

**Before the
Federal Communications Commission
Washington, D.C. 20554**

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

REPLY COMMENTS OF AKAMAI TECHNOLOGIES, INC.

The Commission has heard from a vast array of parties who share the common goal of Internet openness. As Akamai explained in its initial comments, it highly values an open Internet and supports the Commission’s undertaking to protect and promote this goal. In order to best protect the Internet, Akamai echoes the many commenters who urge the Commission to refrain from imposing regulations that could undermine the critical contributions that innovators like Akamai make to the Internet ecosystem. Instead, the Commission should take only those steps that are necessary to promote competition and to foster innovation. In particular, the Commission should address any legitimate concerns using only its authority under Section 706. It should refrain from imposing utility-style regulations on any aspect of the Internet ecosystem, since such regulation would surely result in uncertainty and could well deter innovation and investment.

I. CONTENT DELIVERY PLATFORMS HAVE BENEFITED CONSUMERS AND IMPROVED THE FUNCTIONING OF THE INTERNET

Many comments in this docket recognize that Content Delivery Networks (“CDNs”) and other innovative content delivery and accelerating technologies have played an instrumental role in the development of the Internet ecosystem, and have had an invaluable impact on the Internet’s growth.¹ Indeed, Akamai has reduced the need for large amounts of data to transit congested

¹ See, e.g., Comments of Cisco Systems, Inc. (“Cisco”) at 8 (“Moreover, [CDNs], and other methods of keeping traffic local, are all taking on an increasing role in supporting broadband traffic management to improve consumer

sections of the Internet by sidestepping the traditional network model of content flowing from centralized servers to end-users on a path determined by local routers. Instead, Akamai routes popular content to locations close to end-users, and uses proprietary algorithms to identify the most efficient routing of Internet traffic to avoid transmission delays. While the average consumer may know nothing about these services or even be aware that they are being utilized, providers like Akamai allow consumers to access enhanced Internet content with low latency, particularly resource-intensive content like video streaming. Innovative traffic platforms and networks have thus been key in facilitating the virtuous circle through which increased broadband Internet usage drives increased investment by service and content providers, which in turn drives further usage.²

The rise of innovative Internet technologies and services and the value they provide to the Internet ecosystem illustrates why utility-like Internet regulation is ill-advised; these are precisely the type of paradigm-shifting solutions to consumer and industry needs that have flourished in a

experience.”); Comments of the Information Technology Industry Council (“ITI”) at 2 (“network service providers and the online edge user community. . . have brought end users the virtually unlimited choices available today for online services, applications, and content.”); Comments of Information Technology and Innovation Foundation (“ITIF”) at 16 (“the rapid growth of [CDNs] has dramatically improved the ability of new companies to scale the provision of streaming video over broadband networks.”); Comments of Bright House Networks, LLC at iv (“Commercial services, new streaming techniques, [CDNs], and apps all transcended earlier limited conceptions of the Internet and have created better consumer experiences.”); Comments of Telecommunications Industry Association (“TIA”) at 7 (“[CDNs] and other methods of keeping traffic local (collectively ‘metro-only’ traffic), are taking on an increasingly larger role in supporting broadband traffic management.”); Comments of Verizon and Verizon Wireless (“Verizon”) at 38 (“This becomes all the more true as the capabilities of last-mile facilities improve and as content providers and others rely more heavily on innovative arrangements such as [CDNs], localized content storage and other similar approaches that improve the speeds and performance with which content reaches subscribers.”). Unless otherwise noted, all references to comments here are to initial comments submitted in GN Docket Nos. 14-28 and 10-127, in response to the Commission’s request for comment in *Protecting and Promoting the Open Internet*, GN Docket No. 14-28, Notice of Proposed Rulemaking, DA 14-61, 29 FCC Rcd. 5561 (2014) (“2014 Open Internet NPRM”), submitted on or around the comment submission date of July 18, 2014.

² See, *Protecting and Promoting the Open Internet*, 29 FCC Rcd. 5561, ¶ 26 (2014) (“2014 Open Internet NPRM”) (describing the “virtuous circle of innovation in which new uses of the network—including new content, applications, services, and devices—lead to increased end-user demand for broadband, which drives network improvements, which in turn lead to further innovative network uses.”).

functioning market system.³ Not only was regulation unnecessary to spur their creation, but intensive regulation would likely have limited the ability to spur innovations that upended basic assumptions about Internet architecture. As so many commenters have said, it is this fundamental flexibility of the Internet that has allowed innovators to reinvent the Internet and its uses, and which has made the Internet a bulwark of twenty-first century society and commerce.

