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

In the Matter of	)	
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Applications of XO Communications, LLC and Verizon Communications Inc. for Transfer and Control of Licenses and Authorizations	)	WC Docket No. 16-70
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COMMENTS OF NEW AMERICA'S OPEN TECHNOLOGY INSTITUTE

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I. INTRODUCTION AND SUMMARY

In dual applications before the Commission, XO Communications and Verizon Communications ("Applicants") propose a transaction that raises serious concerns for consumers, small businesses, the nation's telecommunications networks, and the public interest. The applicants' proposal would strengthen Verizon's already-dominant position in the Internet ecosystem by giving the company control of XO's substantial wireline and wireless assets.[1] Although the Applicants submitted their wireline and wireless applications separately, the Commission should consider both applications as a single transaction.

New America's Open Technology Institute ("OTI") respectfully submits these comments in response to the above-referenced applications. OTI is dedicated to ensuring that every community has equitable access to digital technology and its benefits. We promote universal access to communications technologies that are both open and secure, using a multidisciplinary approach that unites advocates, researchers, organizers, and innovators. OTI is a longstanding advocate of robust networks, competitive markets, and consumer protection. The proposed transaction threatens these public interest priorities and therefore warrants the Commission's highest level of scrutiny.

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[1] The transaction's wireline component allows Verizon to wholly acquire XO's fiber-based facilities. The wireless component gives Verizon a long-term lease of spectrum licenses currently held by XO's subsidiary Nextlink, along with an option to purchase Nextlink in two years. *See* Public Notice, WC Docket No. 16-70, *Application Filed For the Transfer of Control of XO Communications, LLC to Verizon Communications Inc.*, DA 16-393 (Apr. 12, 2016); Public Notice, ULS File No. 0007162285, *Cellco Partnership D/B/A Verizon Wireless and Nextlink Wireless, LLC, a Subsidiary of XO Holdings, Seek FCC Consent to a Long-Term De Facto Transfer Spectrum Leasing Arrangement Involving Local Multipoint Distribution Service and 39 GHz Spectrum*, DA 16-394 (Apr. 12, 2016).

OTI is particularly concerned about the transaction's impact on broadband access services and the millions of Americans who rely on those services for full participation in civic life. XO and Verizon are part of an industry of last-mile and transit providers that collectively operate the Internet. This industry helped create the nation's robust digital economy, but it has slid into a period of consolidation and stagnation.[2] The latest consolidation occurred just days ago, when the Commission approved a three-pronged merger that eliminated two competitors from the market and dramatically expanded the size and power of Charter Communications.[3] The proposed transaction would remove yet another competitor from the market and strengthen Verizon's position as a gatekeeper of the Internet.

Accordingly, we urge the Commission to closely examine the transaction using a standard of review that is broad in scope and that rigorously scrutinizes the markets for transit and wireless backhaul. Both of these markets are vital to the evolution and protection of the Open Internet. If the applicants are unable to demonstrate that the transaction will protect the Open Internet and the public at large, the Commission should deny the applications.

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[2] *See, e.g., Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act, 2016 Broadband Progress Report*, 31 FCC Rcd. 699 (2016).

[3] *In the Matter of Applications of Charter Communications, Inc., Time Warner Cable Inc., and Advance/Newhouse Partnership For Consent to Assign or Transfer Control of Licenses and Authorizations*, Memorandum Opinion and Order, MB Docket No. 15-149 at ¶ 107 (May 10, 2016) ("Charter/TWC/BHN Order").

II. THE COMMISSION SHOULD DEFINE THE RELEVANT MARKET BROADLY AND RECOGNIZE A SINGLE TRANSACTION

Both applicants operate large nationwide networks and are providers of wireless and wireline services. XO operates an extensive 20,000-mile fiber network to provide an array of transit, backhaul, and other services. XO is also a significant wireless player through its affiliate Nextlink, which holds many high-value spectrum licenses in service areas stretching from New York to Los Angeles. The applicants' fiber networks overlap in several metropolitan areas, and Verizon leases access to XO's fiber facilities in service areas where it lacks facilities of its own.[4]

The national and global reach of this transaction is significant, warranting a broad scope of review. In addition to the local markets in which Verizon and XO compete directly, both companies provide critical support for the networks that collectively constitute the backbone of the Internet. From the perspective of an edge provider, the market for the applicants' services is clearly national, as the Commission recently noted: "There is no indication that edge providers contract for direct or indirect interconnection with BIAS providers on a local market-by-market basis. Instead, the record indicates that, whether an edge provider is contracting for transit, CDN services, or direct interconnection with a BIAS provider, it provides access to its full footprint."[5] Accordingly, the Commission should review the proposed transaction under the broadest possible scope rather than a local market-by-market analysis.

