to upset the well-functioning market for Internet traffic exchange in order to play favorites.

Adopting any of the rules proposed by Netflix and its allies would be a radical departure from the existing market-based approach for Internet interconnection. Level 3 somehow contends that these types of proposals seek only "light-touch" oversight and that Level 3 "is not advocating supplanting negotiated peering agreement with some kind of tariffed regime."²¹⁸ Far from being a "light touch," however, these regulations would be a knockout blow to the successful regime of leaving Internet interconnection arrangements to commercial negotiation. Why would any party negotiate an interconnection agreement with an ISP when it can have interconnection and unlimited, augmented capacity for free?

The proponents of regulation of Internet interconnection assert that the same hypothetical incentives that broadband providers allegedly have to "threaten the openness of [a] consumer's last-mile broadband connection are present at the point of interconnection."²¹⁹ However, as Verizon explained in our opening comments,²²⁰ our business model depends on a market-driven

²¹⁷ Netflix Comments at 17 (proposing rule that "terminating ISPs cannot charge data sources for interconnection and must provide adequate no-fee interconnection to wholesalers and Internet services"); Comptel Comments at 29-30 (stating that the Commission should not tolerate "anticompetitive practices" including "refusal to expand interconnection," "charges for interconnection," and "giving [a]ny preference or advantage . . . to some [content] providers over others" on terms such as "interconnection locations or rates."); Level 3 Comments at 15 (prosing that "[i]f Internet content is delivered locally . . . the mass-market retail ISP must accept the traffic and deliver it to its customer without charging a fee" and "[i]f interconnection capacity is congested at any interconnection location, it must be promptly augmented"); Cogent Comments at 20-21 (proposing that as part of commercial-reasonableness standard, an ISP should be "oblig[ed] to remedy a sustained state of congestion" with another network and to do so for free).

Level 3 Comments at 14.

²¹⁹ Comptel Comments at 26.

²²⁰ Verizon Comments at 5-10.

open Internet. Verizon has invested tens of billions to build its wired and wireless broadband networks, and the only way to recoup those investments is to win and retain customers by offering them access to the services and features they demand. Verizon has no incentive to cause congested Internet interconnection ports for Netflix or any other traffic because we would risk losing customers to other ISPs that are able to provide uncongested access to the content that our customers demand. Moreover, we increasingly rely on the Internet services of other broadband providers to serve our customers and support the strategic services that Verizon has invested in, such as our over-the-top services and our EdgeCast content delivery network. If other broadband providers were to refuse to negotiate reasonable forms of interconnection for access to those networks, these services would be at risk and we would lose customers. Thus, the suggestion that we have incentives to undercut Internet openness—whether in the last mile, at interconnection points, or anywhere else in the Internet—fundamentally misunderstands our business.

Ignoring the history of the Internet interconnection market, the proponents of regulation claim that any payment for interconnection with an ISP amounts to an arbitrary "toll." As explained above, however, there is nothing new about paid forms of Internet interconnection they have been around as long as the commercial Internet—and we already have agreements that provide for payment from companies that account for a majority of peak period Internet traffic. Moreover, such payments are rational. When the traffic exchange is not balanced, payments are a means for the net sending party to help compensate the net receiving party for its greater relative costs to handle the other party's traffic. Thus, statements by Netflix calling such payments arbitrary "access tolls"²²¹ are nothing more than an effort to avoid the costs associated

²²¹ Netflix Comments at 25.

with Netflix's unprecedented volumes of traffic that other content providers and CDNs including Verizon's EdgeCast— have always incurred to deliver content.