Content delivery platforms and networks have played a key part in making the Internet what it is today. They have done so in a way that neither regulators nor industry participants would likely have predicted when, for instance, the Telecommunications Act was passed in 1996. In the present proceeding, the Commission should protect the open Internet by adopting the light regulatory touch that it has relied on to date, thereby permitting Internet innovators to flourish and to serve consumers' interests.

II. THE COMMISSION SHOULD NOT ADOPT TITLE II REGULATION FOR ANY PART OF THE INTERNET ECOSYSTEM

Akamai is fully committed to the principles of an open Internet. It agrees with the many commenters who oppose using Title II regulation in order to impose open Internet requirements on any part of the Internet.⁴ Utility-style regulation is the type of closed-system regulation that is

³ See Letter from Robert C. Barber, Counsel, AT&T to Marlene H. Dortch, Secretary, FCC, ¶ 1, GN Docket No. 14-28 (filed July 30, 2014) (explaining how Internet interconnection developed in the absence of regulations).

⁴ See, e.g., Comments of ITI at 3 (“Reclassification of broadband Internet service as a Title II service may raise difficult definitional questions. . . [and] create investment disincentives. . .”). See also, e.g., Comments of Alcatel-Lucent at 2 (“Not only would application of Title II be legally suspect, it would add a great deal of uncertainty into a market that has been successful to date.”); Comments of Consumer Electronics Association (“CEA”) at 2 (“Reclassifying broadband as a Title II service thus is unwarranted and excessive, even if the Commission were to forbear from applying certain Title II provisions to some entities.”); Comments of Cisco at 24 (“Classifying broadband Internet access service as a Title II common carrier service would necessarily cripple that freedom by exposing providers of cutting-edge broadband services to an archaic regulatory regime, enforced by a time consuming and uncertain administrative adjudication process.”); Comments of CTIA at 4 (“Application of Title II to broadband services would undercut investment and innovation and give rise to great uncertainty, all of which will harm consumers and the Commission’s broader objectives.”); Comments of ITIF at 7 (“Classification of broadband as a Title II telecommunication service is unnecessary and inappropriate.”); Comments of National Cable and Telecommunications Association (“NCTA”) at 2 (“the Commission should steer clear of pursuing a Title II reclassification theory in adopting any new rules.”); Comments of Nokia at 3 (reclassification of broadband services under Title II of the Communications Act “would create considerable

least suited to the rapidly evolving technology that has defined the Internet since its inception and least likely – in both the short and the long-term – to promote an open Internet.⁵ It is too easy to forget the stifling panoply of rules and mandates that are part of Title II regulation, which, after all, was crafted for a world of sanctioned monopoly communication networks. It is hard even to imagine imposing that sort of regulation on a world where backbone, transit, CDN, and innovative traffic platform services have thrived without regulatory prompting, and have developed ways to offer edge providers a multitude of access options to the benefit of all parties in the ecosystem.⁶ We have had a growing and vital open Internet without Title II regulation. There is simply no reason to believe that will change.

As numerous comments made clear, Title II regulation would limit the drive of innovative companies to seek new and creative solutions to industry challenges.⁷ At the same time, utility-

compliance costs and a period of tremendous uncertainty as the Commission considered which of the onerous provisions applied to common carrier services would be extended to broadband and which would be the basis of regulatory forbearance.”); Comments of Verizon at 46 (“Reclassification not only would be a radical reversal of approach; it also would be harmful, casting a regulatory pall over virtually the entire Internet ecosystem. The same theory invoked to justify Title II here would apply equally to myriad other services that include or use telecommunications.”); Letter from ACS Solutions, ADTRAN, ActiveVideo Networks, Alcatel-Lucent, Alticast, ARRIS, BlackArrow, Blonder Tongue, Broadcom, Cisco, Commscope, Concurrent Computer, Drake, dLink, Ericsson, Gainspeed, Inc., Harmonic, IBM, ILS Technologies, Intel, NetCracker Technology, NSN, Pace, Panasonic Corporation of North America, Penthera Partners, RGB, Rovi, Sandvine, Sumitomo Electric, Lightwave, Synacor, This Technology, Universal Remote Control, and Walker & Associates, to Secretary of Commerce Penny Pritzker, dated September 9, 2014 at 2 (available online at <http://www.tiaonline.org/sites/default/files/pages/Assn%20Title%20II%20letter%20FINAL.pdf>) (“Reclassifying broadband Internet access service as a Title II service would be harmful to the economy and would create unnecessary obstacles to achieving the Administration’s goal of promoting broadband deployment and adoption.”).

