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**REDACTED – FOR PUBLIC INSPECTION**

July 7, 2016

**VIA ECFS**

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Washington, D.C. 20554

Re: *Consolidated Applications of XO Holdings and Verizon Communications Inc. for Consent to Transfer Control of Licenses and Authorizations*,  
WC Docket No. 16-70

Dear Ms. Dortch:

Verizon Communications Inc. (“Verizon”) submits its response to the Wireline Competition Bureau’s (“WCB”) Information and Document request (“Information Request”) dated June 22, 2016, in connection with the above-referenced transaction. Enclosed please find a narrative response and related exhibits (the “Response”). In accordance with the protective order in this docket,<sup>1</sup> and as directed by WCB Staff, Verizon is also submitting separately two sets of the Response to the WCB Competition Policy Division (Zach Ross). Further, and as discussed with Commission Staff, Verizon anticipates that it will provide an initial production of documents responsive to the Information Request on July 8, 2016, and will produce additional documents on a rolling basis.

The Response contains information that meets the requirements for treatment as “Confidential” and “Highly Confidential” under the Protective Order in this docket.<sup>2</sup> Verizon is therefore filing an unredacted copy of the materials identified above pursuant to the procedures established in the Protective Order. Because the submission also contains information that is “Confidential,” Verizon is simultaneously filing a copy of the materials listed above that excludes material that contains “Highly Confidential” information pursuant to the procedures established in the Protective Order. Verizon will also file a redacted version of the above

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<sup>1</sup> *XO Holdings and Verizon Communications Inc., Consolidated Applications for Consent to Transfer Control of Domestic and International Authorizations Pursuant to Section 214 of the Communications Act of 1934, As Amended*, Protective Order, WC Docket No. 16-70, DA No. 16-567 (rel. May 19, 2016) (“Protective Order”).

<sup>2</sup> Consistent with the Protective Order, *id.* at ¶ 3, Verizon obtained written approval from Commission staff to designate certain material as Highly Confidential.

Marlene H. Dortch

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materials for public inspection in the FCC's Electronic Comment Filing System. To avoid confusion, a copy of this cover letter, bearing the appropriate confidentiality legend, will accompany each submission.

Verizon has made diligent efforts to ensure that none of the material it is submitting herewith is privileged under the attorney-client privilege or attorney work product doctrine. To the extent that any privileged materials may have been inadvertently produced, such production does not constitute a waiver of any applicable privilege. Verizon requests that any privileged materials inadvertently produced be returned to Verizon as soon as such inadvertent production is discovered by any party, and reserves all rights to seek return of any such documents.

If you have any questions arise concerning this submission, please contact me.

Very truly yours,

A handwritten signature in black ink, appearing to read "Katharine Saunders", with a stylized flourish at the end.

Katharine R. Saunders

Enclosures

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

XO Holdings and Verizon Communications )  
Inc. Consolidated Applications for Consent ) WC Docket No. 16-70  
to Transfer Control of Domestic and )  
International Authorizations Pursuant to )  
Section 214 of the Communications Act )  
)  
)

**RESPONSE TO INFORMATION AND DOCUMENT REQUEST  
BY VERIZON COMMUNICATIONS INC.**

Verizon Communications Inc. (“Verizon”) provides its narrative responses and other materials (“Response”) in connection with the Wireline Competition Bureau’s Information and Document request (“Information Request”) dated June 22, 2016.<sup>1</sup> In addition to this Response, Verizon anticipates that it will provide an initial production of documents responsive to the Information Request on July 8, 2016.

On July 5, 2016, Verizon representatives discussed the scope of the Information Request with Commission Staff. Where Commission Staff and Verizon reached an accommodation with regard to specific requests, that accommodation is described in Verizon’s response to the request itself.<sup>2</sup> For requests that sought “all documents,” Verizon is conducting its document search using two collection techniques. First, Verizon is using a searchable database of documents

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<sup>1</sup> Initial Information and Document Request (attachment to Letter from Madeleine V. Findley, Deputy Chief, Wireline Competition Bureau, FCC, to Bryan N. Tramont et al., Counsel to Verizon Communications Inc., and Thomas W. Cohen et al., Counsel to XO Holdings, WC Docket No. 16-70 (dated June 22, 2016)).