Of course, the costs that one network imposes on another when it sends a disproportionately large amount of traffic would not disappear under the rules proposed by Netflix and its allies. Instead, those costs would shift-from Netflix to ISPs' end-user customer base. Contrary to Level 3's attempt to downplay the costs that high volumes of imbalanced Internet traffic impose,²²² Verizon incurs substantial costs to augment capacity in the routers and links throughout its network as traffic grows, and establishing new connections with other networks can take significant time and money, depending on the circumstances. By mandating that ISPs provide zero-cost interconnection with mandatory interconnection and unlimited capacity upgrades whenever there is congestion, the rules proposed by Netflix and its allies would force ISPs to pass costs onto their entire consumer base to recover the costs of handling the high volume of traffic received from Netflix and other large content providers. This cost shifting would be profoundly unfair. Instead of Netflix—and ultimately its users—bearing the costs of the capacity needed to accommodate the increased traffic caused by Netflix's streaming video service, all of an ISP's customers would have to pay more, even if they never use Netflix or stream movies at all.

Moreover, Netflix's myopic focus on payments completely ignores other key terms of Internet interconnection agreements that provide value to the parties. Those terms can include regular monitoring and coordination between the parties on topics such as forecasted traffic, location of the traffic, traffic monitoring, augmenting capacity, and other issues that are critical

Level 3 Comments at 12-13 (stating that network costs of handling additional traffic are "unrelated to any cost due to interconnection" and that "the cost of augmenting interconnection . . . is nominal and not an issue").

to ensuring high quality service for traffic delivered to end users on Verizon's network. For its part, Verizon invests hundreds of millions of dollars annually in its network to ensure adequate capacity for continued traffic growth. However, there are many options available for large content providers like Netflix to deliver traffic to our network, and those content providers can switch quickly between those options. Therefore, absent close planning and coordination, adding capacity for interconnection partners any time congestion begins to occur could turn into a game of whack-a-mole that leads to significant risks of stranded capital and wasted resources. Individually negotiated interconnection agreements that address planning and coordination help ensure that Verizon invests in the right kinds of facilities, in the right places, and at the right times, all so that end users receive a high quality Internet experience from Verizon and edge providers. Under the regime of zero-cost interconnection proposed by Netflix and its allies, Commission-imposed terms would apply and the benefits of individually-tailored terms for planning, coordination, and other issues would be lost.

There is no reason for the Commission to venture down the risky path proposed by the likes of Netflix, Cogent, and Level 3. As Akamai has recognized, a "relaxed regulatory environment" has been key to investment and innovation in the Internet ecosystem and the Commission should avoid imposing "unnecessary regulatory overlays that risk adding uncertainty" and "limiting innovation."²²³ Here, the system of voluntary market-based Internet interconnection arrangements has worked well for decades and continues to result in innovative ways of addressing new business models that arise. The Commission should not disrupt this well-functioning market.

Akamai Comments at 2, 9.

B. The Record Shows That There Is No Reason to Apply Open Internet Rules to Specialized Services.

The record reflects widespread agreement that the Commission should continue to allow flexibility for providers to develop and offer specialized services, and that any open Internet rules should not apply to such services. The *Open Internet Order* described specialized services as "other services [provisioned] over the same last-mile connections used to provide broadband service."²²⁴ The Commission excluded specialized services from the scope of the *Open Internet Order* because such services "differ from broadband Internet access service and may drive additional private investment in broadband networks and provide end users valued services, supplementing the benefits of the open Internet."²²⁵ The *NPRM* proposes to follow this same approach.²²⁶

A variety of parties support this proposal. For example, Cisco states that open Internet rules should not apply to specialized services because "[p]roviders must retain the ability to develop and offer innovative new managed services to customers who value these products."²²⁷ According to Alcatel-Lucent, "the Commission should defer to service providers and consumers, who should be free to (continuously) decide the future set of specialized services and the performance required for an optimal user experience."²²⁸

Although some parties raise concerns that broadband providers could use the exemption for specialized services to evade open Internet requirements, these parties generally recognize that the Commission's continued monitoring of specialized services "will allow the Commission

²²⁴ Open Internet Order ¶ 7.

²²⁵ *Id.* ¶ 112.

²²⁶ See NPRM ¶ 60.

²²⁷ Cisco Comments at 16.

²²⁸ Alcatel-Lucent Comments at 18.

to respond to any concerns that arise in connection with specific practices without unduly hampering providers' ability to innovate in the provision of specialized services generally."²²⁹ There is no evidence that broadband providers have used specialized services to undermine the open Internet or to limit the growth or capacity available for broadband Internet.²³⁰ Thus, any concerns in the record about possible abuses involving specialized services do not provide a basis for the Commission to depart from its restrained approach.