⁵ See Comments of CTIA at 2 (“Title II public utility regulation should be declined as it would undercut investment, stifle innovation, and give rise to uncertainty which would harm consumers”); Comments of ITIF at 8 (“reverting to an extensive utility-style regime designed for the old monopoly telephone system is wildly imprudent”); Comments of Qualcomm Incorporated at 2 (“there is no basis for the FCC to impose Title II public utility-type regulation on mobile, given that mobile is such a competitive, vibrant sector of the economy.”).

⁶ See, e.g., Comments of CenturyLink at 17; Comments of Verizon at 53.

⁷ See, e.g., Comments of Comcast at 4 (imposing Title II regulation “would be unwise in that it would stifle capital investment and dynamic innovation at the very time the Commission is seeking to encourage the deployment of higher speed services.”); Comments of CTIA at 2 (noting the FCC should “decline invitations to apply backward-looking Title II public utility regulation, which would undercut investment, stifle innovation, and give rise to great uncertainty, all of which would harm consumers.”); Comments of ITIF at 8 (“imposing restrictive common carrier regulations would undoubtedly slow innovation”); Comments of Nokia at 3 (“Reclassifying broadband services as telecommunications services subject to common carrier treatment is unnecessary and likely to produce

style regulation would create uncertainty for innovators (and their investors) whose new ideas will inevitably exist in regulatory limbo.⁸ This would be true even if Title II regulation was applied only to the broadband provider’s relationship with content providers, as Mozilla proposes.⁹ That relationship, like all parts of the Internet, is an area where technological innovation and creative problem solving remain enduring hallmarks, which Title II regulation would stifle. Indeed, utility-style regulations cannot keep up with the rapid pace of technological innovation. The Internet ecosystem has evolved—and the Commission should rest assured that it will continue to evolve—without the imposition of a Title II regulatory structure.

Similarly, adoption of Title II regulation combined with forbearance would provide an imprecise solution. Forbearance is not a magic wand, it is a highly structured and rule bound process. Even the process of deciding when and where to forebear, which would compound all the uncertainty of Title II, would likely be outmoded by the time it was complete. The lesson to be learned from innovative technology companies is that common carrier regulation is unnecessary—and most likely actively harmful—for the purpose of encouraging the type of

negative changes to the investment and innovation environment.”); Comments of Qualcomm Incorporated at 7 (reclassification as a Title II service “would limit unnecessarily opportunities for new business models, which are essential to continued investment and innovation in the mobile broadband ecosystem.”); Comments of the Wireless Internet Service Providers Association (“WISPA”) at 38-39 (classifying broadband Internet as a telecommunications service would stifle innovation, prevent investment, and raise compliance costs for small businesses.).

⁸ See Comments of ITI at 3 (“reclassification of broadband internet services as a Title II service may raise difficult definitional questions regarding the demarcation between information and telecommunications services, create investment disincentives from regulatory delay or uncertainty, and possibly encourage foreign governments to impose onerous regulation of even Internet services.”); Comments of Cox Communications, Inc. at 6, 31-37 (“a recent study comparing the Commission’s light touch regime over the last decade to the heavy-handed, public utility model applicable to broadband providers in Europe found significant disparities in the resulting investments.”); Comments of Cisco at 27 (“reclassification would clearly disrupt the reliance interests of network providers, who have invested billions in building networks based on the expectation that broadband Internet access service is subject to light-handed regulation as an information service.”). See also Comments of Verizon at 57-69; Comments of Time Warner Cable, Inc. (“Time Warner Cable”) at 14-19.

