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EXECUTIVE SUMMARY

Safeguarding incentives for private investment is the best way to preserve the open Internet. From private capital comes new and competing edge services, which in turn spur network development and deployment and prompt more investment in new edge services. The “virtuous cycle of innovation” lauded by the Commission is real.

This proceeding offers the Commission a unique opportunity to lay the groundwork for the next stage of investment in, and development of, edge services. To encourage future investment in broadband, the Commission should strive to accomplish four policy goals in *every* decision it makes in this proceeding:

1. Offer a clear way forward.
2. Ensure fair competition.
3. Foster permissionless innovation.
4. Maintain low capital entry barriers.

Incorporating these goals into its decision-making will preclude the Commission from reclassifying broadband under Title II. Reclassification does not offer a clear way forward because it is legally tenuous, unduly burdensome and riddled with ambiguities that will take years to resolve. Reclassification would not foster fair competition any more effectively than the Commission rules promulgated under Section 706, but it has the added disadvantage of generating

legal and practical uncertainties that are anathema to the investment community. Nor will reclassification foster permissionless innovation—in fact, it may kill the modern culture of experimentation and innovation in edge services—or lower capital barriers to enter the edge services market. In short, reclassification will only stunt future innovation in broadband.

Fidelity to these policy objectives also requires that the Commission clarify what it means by “commercially unreasonable” behavior. The Commission should expressly find that a “minimum level of access” is the “best-efforts” of an ISP consistent with an end-user’s broadband service; ensure that the Commission’s permitted “commercially reasonable” discrimination does not entrench incumbent edge providers at the expense of fair competition; and provide that “commercially reasonable” discrimination does not require edge providers to negotiate priority arrangements with ISPs in order to enter a particular market.

INTRODUCTION

CALinnovates is an organization that brings together stakeholders in the technology and startup communities with government leaders and policymakers. Our members include C-level executives, venture capitalists, entrepreneurs, and other individuals committed to preserving and improving advancements in innovative technology.¹ We aim to ensure a careful and considered approach to policies impacting the dynamic high-tech sector. CALinnovates also works to educate the public on the latest innovations and uses of technology.

Private capital is critical to maintaining the “virtuous cycle of innovation” that has been widely recognized as fuelling the explosive growth and utilization of broadband. Indeed, private investment has spurred many of the most significant advances in broadband and edge services in recent years.² For instance, Google’s fiber-optic network, Google Fiber, has deployed in three metro areas and Google asserts it has “started early discussions with 34 cities in 9 metro areas around the United States.”³ With respect to edge services, the application SnapChat launched in September, 2011 and in just three years exploded to users sharing over 700 million photos *every day*.⁴ SnapChat was able to achieve this astronomic growth

¹ CALinnovates, *About Us*, <http://www.calinnovates.org/about-us-2-2/>.

² *In the Matter of Protecting and Promoting the Open Internet*, GN Dkt. No. 14-28, Notice of Proposed Rulemaking, at ¶ 30 (rel. May 15, 2014) (“NPRM”).

³ The Future of Fiber, Googlefiber, <https://fiber.google.com/newcities/> (last visited September 2, 2014).

⁴ See Alyson Shontell, *5 Months After Turning Down Billions, Snapchat’s Growth is Still Exploding*, Business Insider (May 2, 2014), <http://www.businessinsider.com/snapchat-growth-2014-5>.

in part on the backing of over \$123 million in private investment.⁵ Increasing these types of investments is imperative if robust and dynamic innovation in broadband is to continue.⁶

The Commission should take this opportunity to lay the groundwork for the next stage of investment in, and development of, edge services. This submission identifies four key principles that should be the touchstones for the Commission's analysis in this and future proceedings. *See infra* § A. It then addresses three important issues raised by the NPRM: reclassification of broadband under Title II, the regulatory framework proposed by Mozilla,⁷ and the appropriate use of Section 706 authority to preserve an open Internet. With respect to the first issue, CALinnovates strongly opposes reclassification—such a decision is legally unsupportable and would have a long-lasting, chilling effect on private investment. *See infra* § B. Second, the Commission should reject Mozilla's proposed regulatory approach: that framework is simply too untested to promote investment and is likely unenforceable. *See infra* § C. Finally, the Commission should continue on its path toward effective open Internet regulation by employing its authority under Section 706. However, it should clarify what it means by

⁵ *Hedge Fund Invests \$50M into Snapchat*, Forbes, (Dec. 11, 2013) <http://www.forbes.com/sites/jjcolao/2013/12/11/hedge-fund-invests-50-million-into-snapchat/>.