Moreover, OTI agrees with petitioners DISH Network and INCOMPAS that the Commission should review the Applicants' wireless and wireline agreements as a single

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[4] *See* Public Notice, WC Docket No. 16-70, *Application Filed For the Transfer of Control of XO Communications, LLC to Verizon Communications Inc.*, DA 16-393 (Apr. 12, 2016).

[5] Charter/TWC/BHN Order at ¶ 107 (May 10, 2016).

transaction.[6] The spectrum leases and wireline acquisitions were not negotiated in isolation. The transactions are highly interrelated, with ramifications for consumers that are collective and reinforcing. For example, XO's spectrum holdings are most valuable to a wireless provider like Verizon when coupled with XO's fiber assets, which provide crucial backhaul support for spectrum-based services. Two separate and independent evaluations of this deal would not effectively serve the public interest.

III. THE TRANSACTION THREATENS THE TRANSIT MARKET AND THE OPEN INTERNET

The proposed transaction's impact on the market for transit services and interconnection is especially worrisome. With XO operating one of the nation's leading transit networks and Verizon being one of just five last-mile ISPs with sufficient market leverage to charge interconnection fees, the potential for vertically-integrated harm is serious.[7]

The transit market is notoriously opaque, with most dealings subject to non-disclosure agreements, but it is clear that consumers and innovators pay the price when this market fails. OTI has studied the myriad ways in which interconnection disputes harm consumers, and we

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[6] *See* Petition to Deny of DISH Network, WC Docket No. 16-70, ULS File No. 0007162285 at 4 (May 3, 2016); Petition to Deny of INCOMPAS, ULS File No. 0007162285 at 2 (May 3, 2016).

[7] Charter/TWC/BHN Order at ¶ 99 ("At the other end of the spectrum are large BIAS providers that operate network infrastructure as a backbone provider or on a scale approaching that of a backbone provider. At present five BIAS providers fall into this category and currently charge for paid peering: Comcast, AT&T, Verizon, Time Warner Cable, and CenturyLink."). *See also* Verizon Response to Oct. 9, 2015, Information and Data Request, transmitted by letter from Meredith Singer, Counsel for Verizon, to Marlene H. Dortch, Secretary, FCC, MB Docket No. 15-149 (filed Nov. 6, 2015).

have longstanding concerns about the state of the transit market in general.[8] The Commission has consistently recognized the important role of interconnection in maintaining a robust and open Internet, as well as the vulnerability of the transit market and the edge providers that rely on it.[9] The Commission has also identified market share and network control as the two key factors that enable last-mile ISPs to extract fees for interconnection.[10]

Allowing Verizon to wholly acquire XO's wireline assets would eliminate an important independent player from the transit market and reduce the options for transit across the Internet backbone. XO's relatively large geographic footprint makes it one of the few independent providers that compete on a scale that matches incumbents like Verizon. This scale allows XO to offer competitive services to companies that do not wish to negotiate with Verizon. Losing this competitive option to a consolidated company would harm transit competition and further

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[8] *See* "ISP Interconnection and its Impact on Consumer Internet Performance," Measurement Lab (Oct. 2014); "Beyond Frustrated: The Sweeping Consumer Harms as a Result of ISP Disputes," New America's Open Technology Institute (Nov. 2014) ("Beyond Frustrated").

[9] *See, e.g.*, *Protecting and Promoting the Open Internet*, GN Docket No. 14-28, Report & Order, FCC 15- 24 (rel. Mar. 12, 2015) ("2015 Open Internet Order") at 205 ("When Internet traffic exchange breaks down—regardless of the cause—it risks preventing consumers from reaching the services and applications of their choosing, disrupting the virtuous cycle."); Charter/TWC/BHN Order ¶ 120 ("[T]he vast majority of edge providers have no market power when dealing with BIAS providers.").