⁹ See Mozilla Petition to Recognize Remote Delivery Services in Terminating Access Networks and Classify Such Services as Telecommunications Services Under Title II of the Communications Act at iii, GN Docket No. 14-28 (filed May 5, 2014).

revolutionary Internet development that has best served consumers. The best way to encourage Internet innovators to survive and thrive is to maintain the same light regulatory touch that facilitated their development in the first place. The positive effects of that approach will be felt both domestically and internationally as communication regulators across the globe will inevitably take cues from the FCC on Internet regulation.¹⁰

III. THE COMMISSION SHOULD USE ITS SECTION 706 AUTHORITY TO PROTECT CONSUMERS AND THE OPEN INTERNET

To be sure, there are legitimate consumer-facing concerns that potentially threaten the Internet’s openness. Accordingly, the Commission should ensure adequate protections are in place to address consumer harm that may arise from issues such as traffic degradation, traffic blocking, and traffic throttling. The Commission should also ensure that its original principles of Internet freedom—aimed at fostering consumer access to Internet content—endure, including freedom to access lawful content, use applications, attach personal devices to the network, and obtain service plan information.

The most appropriate course of action to provide adequate consumer protection for these legitimate concerns is through the Commission’s exercise of authority under Section 706. The D.C. Circuit agreed that the Commission can properly adopt open Internet rules using its authority under Section 706.¹¹ Akamai agrees with many commenters that the Commission should enact protections for consumers on these issues under its Section 706 authority.¹²

¹⁰ See Comments of ITI at 3 (noting that Title II reclassification may “possibly encourage foreign governments to impose onerous regulation of even Internet services.”); Comments of Akamai at 10-11 (“The global reach of Akamai and other technology companies and, indeed, the global reach of the Internet mean that actions taken in the U.S. will have implications across the world, for content providers, broadband access providers, and consumers.”).

¹¹ *Verizon v. FCC*, 740 F.3d 623, 628 (D.C. Cir. 2014).

¹² See, e.g., Comments of American Cable Association at 47-53; Comments of AT&T at 32; Comments of Cox Communications, Inc. at 6-7; Comments of Alcatel-Lucent at 13; Comments of ARRIS Group, Inc. at 14-15; Comments of CEA at 9; Comments of Cisco at 23; Comments of Comcast at 13-14; Comments of NCTA at 45-

Finally, there is not even a wisp of evidence that additional regulation of CDNs is needed or appropriate under the Commission’s Section 706 authority. Free from regulation, innovators like Akamai have consistently and demonstrably improved the quality of service offered to consumers in a robust and competitive environment. Further, were the Commission to adopt Title II regulations for broadband providers, the Commission need not and ought not extend that regulatory classification to other Internet ecosystem participants.¹³ There is no legitimate basis to conclude that reclassification of broadband Internet access service would inevitably result or imply that content delivery or other services in the Internet ecosystem should be subject to the same classification. Services in the Internet ecosystem other than residential, last-mile broadband Internet access service provided by ISPs are separate, unique, and truly competitive. Indeed, by providing parties means of storing and retrieving data, CDNs and content platforms like Akamai provide the quintessential information service.¹⁴ For instance, Akamai does not operate a network for the transmission of information, but instead provides services that allow access to data and more efficient routing through others’ networks. Even if the Commission were to classify ISPs’ last-mile broadband Internet access services as Title II offerings, there is no reason that definition should apply beyond that—and particularly no reason it should apply to content delivery platforms like Akamai.

47; Comments of Pennsylvania Public Utilities Commission at 2; Comments of TIA at 9; Comments of Time Warner Cable at 7-8; Comments of WISPA at 38-39; Letter from Andrew W. Guhr, Counsel, Yahoo! Inc., to Marlene Dortch, Secretary, FCC, GN Docket No. 14-28, (filed July 18, 2014).

¹³ Some commenters have suggested that reclassification of broadband Internet service as a telecommunications service would imply that CDNs would also be reclassified as providers of telecommunications services. *See* Comments of AT&T at 4-5; Comments of CenturyLink at 51-52.

¹⁴ *See* 47 U.S.C. § 153(24) (defining information service as “offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications. . .”).

CONCLUSION

As Akamai explained in its opening comments, it supports policies that protect an open Internet. The Commission should act with deliberation and humility to ensure it adopts only those policies that affirmatively enhance the competition, innovation, and efficiency of the open Internet.

Respectfully submitted,

/s/

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