⁶ Staff Presentation, *September 2009 Commission Meeting*, at 45, 133-141 (Sept. 29, 2009), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-293742A1.pdf (“*September 2009 Staff Presentation*”).

⁷ *See* Comments of Mozilla, *In the Matter of Protecting and Promoting the Open Internet*, GN Dkt. No. 14-28 (filed July 14, 2014) (“*Mozilla July Comment*”); Petition of Mozilla to Recognize Remote Delivery Services in Terminating Access Networks, GN Dkt. Nos. 09-191, 10-127, 14-28 (filed May 5, 2014) (“*Mozilla May Petition*”).

“minimum level of access” and “commercially unreasonable” behavior in accordance with the four guiding principles detailed in this submission. *See infra* § D.

DISCUSSION

A. Four key principles to preserve investment in broadband.

CALinnovates believes that four principles should guide the Commission’s rulemaking efforts in order to ensure continued high levels of private investment in broadband innovation:⁸

1. **Offer a clear way forward.** Clear expectations and foreseeable results are critical to any potential investor. The Commission must enact rules that reduce uncertainty and risk to encourage private capital investment.

2. **Ensure fair competition.** Investment will only thrive in an ecosystem where the quality of a service determines success in the marketplace. Preservation of competition on the merits, particularly among edge providers, cannot be compromised in favor of a regulatory regime that rewards only incumbents or entrants with deep pockets. Specifically, the Commission must ensure that:

⁸ These principles focus on the Commission’s treatment of wireline broadband access. CALinnovates does not believe that further regulation of wireless broadband is needed or warranted.

- a. *“Fast lanes” are not allowed to develop.* This form of paid prioritization will only entrench incumbent services at the expense of investment and innovation.⁹
- b. *Broadband providers are not allowed to block lawful services.* There is no faster way to threaten investment in edge services than to allow last-mile broadband providers to control what lawful services an end-user may access.¹⁰ Few investors would risk their resources on a venture that could be swiftly and permanently shut-down by a broadband provider that might seek to offer a similar service.
- c. *Transparency is robust.* Any prioritization that the Commission permits, whether it be “commercially reasonable” prioritization or otherwise, must be disclosed to the market. Potential investors demand accurate and up-to-date information on market conditions before committing their capital. Rules that mandate clear and complete disclosure of prioritization

⁹ Statement of Chairman Tom Wheeler, Notice of Proposed Rulemaking, *In the Matter of Protecting and Promoting the Open Internet*, GN Dkt. No. 14-28 (rel. May 15, 2014) (“The potential for there to be some kind of ‘fast lane’ available to only a few has many people concerned. Personally, I don’t like the idea that the Internet could become divided into ‘haves’ and ‘have nots.’ I will work to see that does not happen. In this Item we specifically ask whether and how to prevent the kind of paid prioritization that could result in ‘fast lanes.’”).

¹⁰ *Preserving the Open Internet*, GN Dkt. No. 09-191, Report and Order, 25 FCC Rcd 17905, 17941-42, ¶ 62 (2010) (“Open Internet Order”) (“The freedom to send and receive lawful content and to use and provide applications and services without fear of blocking is essential to the Internet’s openness and to competition in adjacent markets such as voice communications and video and audio programming.”).

practices should be part of whatever regulatory scheme is adopted.¹¹

3. **Foster permissionless innovation.** A defining feature of the creation and development of edge services in this country to date has been the relative lack of regulatory or infrastructure hurdles faced by potential entrants. This culture of creation has led to widespread experimentation, which in turn has attracted robust capital investment and competition. The Commission should preserve this dynamism by minimizing restraints on edge service providers' access to end users.¹²
4. **Maintain low capital entry barriers.** Direct Commission regulation of edge services, or even the threat of such regulation, would inevitably increase the level of startup capital necessary to establish and operate these businesses. The need for increased capital under Title II will lead some would-be innovators to forego projects that they otherwise would have undertaken. Edge services should not be forced to adhere to regulations that would suppress new ideas or hamstring the entrepreneurs who develop them. Similarly, any rule

¹¹ NPRM at ¶ 63 (“effective disclosure of broadband providers’ network management practices, performance, and commercial terms of service promotes competition, innovation, investment, end-user choice, and broadband adoption.”) (citing *Open Internet Order* at ¶ 53).