[10] Charter/TWC/BHN Order ¶ 99, 100 ("Networks that have strong control over interconnection and purchase little or no transit service can be accessed primarily by peering. ... Through size and control, the largest BIAS providers can solidify their position as gatekeepers between their subscribers and edge providers—and use this position in a two-sided market to their benefit."). *See also Applications of AT&T Inc. and DIRECTV for Consent to Assign or Transfer Control of Licenses and Authorizations*, *Memorandum Opinion and Order*, 30 FCC Rcd. 9211-12 ¶ 214 (2015).

constrain the limited choices available to edge providers.[11] By acquiring XO's infrastructure, Verizon would gain greater control of the Internet backbone and the routes into its own last-mile network. As a result, Verizon would be well-positioned to increase the price of transit and interconnection—eroding the competitive ecosystem that the transit market has long enjoyed.

The prospect of this transaction comes at a precarious moment in the history of Internet transit. The Internet largely developed in an environment of settlement-free interconnection, allowing small businesses to launch online without paying onerous fees or otherwise having to seek permission from big ISPs to reach end users. Transit services were offered on a competitive basis, as well. That environment is changing, as years of industry consolidation have produced a handful of dominant ISPs, including Verizon, that are now large enough enough to extract interconnection fees from transit and edge providers.[12]

While some interconnection fees may be reasonable (such as those that pay for routine port upgrades at traffic-exchange points), OTI believes it is unreasonable for a last-mile ISP to charge interconnection fees simply to reach its customers—charges that result in essentially a toll for access. Access fees are an abuse of market power that jeopardize the Internet economy. By raising costs for competitors and increasing the likelihood that rivals exit the market altogether,

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[11] *See* Letter from Markham Erickson, Counsel to Netflix, Inc., to Marlene Dortch, FCC, MB Docket No. 14-57, at 5 (April 6, 2015) ("There are only six competitive options available to Netflix for transit to high-bandwidth customers in the United States: Cogent, Level 3, Tata, TeliaSonera, XO, and NTT.").

[12] The Commission has identified five ISPs that fall into this category: Verizon, Comcast, AT&T, CenturyLink, and the recently-acquired Time Warner Cable. *See* Charter/TWC/BHN Order ¶ 99.

access fees are a direct threat to innovation.[13] Indeed, the mere prospect of access fees can have a chilling effect on investment in online startups.[14]

Verizon has been a leading contributor to the recent changes in the transit market, as evidenced by its 2014 dispute with Netflix and the persistent congestion at various interconnection points into its last-mile network.[15] The integration of XO's infrastructure would give Verizon the ability to further constrain routes into its network, raise the fees it has already extracted, and impose new fees on other companies. Given current market conditions, the prospect of high-cost interconnection dictated by a vertically-integrated Verizon warrants rigorous scrutiny.

IV. THE TRANSACTION THREATENS THE WIRELESS BACKHAUL MARKET AND 5G DEPLOYMENT

The vertical integration of this transaction also extends into the wireless industry, raising concerns about the impact on backhaul services and 5G mobile technology. XO's fiber assets would greatly enhance Verizon's existing backhaul infrastructure and give the post-merger company significant influence over next-generation wireless service.

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[13] *See* 2015 Open Internet Order at 205 (explaining how higher interconnection costs disrupt "the virtuous cycle of innovation").

[14] *See, e.g.*, Barbara Van Schewick, *The Case for Rebooting the Network-Neutrality Debate, The Atlantic* (May 6, 2014) ("The uncertainty over access fees is already starting to have a chilling effect on innovation and investment. Entrepreneurs have told me that they are reconsidering their plans and that investors are more hesitant to invest in applications, content, or services that may become subject to access fees.").

[15] *See* Beyond Frustrated at 2, 7-10, 17-20.