<sup>2</sup> The narrative responses are based upon interviews with relevant Verizon personnel, data provided in exhibits attached hereto, and review of documents that will be provided as part of the document production.

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collected from custodians identified in connection with the Department of Justice’s (“DOJ”) Hart-Scott-Rodino review of this transaction (the “DOJ Database”). Second, Verizon identified additional document custodians who are not custodians in the DOJ Database but who are most likely to have additional documents responsive to the Information Request.<sup>3</sup> Documents from these searches are being reviewed for responsiveness and privilege. Relevant, non-privileged documents are also reviewed for coding as Public, Confidential (subject to the Protective Order in WC Docket No. 16-70), or Highly Confidential (subject to the Protective Order in WC Docket No. 16-70).<sup>4</sup> As noted, Verizon anticipates that it will begin producing responsive, non-privileged documents on July 8, 2016, and will produce additional documents on a rolling basis.

### REQUESTS AND RESPONSES

#### A. General

1. *List each Relevant Service provided by each Applicant, and for each:*
  - a. *Provide a description of the service;*
  - b. *State the division, Subsidiary, or Affiliate of the company that provides the service; and*
  - c. *Describe how each Applicant defines the area in which it provides the service (e.g., metropolitan statistical area, county).*

Exhibit 1a provides a description of the Relevant Services provided by Verizon.<sup>5</sup> The Relevant Services are offered through Verizon Enterprise Solutions (“VES”) for enterprise customers and Verizon Partner Solutions (“VPS”) for carrier customers. The services are

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<sup>3</sup> By including such materials and identifying those individuals as custodians in the metadata, Verizon is not implying or representing that the entirety of their files has been digitized or added to the DOJ Database, or that a broader search of their materials has been undertaken in connection with the “all documents” requests.

<sup>4</sup> See *XO Holdings and Verizon Communications Inc., Consolidated Applications for Consent to Transfer Control of Domestic and International Authorizations Pursuant to Section 214 of the Communications Act of 1934, As Amended, Protective Order*, WC Docket No. 16-70, DA No. 16-567 (rel. May 19, 2016).

<sup>5</sup> Exhibits submitted as part of this Response are identified by the numbered Question that they are associated with.

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typically provided by Verizon operating subsidiaries. Both VES and VPS offer the Relevant Services on a nationwide basis, either through Verizon-owned or leased facilities or resold service.

2. ***For each Relevant Service listed in response to information request 1 above, for each year from 2014 to the present, and for each service area, state:***
  - a. ***Each Applicant's sales to all customers in the aggregate, separately for (i) enterprise customers and (ii) carrier customers;***
  - b. ***The name, address, telephone number, and contact Person for each Applicant's 20 largest customers by total revenues; and***
  - c. ***The name and address of each of the Applicants' competitors.***

Responsive information is provided in Exhibits 2a, 2b, and 2c produced with this narrative response. Because the Relevant Services are offered on a nationwide basis, and customers routinely purchase services that encompass more than one service area or state, the data in Exhibits 2a, 2b, and 2c are provided on a nationwide basis. In addition, in response to Question 2a, the VES revenue generally represents the sales associated with enterprise customers while the VPS revenue generally represents the sale associated with carrier customers.

3. ***Provide one unredacted copy of each Hart-Scott-Rodino 4(c) document.***

Pursuant to its discussion with Staff on July 5, 2016, Verizon anticipates producing responsive documents as part of its initial document production. Also pursuant to its discussion with Staff, Verizon will produce a redacted copy of Hart-Scott-Rodino document 4(c)-11.

4. ***Submit all documents relating to allegations by any Person that any Applicant that provides any Relevant Service is not behaving in a competitive manner, including, but not limited to, customer and competitor complaints, threatened, pending, or completed lawsuits, and federal and state investigations.***

The scope of this question is broad and could encompass any consumer or competitor interaction that might be construed as a complaint or allegation, publicly filed comments, or confidential law

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enforcement investigations. Verizon does not, and indeed cannot, identify and track every consumer or competitor interaction that might possibly be construed as a complaint or allegation against the company. Nonetheless, to the extent documents have been identified as part of Verizon's response to the DOJ document request with respect to a similar question, Verizon is reviewing for responsiveness and will produce such documents on a rolling basis.