¹² NPRM at ¶ 1 (“As the Commission explained in its 2010 Open Internet Order, the Internet’s open architecture allows innovators and consumers at the edges of the network ‘to create and determine the success or failure of content, applications, services and devices,’ without requiring permission from the broadband provider to reach end users.”).

allowing entrenched edge services to purchase “fast lanes” would require prospective entrants to pay for similar access just to have a chance at competing. Startup edge services should not be forced to bid against deep-pocketed giants for their share of bandwidth. The Commission’s rules should not impose what would effectively be a higher barrier to entry by startups.¹³

B. The Commission should not reclassify broadband under Title II.

Several commenters have argued in favor of reclassifying broadband access as a Title II telecommunications service,¹⁴ asserting that reclassification will not adversely affect private investment in related services and infrastructure.¹⁵ But those assertions are untenable.¹⁶

Reclassification does not offer a clear way forward. The venture capital community has warned of the likely adverse effects of reclassification on private investment. As Jack Crawford, general partner at Velocity Venture Capital noted:

¹³ NPRM at ¶ 1 (“As a ‘general purpose technology,’ the Internet has been, and remains to date, the preeminent 21st century engine for innovation and the economic and social benefits that follow. These benefits flow, in large part, from the open, end-to-end architecture of the Internet, which is characterized by low barriers to entry for developers of new content, applications, services, and devices and a consumer-demand-driven marketplace for their products.”).

¹⁴ See, e.g., *Free Press Comments* at 99-111.

¹⁵ See Comments of Electronic Frontier Foundation, *In the Matter of Protecting and Promoting the Open Internet*, GN Dkt. No. 14-28 at 13-17 (filed July 15, 2014) (“EFF Comments”); Comments of Free Press, *In the Matter of Protecting and Promoting the Open Internet*, GN Dkt. No. 14-28 at 90-112 (filed July 17, 2014) (“Free Press Comments”); Comments of Public Knowledge, Benton Foundation, Access Sonoma Broadband, *In the Matter of Protecting and Promoting the Open Internet*, GN Dkt. No. 14-28 at 3-22 (filed July 15, 2014) (“Public Knowledge Comments”).

¹⁶ See Letter from Representative Gene Taylor, Representative Gene Green, et al., to Julius Genachowski, Chairman, FCC (May 24, 2010), http://netcompetition.org/House_Democrat_Letter.pdf; Comments of the Department of Justice, Economic Issues in Broadband Competition; A National Broadband Plan for Our Future, GN Docket No. 09-51, at 28 (Jan. 4, 2010).

“If the Internet had been regulated like water or gas, I highly doubt we would have seen the advent of things like Google Fiber or connected cars.”¹⁷ Mr. Crawford predicts that if the Commission moves forward with reclassification, “regulated broadband [in 80 years] would look a lot like it does today. Let’s not veer down that path.”¹⁸

The disincentives for future investment will be increased by the lengthy (and likely meritorious) legal challenges that would undoubtedly follow reclassification. In 2002, the Commission determined that broadband is properly considered an “information service” and therefore necessarily not a “telecommunications” service.¹⁹ The Commission came to this conclusion because broadband providers offered users transmission capabilities integrated with information services, such as DNS look-up, web-hosting, e-mail, and the like.²⁰ The Supreme Court agreed with the Commission’s classification in its 2005 *Brand X* decision.²¹ As the Supreme Court made clear in *FCC v. Fox*, the Commission must have a factual basis for reversing fact-based decisions.²² There is no such basis for reversing the Commission’s 2002 fact-based decision that broadband providers offer

¹⁷ Mike Montgomery, *We Need Net Neutrality Policies, But ‘30s Regs Aren’t the Way to Do It*, Medium.com, <https://medium.com/@calinnovates/we-need-net-neutrality-but-30s-regs-arent-the-way-to-do-it-b43144c4e9df>.

¹⁸ *Id.*; see Mike Montgomery, *How the FCC Can Save Net Neutrality and Still Ruin the Internet*, (Aug. 15, 2014), http://www.huffingtonpost.com/mike-montgomery/how-the-fcc-can-save-net-_b_5680464.html.

¹⁹ Declaratory Ruling, *Inquiry Concerning High-Speed Access to the Internet over Cable and Other Facilities*, 17 FCC Rcd 4798, 4825, 4828-31 ¶¶ 44, 52-55 (2002) (“*Cable Modem Order*”).

²⁰ See *Cable Modem Order*, 17 FCC Rcd at 4822-23 ¶ 38.

²¹ *Nat’l Cable & Telecomm. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967 (2005).