5G technology, which is widely regarded as necessary to accommodate the growing demand for mobile data, relies on small cells that require a large amount of backhaul capacity.[16] The Commission anticipates that much of this new capacity will be fiber-based.[17] Due to its extensive fiber network, XO is well-positioned to offer crucial 5G support in many parts of the country. Notably, the majority of XO's fiber in its top markets is unlit, or dark.[18] This large amount of dark fiber could be a lucrative asset as the industry moves toward 5G.

Much like the potential harms to the transit market, the proposed transaction threatens competition in the wireless industry. First, the acquisition would consolidate the market for backhaul services, giving Verizon's wireless product a competitive advantage and the ability to increase prices for backhaul transport. Such price increases would significantly burden rival wireless carriers since backhaul typically accounts for 30 percent of their operating costs.[19] Price increases would make backhaul service less affordable, creating a serious barrier to new entrants and impeding the deployment of 5G. These effects would be acutely felt in areas that are currently served by both Verizon and XO. Furthermore, Verizon's advantages in the backhaul

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[16] *See Use of Spectrum Bands Above 24 Ghz for Mobile Radio Services, Notice of Proposed Rulemaking*, 30 FCC Rcd. 11878 (2015).
[17] *Id*. at ¶ 272.

[18] *XO Holdings and Verizon Communications Inc., Consolidated Applications to Transfer Control of Domestic and International Section 214 Authorizations,* WC Docket No. 16-70 at 10 (Oct. 30, 2015).

[19] *Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services, Eighteenth Report*, 30 FCC Rcd. 14515, 14564 ¶ 69 (2015).

market would be compounded by the lucrative spectrum licenses that XO proposes leasing to Verizon with the option to purchase outright in two years.[20]

XO has been an active participant in the Commission's efforts to promote 5G and was exploring creative strategies for its Nextlink wireless service prior to the announcement of the instant transaction. In January, XO discussed "a multi-faceted 5G plan that includes a number of business approaches," described plans to "leverage its extensive metro fiber transport rings for backhaul and on-net locations for traffic aggregation," and suggested partnerships "with one or more mobile operators (or non-traditional operators) so their users could roam onto XO's 5G networks where available."[21] XO's plans to make competitive use of its backhaul infrastructure is laudable, but they are not compatible with the increased market power and incentives that the proposed transaction would bring to the post-merger entity.

Ultimately, successful 5G deployment is unlikely without a competitive backhaul market.[22] Given 5G's imminence, this is a particularly inopportune time to consolidate that market and increase competitors' dependence on Verizon. The Commission has identified 5G deployment as a priority, and therefore it should carefully assess whether this transaction would thwart the emergence of this next-generation technology and the data-hungry innovations that are waiting for it.

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[20] Public Notice, ULS File No. 0007162285, *Cellco Partnership D/B/A Verizon Wireless and Nextlink Wireless, LLC, a Subsidiary of XO Holdings, Seek FCC Consent to a Long-Term De Facto Transfer Spectrum Leasing Arrangement Involving Local Multipoint Distribution Service and 39 GHz Spectrum*, DA 16-394 (Apr. 12, 2016).

[21] Comments of XO Communications, GN Docket No. 14-177, IB Docket No. 15-256, RM-11664, WT Docket No. 10-112, IB Docket No. 97-95, at 6 (Jan. 28, 2016).

[22] *See* Jon Sallet, FCC General Counsel, "Remarks at INCOMPAS 2016 Policy Summit" (Feb. 10, 2016), *available at* https://apps.fcc.gov/edocs_public/attachmatch/DOC-337681A1.pdf

V. CONCLUSION

Any transaction that further concentrates ISP market power demands the Commission's highest level of scrutiny. The proposed transaction would concentrate Verizon's power as a last-mile and transit ISP, giving the company substantial influence over the Internet's backbone infrastructure. As a steadfast proponent of competitive markets and robust networks, OTI is deeply concerned about the potential consequences of this vertically-integrated control, particularly for consumers and innovators. We urge the Commission to closely examine this transaction, including a rigorous review of the impact on the transit and wireless backhaul markets. The Commission must also ensure that the transaction protects the Open Internet and the deployment of advanced telecommunications technology; any merger that fails to meet this threshold should be rejected. We look forward to working with the Commission and the applicants as this review proceeds.

Respectfully Submitted,

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