5. ***For each Specified Service, submit (a) one copy of all current selling aids and promotional materials, and (b) all documents discussing advertising plans and strategies.***

Pursuant to its discussion with Staff, Verizon is conducting a reasonable search and will produce responsive documents on a rolling basis. Verizon anticipates that its initial production of documents responsive to this request will be included in its initial document production on July 8, 2016.

6. ***Submit all documents discussing each Applicant's plans relating to any Specified Service, including, but not limited to, business plans; short-term and long-range strategies and objectives; budgets and financial projections; expansion or retrenchment plans; research and development efforts; plans to reduce costs, improve services, introduce new services, or otherwise become more competitive; and presentations to management committees, executive committees, and boards of directors. For regularly prepared budgets and financial projections, each Applicant need only submit one copy of final year-end documents and cumulative year-to-date documents for the current year.***

Pursuant to its discussion with Staff, Verizon is conducting a reasonable search and will produce responsive documents on a rolling basis. Verizon anticipates that its initial production of documents responsive to this request will be included in its initial document production on July 8, 2016.

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7. *Submit all documents relating to competition in the provision of each Specified Service, including, but not limited to, market studies, forecasts and surveys, and all other documents relating to:*
  - a. *The sales, market share, or competitive position of the Applicant or any of its competitors;*
  - b. *The relative strength or weakness of companies providing each Specified Service;*
  - c. *Supply and demand conditions;*
  - d. *Sales negotiations and attempts by the Applicant to respond to competition;*
  - e. *The Applicant's analysis of, or response to, actual or potential competition or entry in each Relevant Service; and*
  - f. *Any actual or potential effect on the supply, demand, cost, or price of any Specified Service as a result of competition from any other possible substitute service.*

Pursuant to its discussion with Staff, Verizon is conducting a reasonable search and will produce responsive documents on a rolling basis. Verizon anticipates that its initial production of documents responsive to this request will be included in its initial document production on July 8, 2016.

8. *Submit all documents created or received by the company that relate to each Applicant's transaction prices, price lists, pricing plans, pricing policies, pricing forecasts, pricing strategies, pricing analyses, and pricing decisions relating to any Specified Service.*

Pursuant to its discussion with Staff, Verizon is conducting a reasonable search and will produce responsive documents on a rolling basis. Verizon anticipates that its initial production of documents responsive to this request will be included in its initial document production on July 8, 2016.

9. *To the extent not otherwise being provided, provide all documents created by or for the Applicants (either internally or by outside advisors) for the purpose of analyzing the effects of this Transaction with respect to: competition, diversity, consumer welfare, technology, cost savings, efficiencies, synergies, benefits, and profitability.*

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Pursuant to its discussion with Staff, Verizon is conducting a reasonable search and will produce responsive documents on a rolling basis. Verizon anticipates that its initial production of documents responsive to this request will be included in its initial document production on July 8, 2016.

- 10. For each Applicant, provide a list of all Internet Interconnection Agreements, formal or informal, the Applicant has entered into with any Person located at an Internet exchange point (including CDNs, Edge Providers, Internet Access Service providers and Internet Backbone Services providers) that are currently in effect or entered into since Jan. 1, 2014. For each Person on the list, identify and describe in an Excel spreadsheet the following information: the effective dates of the agreement; Capacity; whether the Interconnection Agreement is Peering, Transit Service, or other (explain other); whether the traffic must be localized; the traffic ratio requirement, if any; the minimum required points of interconnection, if any; the financial terms associated with each Interconnection Agreement; and, for the most recent month for which such data is available, utilization, measured using the industry standard 95th percentile method, or the total capacity sold, if sold on a capacity basis.**

Pursuant to its discussion with Staff, Verizon will provide responsive information with regard to its primary Internet peering locations. Verizon anticipates providing information responsive to this request as part of its rolling production.