²² *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009) (when an agency decision “rests upon factual findings that contradict those which underlay its prior policy” it must “provide a more detailed justification than what would suffice for a new policy created on a blank slate”).

transmission capabilities integrated with information services. On the contrary, broadband providers' offerings have only become *more* integrated since the Supreme Court's decision in *Brand X*.²³ Any Commission decision to reclassify broadband would be one completely divorced from data, facts, and reality.²⁴

When investors determine whether to provide startups with capital, they assess both short term and long term costs and risks. The fewer risks (or lower costs) there are, the more attractive an investment becomes. Reclassification (and the inevitable legal battles that would accompany it) would be anathema to venture capitalists by increasing the risks associated with any startup in the broadband space, without any certain reward.²⁵ Even misguided *proponents of reclassification* concede that reclassification will “spur an immediate legal battle and could expose carriers to outdated and excessively detailed regulation of their operations and business practices. These are significant complications”²⁶

²³ See Comments of Verizon and Verizon Wireless, *In the Matter of Protecting and Promoting the Open Internet*, GN Dkt. No. 14-28 at 3-22 (filed July 15, 2014), Declaration of Andres V. Lerner, *Competition in Broadband and “Internet Openness”* at ¶ 56 (“Broadband providers are also offering subscribers enhanced services, such as control of their home TV via smartphone and tablet applications. For instance, Verizon offers a My FiOS application, which not only allows users to use their tablet or smartphone as a remote control, but also allows for remote setting of their DVR and management of their Verizon account to pay bills, listen to voicemail, review call logs and get technical support. Comcast’s Xfinity has a mobile app that allows users to change channels on their TV, schedule DVR programming remotely, search program listings, and watch on demand shows.”).

²⁴ See *Fox Television Stations*, 556 U.S. at 537 (Kennedy, J., concurring in part and in judgment) (an “agency cannot simply disregard contrary or inconvenient factual determinations that it made in the past”).

²⁵ See Comments of Consumer Electronics Association, *In the Matter of Protecting and Promoting the Open Internet*, GN Dkt. No. 14-28 at 11 (filed July 15, 2014) (“[I]f the Commission pursues Title II regulation, the result almost certainly will be further litigation and regulatory uncertainty. Whether through complicated forbearance proceedings and/or judicial appeals, prolonged instability over ‘rules of the road’ for Internet openness will deter investment and innovation and divert Commission resources from critical regulatory priorities.”).

²⁶ Comments of Center for Democracy & Technology, *In the Matter of Protecting and Promoting the Open Internet*, GN Dkt. No. 14-28 at 3 (filed July 17, 2014).

The forbearance approach to reclassification urged by some commenters would only exacerbate this uncertainty.²⁷ *First*, the Internet ecosystem would have no definitive guidance about which provisions of Title II were applicable to which services; there is no certainty that the current Commission (to say nothing of future Commissions) will adhere to any forbearance decision it makes. The Federal-State Joint Board on Universal Service has already acknowledged the negative effect that this potential back-and-forth could have on innovation.²⁸ *Second*, even if the Commission settled on which provisions to suspend with respect to broadband, that decision would likely trigger its own legal battles. As the Open Internet proceedings have demonstrated, various interests are willing to litigate Commission decisions at every turn. A decision as to which aspects of Title II to impose would be no different. In short, reclassification is a recipe for uncertainty and risk in the broadband market—both of which will reduce the incentive to invest in edge services.

In exchange for this uncertainty and risk, **reclassification will not ensure fair competition** any more than rules promulgated under Section 706. Proponents

²⁷ Comments of Information Technology and Innovation Foundation, *In the Matter of Protecting and Promoting the Open Internet*, GN Dkt. No. 14-28 at 10 (filed July 15, 2014) (“*ITIF Comments*”) (“determining the boundary of Title II through forbearance would be a difficult and complex process the Commission should seek to avoid.”).