Similarly, the Commission should reject the handful of parties calling for a more specific definition of specialized services. As recognized by Cisco, specialized services "are nascent services and the Commission should allow them to evolve without trying to cabin them with a particular definition."²³¹ According to Alcatel-Lucent, "[t]he specialized services demanded by consumers 12 months from now may not even exist today, given the dynamic nature of the application, web service and cloud service marketplace."²³² Given that specialized services are still in their infancy and are evolving rapidly, the *Open Internet Order*'s definition—"other services [provisioned] over the same last-mile connection used to provide broadband service"²³³—is appropriate. Nevertheless, parties such as Comptel urge the Commission to follow the footsteps of the European Parliament and impose a more technical definition.²³⁴ This

²³³ Open Internet Order ¶ 7.

²²⁹ Microsoft Comments at 28; *see also* CDT Comments at 25 (stating that "the Commission should echo its commitment from its 2010 order to 'closely monitor' marketplace developments 'with a particular focus on any signs that specialized services are in any way retarding the growth or constricting the capacity available for broadband Internet access service') (*quoting Open Internet Order* ¶¶ 113-14).

²³⁰ See Cisco Comments at 15 ("Nor is there any evidence that specialized services give rise to any serious anticompetitive or anti-consumer conduct.").

²³¹ Cisco Comments at 15-16.

Alcatel-Lucent Comments at 18.

²³⁴ Comptel Comments at 32 ("Additionally, the Commission should adopt the following definition of "specialized services," which is modeled after the European Parliament's definition: 'an electronic communication service optimized for specific content, applications or services, or a combination thereof, provided over logically

would be a mistake. According to the European Telecommunications Network Operators' Association, the European Parliament's definition has been "judged impracticable by many operators and observers."²³⁵ Instead of going down this path, the Commission should retain its existing definition, which, according to Cisco, "will best enable the industry to experiment with and explore new types of specialized services, thereby driving additional private investment in broadband networks."²³⁶

C. The Record Shows That There Is No Reason to Apply Open Internet Rules to Enterprise Services.

As Verizon argued in its opening comments, the Commission should adopt its tentative conclusion to continue to exclude enterprise services from its open Internet rules.²³⁷ The Commission has observed that enterprise services, such as virtual private network services, hosting, and data storage services, "typically are not mass market services and/or do not provide the capability to transmit data to and receive data from all or substantially all Internet endpoints."²³⁸ Moreover, enterprise services "are typically offered to larger organizations through customized or individually negotiated agreements."²³⁹ As explained in Verizon's opening comments, the Commission should refrain from disturbing this highly competitive marketplace because imposing Commission-mandated terms could render certain enterprise offerings uneconomic and/or undesirable.²⁴⁰

- ²³⁶ Cisco Comments at 15-16.
- ²³⁷ See NPRM ¶ 58; Verizon Comments at 77-78.
- ²³⁸ Open Internet Order ¶ 47.

distinct capacity, relying on strict admission control, offering functionality requiring enhanced quality from end to end, and that is not marketed or usable as a substitute for Internet access service."").

ETNO Comments at 4.

²³⁹ NPRM ¶ 58 (citing Open Internet Order ¶ 45).

²⁴⁰ Verizon Comments at 78.

VII. CONCLUSION

Because the Commission's light-touch approach to Internet regulation has reaped enormous consumer benefits over the last two decades, the Commission should stay that course and not adopt any new rules. But if the Commission finds that new rules would best protect consumers and prevent any harm to competition, it should pursue a balanced approach that relies primarily on informed consumer choices, while still allowing flexibility to meet consumers' evolving demands. Mobile wireless should receive an especially light regulatory touch; and the Commission should not extend the current rulemaking beyond the last mile. Above all, the Commission should reject the dangerous path of Title II "reclassification," which would be a radical reversal and would harm consumers, investment, and the continued development of the Internet.

Respectfully submitted,

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