- 11. Describe each Applicant's internet backbone in the United States, including identifying each market and IP Point of Presence where each Applicant offers service, the Internet Backbone Services offered, and the terms of each service.**

Verizon's Internet backbone in the United States is comprised of high-speed transmission links, IP Points of Presence ("POPs"), and supporting network infrastructure. Verizon's Internet backbone interconnects with networks of many other entities, and together, they make up the network-of-networks that is often referred to as the "public Internet." Verizon offers a range of services involving the exchange of traffic with its Internet backbone. These services can be categorized as follows:

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Transit Services: In a transit agreement, the customer (*e.g.*, an ISP or edge provider) pays Verizon to arrange for the transmission of Internet traffic between the customer and all other sites and end users on the Verizon IP network, end points on third-party IP networks with which Verizon maintains an interconnection relationship as part of the public Internet, as well as any other end points reachable on the public Internet.

Settlement-Free Peering or Bilateral Interconnection Arrangements (“BIA”): Traffic exchange is settlement-free under certain conditions. If traffic flows exceed the parameters specified in an agreement that contemplates the mutual exchange of roughly balanced traffic, the party sending more traffic may be required to pay the other party for that excess traffic. The same holds true if the agreement is based on mutually agreed-upon forecasts for traffic growth, and one party exceeds those. Both parties to these agreements may be payors or payees at various points in time, based on traffic flows. These agreements support peering routes only (*i.e.*, delivery of traffic only to customer end points on each party’s network).<sup>6</sup>

Paid Peering: Paid peering provides customers with access to customer end points on Verizon’s network only. For instance, under Verizon’s “Partner Port” program, edge providers and content delivery networks (“CDNs”) deposit their consumer-focused content directly onto the Verizon Internet backbone network through ports located at regional carrier “hotels” without the need for connections that use longer, less direct, and often costly middlemen architectures that involve multiple connections, or “hops,” among multiple carriers. By bypassing these

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<sup>6</sup> Historically, Verizon entered into various types of settlement-free peering agreements. Some earlier-generation agreements [BEGIN CONFIDENTIAL]

[END CONFIDENTIAL]

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pathways, edge providers and CDNs can deliver content to their customers on Verizon’s network with lower latency. Some of these arrangements are configured to provide access to just a subset of end points on Verizon’s network. Under the “Cache Port” program, edge providers can enter into agreements that allow the customer to deliver content directly to the Verizon network through Cache Ports, which typically (but not always) serve a narrower geographic area and contain peering routes limited to just end points in that geographic region.

Terms of Service: The terms of Verizon’s Internet Backbone Services vary by channel and customer contract. Verizon has some standard offers, but customers routinely negotiate individualized terms for their services.

Typically, transit and paid peering arrangements are negotiated and tailored to the needs of the interconnecting parties, based on price and some combination of capacity and/or utilization. In the BIA context, the following terms are individually negotiated with each BIA network partner: **[BEGIN CONFIDENTIAL]**

**[END CONFIDENTIAL]** Internet interconnection arrangements can also provide for important coordination and information exchange between the parties on traffic forecasts, traffic monitoring, and operational issues that may arise, such as scheduled outages and emergency maintenance.

Verizon’s policy for interconnection has been publicly posted for a number of years and is available at <http://www.verizonenterprise.com/terms/peering/>. This long-standing policy is similar to the peering policies used throughout the industry and reflects the factors that Verizon generally considers in measuring the value provided by a potential interconnection partner. These factors include such things as the geographic scope of each party’s facilities, traffic

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exchange volume, a party's backbone capacity, and the number of unique transit networks to which a party's network connects. Verizon also considers operational factors such as maintaining sufficiently robust traffic exchange links and providing a 24x7 Network Operations Center. Parties qualifying under the terms of Verizon's interconnection policy would enter into a BIA with Verizon.

IP Points of Presence: Exhibit 11 contains a list of the Verizon IP POPs. (The list does not include Verizon ILEC central offices, which terminate broadband Internet access services.) From these [BEGIN CONFIDENTIAL] [END CONFIDENTIAL] locations identified in the attached file, Verizon can provide Internet Backbone Services to any customer located within the United States, so long as they self-provision or purchase (through Verizon or another carrier) connectivity to a Verizon POP.