²⁸ Report to Congress, Federal-State Joint Board on Universal Service, 13 FCC Rcd 11501, 11525 ¶ 47 (1998) (“*Stevens Report*”) (“Notwithstanding the possibility of forbearance, we are concerned that including information service providers within the ‘telecommunications carrier’ classification would effectively impose a presumption in favor of Title II regulation of such providers. Such a presumption would be inconsistent with the deregulatory and procompetitive goals of the 1996 Act. In addition, uncertainty about whether the Commission would forbear from applying specific provisions could chill innovation.”).

of reclassification rely primarily on Sections 201 and 202 to prevent “fast lanes” and other types of unhealthy prioritization from developing.²⁹ Section 201 requires “[a]ll charges, practices, classifications, and regulations for and in connection with [a] communication service” to be “just and reasonable,”³⁰ and Section 202 similarly prohibits “unjust or unreasonable discrimination.”³¹ The text of these statutes does not *per se* prevent any type of conduct. Rather, they are vague rules that rely primarily on enforcement standards and considerations to deter unwanted conduct. As such, Sections 201 and 202 are no different than the Commission’s present proposed rule regarding discrimination, which would forbid “commercially unreasonable” action. As the ITIF noted in its comments, “[i]t is unclear to what extent a standard of ‘commercially reasonable’ would end up being materially different from one of ‘unjust and unreasonable.’”³²

Some comments have proposed the Commission interpret any form of prioritization as inherently unjust or unreasonable under Sections 201 and 202.³³ Although CALinnovates agrees with the sentiment that clear standards are needed to determine what forms of prioritization should be restricted, *see infra* at 18-21,

²⁹ See *e.g.*, *Public Knowledge Comments* at 102 (“Title II allows for rules prohibiting discrimination” and citing Sections 201 and 202).

³⁰ 47 U.S.C. § 201(a).

³¹ 47 U.S.C. § 202(a).

³² *ITIF Comments* at 9.

³³ See, *e.g.*, Comments of New America Foundation, *In the Matter of Protecting and Promoting the Open Internet*, GN Dkt. No. 14-28 at 24-25 (filed July 17, 2014) (“The Commission could, by reclassifying broadband access service under Title II, implement a bright-line rule that creates a presumption against discrimination under § 201, which requires that all charges, practices classifications, and regulations of communications services be just and reasonable.”).

the Commission should avoid this type of *per se* rule.³⁴ Commenters who support such a regulation are willing to trade a reasoned “case-by-case analysis that identifies and prevents conduct that is unreasonable” with a rigid “*ex ante* ban.”³⁵ As history demonstrates, rigid regulatory environments do not give innovators the breathing space they need to experiment and attract investment.³⁶

Reclassification will not foster the type of permissionless innovation and open environment that have allowed edge services to flourish thus far, notwithstanding assertions to the contrary.³⁷ “Edge providers create tremendous value in the Internet. And that value is rooted in the fact that they can innovate without permission from governments or the companies that provide access to the Internet.”³⁸ As Yo Yoshida, Founder & CEO of Appallicious, a San-Francisco-based civic startup operating in the open government space, stated: “Without the freedom for people to innovate without government oversight—what’s known as “permissionless innovation”—it’s doubtful the Internet would be where it is

³⁴ See *ITIF Comments* at 3 (noting ITIF’s longstanding belief that the Commission should “allow[]for case-by-case analysis of acceptable traffic prioritization.”).

³⁵ *Id.* at 9.

³⁶ Christopher S. Yoo, *U.S. v. European Broadband Deployment: What Do The Data Say*, University of Pennsylvania Law School (June 2014), <https://www.law.upenn.edu/live/files/3352-us-vs-european-broadband-deployment> (noting greater private investment in broadband in the United States than in European countries where broadband is regulated more akin to a utility).

³⁷ See *EFF Comments* at 16 (noting that the Commission could seek ‘permissionless innovation’ under Title II); See Comments of Comptel, *In the Matter of Protecting and Promoting the Open Internet*, GN Dkt. No. 14-28 at 15 (filed July 15, 2014) (“Public policy should protect the great driving force of the open Internet: how it allows innovation without permission. This is why it is essential that the FCC continue to maintain an open Internet and maintain the legal ability to intervene promptly and effectively in the event of aggravated circumstances. Reclassifying the transmission component of Internet access service as a Title II service would give the Commission the anti-discrimination and anti-blocking tools necessary to maintain an open Internet while retaining the information service classification of Internet service itself.”).

³⁸ See Comments of The Internet Association, *In the Matter of Protecting and Promoting the Open Internet*, GN Dkt. No. 14-28 at 6 (filed July 14, 2014) (advocating for “light touch” regulation).

today.”³⁹ CALinnovates is very concerned that reclassification will impose Commission regulation directly upon edge services as well as last-mile providers.⁴⁰ Any such regulation would make it more difficult for edge services to experiment and operate, and thus to attract investment. As Lloyd Mario of Avetta stated, “In this business, we’re iterating on the fly, A/B testing different features and changing pricing models frequently. I don’t have the time to wait patiently for the conclusion of a regulatory process that I frankly don’t understand and can’t afford.”⁴¹ This sentiment, which is widely shared by the venture capital community, is proof positive of the disastrous effect reclassification will have on investment.