- 12. For each Applicant's 25 largest Transit Service customers by traffic volume, provide in an Excel spreadsheet, for each quarter since January 1, 2014:**
- a. The Interconnection Partner;**
  - b. Usage, measured using the industry standard 95th percentile method, or the amount of capacity if sold on a capacity (port) basis;**
  - c. The price charged for the Internet Transit Service; and**
  - d. The Quarterly revenues earned for each Transit Service separately charged to the Transit Service customers.**

***For each Transit Service customer that is invoiced for a combination of services, report in separate columns the revenues earned for each service (e.g., Transit Service, Paid Peering) and provide an explanation for how the total invoiced amount is allocated across the services.***

Pursuant to its discussion with Staff, Verizon will identify its 25 largest Transit Service customers by revenue rather than traffic volume. Based on this modification to this request, Verizon anticipates providing information to this request as part of its rolling production.

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- 13. Describe, and provide and identify supporting documents showing each Applicant's position, rank, and competitive strategy in the Internet Backbone Services market and how each Applicant compares to other Internet Backbone Services providers, including a description of which entities each Applicant is most competitive with and the most significant market risks facing each Applicant.***

Verizon's competitive strategy with regard to Internet Backbone Services reflects the dynamic nature of this market. Due to the exponential growth of Internet traffic (driven primarily by video consumption), the advent of CDNs (which has resulted in increasingly localized traffic flows), and the increasing use of private networks by large content providers, Verizon's competitive strategy has evolved over several years. Today, Verizon primarily relies on bilateral interconnection agreements and alternative forms of interconnection, such as Verizon's Partner Port and Cache Port programs. These arrangements allow Verizon and other network operators to enable the direct interconnection of their networks with sources of large and asymmetric traffic flows. They also allow Verizon and other market participants to continue making necessary investments in network infrastructure and delivering expected performance results to customers.

There is robust competition in the provision of Internet Backbone Services, with multiple commercial network operators offering a variety of connectivity and delivery options. For example, the Center for Applied Internet Data Analysis ("CAIDA") uses publicly available data to rank Autonomous Systems on a measure of their influence in the global routing system, specifically the size of their customer cone. In other words, CAIDA's rankings measure how interconnected a network is. As of June 1, 2016, Verizon ranked 11th on this list, behind providers including Level 3 and Cogent. Dyn Research provides annual rankings of Internet

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providers as measured by quantity of transited IP space. For 2015, Dyn's Top 5 for North America are Level 3, TeliaSonera, Cogent, NTT, and CenturyLink.

Verizon views the following as significant market risks: **[BEGIN CONFIDENTIAL]**

**[END CONFIDENTIAL]**

Verizon will produce documents responsive to this request in its initial and rolling document production expected to begin on July 8, 2016.

***14. Describe, and identify and produce all documents discussing how the acquisition of XO fits within and benefits the Verizon Internet Backbone Services business strategy and how XO's Internet Backbone Services business will be merged into Verizon's service offering.***

Verizon is still in the early stages of assessing XO Communication's ("XO") network, and it is too soon to say with specificity how XO's Internet Backbone Services business will advance Verizon's Internet Backbone Services business strategy or how it will be merged into Verizon's service offering as part of this acquisition.

Nonetheless, Verizon expects to utilize those XO network assets and service arrangements that can enhance, optimize, and augment Verizon's Internet Backbone Services business. Verizon intends to manage the acquired assets in line with its existing properties to provide the best service to its customers over the most efficient networks. In some cases, this could mean that XO network assets will replace legacy Verizon network assets. XO may also

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have service arrangements (locations, lease terms, and equipment), network routes, and customer traffic flows that complement the Verizon Internet Backbone Services business and will be additive to the existing network.

XO's long-haul business including its Internet backbone network relies entirely on fiber that XO obtains from third parties through indefeasible rights ("IRUs") of use and fiber swaps. None of the XO long-haul fiber network is leased from Verizon. Verizon, by comparison, owns significant amounts of long-haul network fiber. As XO's leases and IRUs for long-haul fiber expire, Verizon may have opportunities to migrate traffic to Verizon-owned assets, and those migrations may provide opportunities for Verizon to consolidate portions of the XO services that ride on top of XO's long-haul network (*e.g.*, Internet Backbone Services) with equivalent Verizon services. In addition, the entities that own the long-haul fiber facilities utilized by XO today will continue to do so, and presumably will have the ability to lease them to other providers (or maybe even Verizon) at the end of the lease term.