The imposition of Commission regulation in edge services—or even the threat of such regulation—under Title II **is precisely the type of entry barrier that must be avoided**. The culture of experimentation that has led to a

³⁹ Mike Montgomery, *We Need Net Neutrality Policies, But ‘30s Regs Aren’t the Way to Do It*, Medium.com, <https://medium.com/@calinnovates/we-need-net-neutrality-but-30s-regs-arent-the-way-to-do-it-b43144c4e9df/>; see Mike Montgomery, *How the FCC Can Save Net Neutrality and Still Ruin the Internet*, (Aug. 15, 2014), http://www.huffingtonpost.com/mike-montgomery/how-the-fcc-can-save-net-_b_5680464.html.

⁴⁰ See *ITIF Comments* at 9-10 (“What’s worse, classifying broadband as a Title II ‘telecommunications service’ potentially brings many Internet edge services into regulatory reach.”); Comments of National Cable & Telecommunications Association, *In the Matter of Protecting and Promoting the Open Internet*, GN Dkt. No. 14-28 at 24 (filed July 15, 2014) (Any reclassification approach also would put the Commission on a slippery slope toward the imposition of Title II regulation on a wide array of other services in the Internet ecosystem.”); Comments of Alcatel-Lucent, *In the Matter of Protecting and Promoting the Open Internet*, GN Dkt. No. 14-28 at 2 (filed July 15, 2014) (“Application of Title II regulation would risk chilling investment in infrastructure, as well as opening up a Pandora’s Box of proceedings covering the legal classification of edge services that also have thrived in a largely unregulated environment. As such, Alcatel-Lucent urges the Commission not to regulate broadband Internet access services under Title II of the Communications Act.”).

⁴¹ Mike Montgomery, *We Need Net Neutrality Policies, But ‘30s Regs Aren’t the Way to Do It*, Medium.com, <https://medium.com/@calinnovates/we-need-net-neutrality-but-30s-regs-arent-the-way-to-do-it-b43144c4e9df/>; see Mike Montgomery, *How the FCC Can Save Net Neutrality and Still Ruin the Internet*, (Aug. 15, 2014), http://www.huffingtonpost.com/mike-montgomery/how-the-fcc-can-save-net-_b_5680464.html.

proliferation of edge service providers in the U.S. will be threatened if regulatory burdens on these nascent businesses are increased. Internet startups should not have to spend needed capital on counsel to walk them through a regulatory regime. The costs and risks associated with Title II regulation will, in turn, deter investment—venture capitalists will simply seek out businesses in other less-regulated tech industries with a more attractive risk/return profile.

C. The Commission should not regulate broadband under the framework proposed by Mozilla.

The regulatory framework proposed by Mozilla is not a viable alternative to reclassification because it too **does not offer a clear way forward**. Mozilla has effectively proposed splitting the Internet into two regulatory frameworks.⁴² The first is characterized by an ISP’s relationship with its own subscribers, which Mozilla terms a “Side A” relationship.⁴³ The second is an ISP’s relationship with “a remote endpoint,” such as an edge provider, which Mozilla terms a “Side B” relationship.⁴⁴ Mozilla contends that this “Side B” relationship can be regulated under Title II irrespective of how the Commission regulates “Side A.”⁴⁵ In essence, Mozilla proposes a partial reclassification of the Internet. Mozilla’s proposed framework would add even more uncertainty to broadband development

⁴² See *Mozilla July Comment* at 9-13; *Mozilla May Petition* at 10-12.

⁴³ *Mozilla May Petition* at 7.

⁴⁴ *Id.*

⁴⁵ *Id.* at 10-13.

than complete reclassification and would similarly deter investment in edge services.

Mozilla acknowledges that, “at its core,” its petition “asks the Commission to recognize a new type of service, one that has never before been classified.”⁴⁶ There is no precedent for the regulatory structure Mozilla proposes, and possibly no more uncertain framework for future broadband development. That ambiguity will leave potential investors in edge services unable to project market conditions and risk, which will lead many to put their money elsewhere.

In fact, the closest analogous service to Mozilla’s “Side B” relationship are Content Delivery Networks (“CDNs”), which also transport content from an edge service to an ISP. But the Commission has never intended to reclassify CDNs under Title II. Not only is Mozilla’s proposal at odds with the Commission’s treatment of CDNs, but if adopted will inevitably force the Commission to sweep CDNs into Title II regulation just like full reclassification. *See supra* at 11-12. The Commission must avoid this unintended, untested, and uncertain slippery slope.

The only certainty that will come from Mozilla’s proposed regulatory regime is years of protracted litigation on multiple issues. For instance, there is a significant question as to whether Mozilla’s “Side B” relationship actually falls

⁴⁶ *Mozilla July Comment* at 9.

within the scope of Title II. In order to be considered a “telecommunications service” under the Communications Act, and thereby come within the ambit of Title II, a service must satisfy at least three conditions. The service must offer “transmission . . . between or among points specified by the user, of information of the user’s choosing;”⁴⁷ that transmission must be offered “for a fee directly to the public;”⁴⁸ and be provided “without the capability of providing enhanced functionality,” such as that provided by an “information service.”⁴⁹ It is debatable whether an ISP’s “Side B” relationship meets any of these requirements.

First, there is ambiguity as to whether the “Side B” relationship identified by Mozilla sends information “of the user’s choosing.” The term “telecommunications” is defined as “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.”⁵⁰ Mozilla contends that this definition “indisputably” applies to an ISP passing a remote host’s content to an ISP’s subscribers because the remote host is “still a cognizable ‘user’ and the ‘choosing’ and ‘transmission’ still reflect communications associated with the remote host.”⁵¹ However, it is unclear whether Mozilla’s position accurately defines the “user” in that definition. A remote host may be a “user” of an ISP’s

⁴⁷ 47 U.S.C. § 153(50).

⁴⁸ 47 U.S.C. § 153(53).

⁴⁹ See *Stevens Report*, 13 FCC Rcd 11520 ¶ 39 (stating that “an entity offering a simple transparent transmission path, without the capability of providing enhanced functionality, offers ‘telecommunications.’”).

⁵⁰ 47 U.S.C. § 153(50).

⁵¹ *Mozilla May Petition* at 10.

service, but it is not necessarily “the user” that is requesting the “information” contemplated in the statute. Rather, it is the ISP’s subscriber that is “choosing” information to be sent to it—the remote host does not “choose” to send information absent the end-user’s instruction. This definitional wrangling would take years to resolve and will spur investors to turn their attention to other endeavors.

The next issue is whether ISPs offer their service to “Side B” remote hosts “for a fee directly.” Mozilla argues without citation that the statute does not require “first-hand monetary payment” and in fact acknowledges that the edge providers of the “Side B” relationship are not paying the end-user’s ISP, but instead pay “the [] local access service subscriber.”⁵² The question of whether “first-hand monetary payment” is required by the Communications Act is something that would surely be litigated if Mozilla’s proposal were adopted.

Third, there is little assurance that the “Side B” service contemplated by Mozilla is separable from an information service. Indeed, the entire “Side B” relationship Mozilla has articulated necessarily depends on the existence of an information service—“deep packet inspection and other advanced network management technologies.”⁵³ Additionally, Mozilla says nothing about the security features or other information services that often come with sending an

⁵² *Mozilla July Comments* at 12.

⁵³ *Mozilla May Petition* at 7.

edge provider's traffic, all of which are not offered distinctly from the transmission of content.

These are not the only legal grounds upon which the regulatory framework proposed by Mozilla could be challenged. Mozilla's proposal relies on the existence of a new form of privity between last mile ISPs and remote edge hosts.⁵⁴ ISPs are unlikely to undertake this new legal obligation lightly. And even if the Commission did adopt Mozilla's proposal and was able to withstand the wave of litigation that would undoubtedly follow, there is still the question of what sections of Title II should be candidates for forbearance. As discussed above, forbearance proceedings would take years to sort out, lead to even further litigation, and perpetuate legal uncertainty in the broadband space—not a situation conducive to new investment. *See supra* at 9.

Moreover, there are considerable doubts as to whether Mozilla's proposal will **ensure fair competition**. As Professor Barbara van Schewick noted in her *ex parte* comments to the Commission, Mozilla's proposal "would leave edge providers that do not pay a fee unprotected against blocking or discrimination by ISPs."⁵⁵ In fact, as Professor van Schewick notes, the regulatory structure Mozilla

⁵⁴ *Mozilla May Petition* at ii, 7.