Verizon's intention to make use of the best of both networks means that XO customers whose traffic migrates to the Verizon Internet backbone network may experience better or higher-quality connectivity to networks or locations that today are "off net" for XO. And Verizon will comply with the terms of existing XO contracts. In addition, Verizon customers may have the opportunity to make use of XO fiber or other assets after the acquisition. As Verizon gains a better understanding of XO's network footprint, product set, interconnection locations, interconnection partners, customer base, network capacity, utilization, equipment vendors, and contractual terms/conditions, it will be better positioned to determine how to combine the best of both the Verizon and XO networks.

Verizon has not identified any responsive documents to this question.

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**15. Describe the extent to which XO and Verizon utilize fixed wireless technologies in connection with the provision of BDS, including the extent to which it is used in each county in which XO and Verizon provide BDS.**

Verizon utilizes fixed wireless technologies in connection with the provision of BDS to a very limited extent. Verizon does not hold any wide-area spectrum licenses typically used by companies that offer fixed wireless BDS solutions.

Verizon does use fixed wireless technologies in two other ways, however. First, Verizon operates a small number of point-to-point fixed wireless microwave facilities, which are authorized on a site-by-site basis under the FCC's point-to-point microwave rules set forth in 47 C.F.R. Part 101, as part of its network for the provision of BDS. These facilities are primarily used for backhaul (inter-office facilities) in situations where wireline facilities are difficult to deploy, such as to islands or other remote sites. In a few areas, the fixed wireless facilities are used to provide a connection (wireless loop) between Verizon's network and a customer location. These services are located in the following counties:

Maryland

- Somerset County
- Dorchester County

Massachusetts

- Dukes County
- Bristol County
- Nantucket County
- Barnstable County
- Middlesex County

New Jersey

- Monmouth County
- Salem County

Oregon

- Multnomah County

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Rhode Island

- Washington County

Virginia

- Page County
- Accomack County
- City of Lynchburg
- Warren County
- Madison County
- Louisa County
- Henrico County
- Frederick County

Washington

- Clark County

Second, VES resells wireless services from a variety of providers, including Verizon

Wireless, **[BEGIN CONFIDENTIAL]**

**[END CONFIDENTIAL]** and deploys them in fixed wireless solutions.

These services are used to provide connectivity to point of sale operations, such as ATM machines and gas pumps, to back-office systems, and other locations. The fixed wireless services provided by Verizon Wireless utilize 4G LTE technology, and are used to provide services in the following counties:

- Baltimore County, MD
- Bexar County, TX
- Cuyahoga County, OH
- Dallas County, TX
- Davidson County, TN
- Denver County, CO
- DuPage County, IL
- Fairfield County, CT
- Harris County, TX
- King County, WA
- Maricopa County, AZ
- Mecklenburg County, NC
- Milwaukee County, WA
- Philadelphia County, PA
- Sacramento County, CA

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Salt Lake County, UT  
Santa Clara County, CA  
Washington County, OR  
Washtenaw County, MI  
Wayne County, MI  
Worcester County, MA

- 16. *What additional products and services will Verizon be able to offer existing XO customers because of the transaction that are currently not offered by XO? What products and services will Verizon cease offering existing XO customers? Explain in each case whether the cessation would occur because of the Transaction, or on a materially accelerated timetable because of the Transaction, or if XO would have similarly ceased the service or product offering even in the absence of the Transaction.***

Verizon is currently reviewing XO's products and services (collectively, "services") to determine the specific additional services Verizon will be able to offer existing XO customers post-closing. Verizon is also assessing which XO services will migrate to equivalent Verizon services and which Verizon will offer as new Verizon services—as Verizon has stated before, it will comply with the terms of existing XO customer contracts. Generally speaking, however, while the companies provide many of the same types of services, Verizon has a much more extensive and innovative family of service options that it will be able to offer XO customers. For example, Exhibit 16 lists products that Verizon will be able to offer to XO customers that XO currently does not provide.

Verizon's review process will consider the migration of XO services to reasonably equivalent Verizon services. With that in mind, Verizon anticipates that over time it will migrate existing XO customers to functionally equivalent Verizon services, if there is service parity between the companies' offerings and if doing so would not violate the terms of the customers' agreements. Verizon intends to grandfather and continue to provide those XO services that are not migrated to an equivalent Verizon service. Any determination to migrate XO customers to

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equivalent Verizon services, moreover, will be affected by contract terms and conditions, Service Level Agreements, pricing, customer commitments and other issues. The specific timing of any migration will be determined based on input from information/technology, network, and operations teams.

**[BEGIN CONFIDENTIAL]**

**[END**

**CONFIDENTIAL]**

- 17. Provide (a) a list of census blocks within Verizon's ILEC footprint; (b) a list of census blocks within Verizon's non-ILEC footprint; and (c) a list of census blocks into which Verizon's footprint will expand through the acquisition of XO's fiber assets. Indicate where any expansion reverses coverage loss Verizon experienced due to transactions or divestitures that occurred in the last three years.***

Data responsive to parts (a) and (b) are attached as Exhibit 17. Data responsive to part (c) will be produced following receipt of XO's census block information. During the past three years, Verizon's legacy GTE ILEC and CLEC operations in California, Texas, and Florida were sold to Frontier Communications Corporation ("Frontier"). However, Verizon retained its legacy MCI CLEC operations in these states. While XO has fiber networks in these service areas, this transaction was not intended to, and does not to any meaningful degree, "reverse" any "coverage loss" experienced by Verizon due to those transactions. The properties sold included some areas of Fios deployment, which is not something that XO's network architecture or footprint would replicate. With respect to the ILEC point-to-point fiber routes in those markets, it is possible there may be some parts of those territories (specific streets or buildings) that could be served by both the legacy fiber facilities that Frontier acquired from Verizon, and fiber routes Verizon is acquiring from XO.

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- 18. *In the Supplement at page 2, Applicants state that 691 XO Communications on-net buildings are located within Verizon’s incumbent LEC footprint, and that 537 of these buildings “are on-net buildings for at least one other CLEC or cable company.” In their Opposition at page 7, Applicants state that of the 691 buildings located within Verizon’s incumbent LEC footprint, 690 buildings “are served by at least one other CLEC or cable company in addition to XO Communications.” Please explain whether there are 537 buildings within Verizon’s incumbent LEC footprint that are served by at least one CLEC or cable company other than XO Communications, or if there are 690 buildings within Verizon’s incumbent LEC footprint that are served by at least one CLEC or cable company other than XO Communications, and explain the discrepancy between the two statements (if there is one).***

XO has 691 on-net buildings within Verizon’s ILEC footprint, and 690 of them are served by at least one CLEC or cable company in addition to XO. Upon the announcement of its transaction with XO, Verizon conducted an initial competitive overlap analysis using an internal confidential and proprietary database and publicly available data from certain competitors, which yielded an initial figure of 537 buildings that are on-net for at least one other CLEC or cable company in addition to XO. Applicants provided that initial figure to Commission Staff in the Supplement and stated (at page 2) that they “will continue to examine these buildings.” After conducting further analysis using publicly available data from several additional competitors, Verizon determined that it was able to supplement its initial findings. This “more extensive review” (Opposition at 7) shows that there are 690 buildings within Verizon’s ILEC footprint that are served by at least one CLEC or cable company in addition to XO.

- 19. *Describe Verizon’s post-closing plans concerning XO’s services provided via Ethernet over Copper (“EoC”). In addition:***
- a. *Provide all documents in Verizon’s or XO’s possession that discuss XO’s EoC-based service, including strategic plans, deployment plans, pricing, and competitive environment.***
  - b. *Does Verizon plan to continue providing EoC-based service to existing purchasers everywhere it is currently available from XO?***

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- c. Will Verizon honor existing XO contracts or purchase arrangements for EoC service?*
- d. Submit all documents discussing any planned, potential, or actual XO migration of its non-facilities-based connections to its own facilities (whether over XO’s facilities or an infeasible right of use).*
- e. Describe the extent to which EoC is a competitive alternative to BDS provided over fiber and any other business broadband services provided by Verizon over fiber.*

Verizon and XO are in the process of planning for the post-closing period. Accordingly, it is too soon to provide detailed responses on how the combined business operations of Verizon and XO will be managed with respect to XO’s Ethernet-over-Copper service offerings (“EoC service”) in any given geographic area. That said, Verizon’s planning activity is guided by its intention to comply with the terms of existing XO contracts and purchase arrangements for EoC services.