⁵⁵ *See Ex parte* notice of Barbara van Schewick, *In the Matter of Protecting and Promoting the Open Internet*, GN Dkt. No. 14-28 at 9-13 (filed August 12, 2014).

proposes may not have prevented the type of conduct that has exemplified what the Commission's Open Internet rules are trying to prevent.⁵⁶

Professor van Schewick further warns that Mozilla's proposal **will not foster permissionless innovation** or **reduce capital barriers**. “[W]hile Mozilla[’s] petition would give the FCC authority to ensure that the rates charged to edge providers are just and reasonable, it is not clear that granting the Mozilla petition would allow the FCC to actually ban access fees.”⁵⁷ Mozilla's proposed framework thus offers little real benefit while simultaneously raising several serious legal and policy uncertainties. The Commission should not adopt Mozilla's proposal.

D. The Commission should clarify the considerations that constitute blocking and “commercially unreasonable” behavior.

As explained above, neither reclassification nor Mozilla's proposal presents a viable option for preserving an open Internet, while at the same time creating the sort of regulatory certainty and breathing space that promotes innovation, competition, and investment. Accordingly, CALinnovates urges the Commission to proceed under the framework suggested by the D.C. Circuit's decision in *Verizon* and reflected in the NPRM, which provides a flexible prohibition on blocking and commercially unreasonable discrimination without reclassification.

⁵⁶ *Id.* (stating that rules under Mozilla's petition “it would not capture Comcast's blocking of BitTorrent, since Comcast was not providing a service to BitTorrent for a fee.”).

⁵⁷ *Id.*

That flexibility ensures that the Commission’s rules will not be considered a prohibited “common carrier” regulation,⁵⁸ while still fostering innovation and competition if properly designed.

Structurally, this approach advances the core principle of “permissionless innovation,” by ensuring that edge providers and broadband providers alike have the flexibility to deploy new products and business models without seeking forbearance in advance or wading through other regulatory proceedings. The resulting regulations will minimize the capital costs of new entrants to these dynamic markets by avoiding fees for “fast lanes” that could cripple edge providers and reducing the legal costs of compliance.

This approach does, however, raise one important concern: the standards governing broadband providers may not be clear enough to encourage investment and innovation. Anticipating this issue, the Commission has sought comment on the various standards that might be used to determine whether a discriminatory practice is commercially reasonable, and what constitutes a “minimum level of access.”⁵⁹ Because regulatory clarity may significantly affect the calculus of current and potential investors, it is crucial that the FCC provide more guidance on the meaning of these terms. To that end, CALinnovates proposes that the

⁵⁸ *Verizon v. F.C.C.*, 740 F.3d 623, 657-658 (D.C. Cir. 2014) (mandatory cellular roaming interconnection rule not a common carrier regulation where reasonableness of negotiated relationship subject to multi-factor assessment).

⁵⁹ See NPRM at ¶¶ 124-135.

Commission clearly articulate in the rule itself the various factors that will govern its application of the “minimum level of access” and “commercially unreasonable” standards. In particular, CALinnovates believes the Commission should expressly state:

A “minimum level of access” should require standard, “best-efforts” access consistent with the end-user’s data plan. Tying minimum access to the end-user’s data plan avoids any possibility that a broadband provider would have to expand its customers’ bandwidth simply because an edge provider developed a particularly data intensive service. But, at the same time, ensuring that broadband providers treat all traffic on at least a “best-efforts” basis—that is, without degrading their delivery of any content—will ensure that new edge providers can benefit from increasing broadband speeds as they are deployed.

“Commercially reasonable” discrimination should not entrench incumbent edge providers at the expense of fair competition. The less capital investment is required to start a business, the more likely that innovative new ideas will be able to compete in the market and succeed. Incumbent edge providers naturally have significant advantages from established user bases, brand recognition, and experience. There is no need to let them construct artificial barriers for new entrants whereby new, better services can only compete if they pay broadband providers for the right to even reach potential customers.

“Commercially reasonable” discrimination should not require edge providers to negotiate priority arrangements with ISPs in order to enter a particular market. Given the number of ISPs operating throughout the country—and the hope that more will enter in the future—it would be burdensome and probably cost-prohibitive for edge providers to have to negotiate service terms with each one before entering the market. Such requirements would plainly serve as a disincentive to potential investors.

CONCLUSION

For the foregoing reasons, the Commission should consider the four key principles identified above in each regulation enacted in this proceeding. Further, the Commission should not reclassify broadband under Title II; should reject the regulatory framework proposed by Mozilla; and should clarify the considerations that may constitute the required “minimum level of access” and “commercially unreasonable” behavior under the proposed rules.

Respectfully submitted,

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