Because Verizon is seeking to purchase XO as a going concern, Verizon will acquire XO’s EoC business intact, with the personnel, operations support systems and processes, network infrastructure, and contractual arrangements in place to operate XO’s EoC business post-closing consistent with how XO is operating it currently, and in a manner that will enable Verizon to continue to comply with XO’s contracts with its customers. This will give Verizon the ability to make prudent business decisions as it learns more about, and gains a better understanding of, XO’s EoC business.

XO’s EoC business may provide Verizon with a complement to its current fiber-based Ethernet and broadband offerings, both in and out of Verizon’s ILEC service areas. Indeed, Verizon currently purchases some EoC service from XO and sees the value of this service offering in specific markets and for appropriate business applications. Subsequent decisions on EoC services will be determined based on **[BEGIN CONFIDENTIAL]**

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**[END CONFIDENTIAL]**

**19a.** Documents responsive to this request will be provided in the document production.

**19b.** Verizon plans to continue providing EoC-based service to XO's existing purchasers pursuant to the terms of XO's existing contracts. As part of this, existing customers will continue to be able to order new circuits as allowed under those agreements. Facilities availability will be subject to Verizon's normal course of investment and technology upgrade efforts.

**19c.** Verizon plans to comply with the terms of existing XO contracts or purchase arrangements for EoC service.

**19d.** Question 19d is not applicable to Verizon.

**19e.** EoC is often used to provide low-cost, low-bandwidth Ethernet services to small and medium business customers, especially in areas where fiber is not available. Verizon understands that some customers purchasing EoC services are using those services for applications such as broadband Internet access, for which other broadband services, like cable broadband service or fiber-based Ethernet, DSL, or Fios, might be suitable competitive alternatives. Verizon, as well as other providers, also offers BDS services in a range of speeds using DS1 circuits provided over copper or fiber and DS3 circuits provided over fiber. Other customers' needs might be met appropriately with a wireless solution.

In some instances, EoC services may not provide a reliable network connection at sufficient speeds to meet customers' demands. For these customers, a fiber network is a better alternative. For example, to provide EoC service, copper loops cannot exceed a certain length. Some copper cables, depending on their condition, may not be able to support the higher

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frequencies needed to provide EoC service. Some customer locations may not be served by the requisite number of copper pairs needed to be bonded in order to provide the desired Ethernet speed, or may not have sufficient working pairs available, based on other demand at the location. Delivering EoC may also provide customers with a less-than-optimal upgrade experience; significant increases in bandwidth over copper lines may require activity such as a dispatch to the customer location to connect more pairs, while newer fiber-based Ethernet networks can be provisioned to deliver bandwidth-on-demand via simple software or configuration changes when customers require more bandwidth. And fiber is more resilient than copper, as well as being more impervious to atmospheric events or other conditions that can damage copper facilities. Fiber is a superior facility choice to copper for providing data services. As such, EoC-based service delivery may wane in importance in the face of continued expanded deployment of fiber-based broadband technologies and advanced wireless data services.

- 20. Describe Verizon's CLEC activities within its ILEC footprint and outside of its ILEC footprint. In addition:**
- a. Provide a list of each state in which Verizon continues to operate a CLEC Subsidiary or Affiliate and for each Subsidiary or Affiliate explain whether and how the activities of each Subsidiary or Affiliate will change after the completion of the transaction with XO.**
  - b. Describe, and provide documents sufficient to show, the extent to which the acquisition of XO will affect Verizon's wholesale operations, offered services, and service terms for operations within and outside of its ILEC footprint.**
  - c. Explain whether Verizon, in selling its ILEC assets in Florida, Texas and California, has leased back such facilities from Frontier in order to continue serving its customers, and whether such connections are included in the applicants' analyses regarding building overlap between Verizon and XO.**

Verizon's CLEC activities occur in 49 states (all except Alaska) and the District of Columbia; Verizon affiliates have other non-ILEC sales activities in all fifty states and in the

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U.S. territories. CLEC wholesale sales activities are handled through VPS; enterprise retail sales activities through VES; and small business sales activities through Verizon's Retail Sales Operations and are branded as "MCI" products and services out of Verizon's ILEC footprint. VPS and VES offer the services identified below through Verizon's CLEC operations or other non-ILEC affiliates, both inside Verizon's ILEC footprint and outside Verizon's ILEC footprint.

The services include:

### Data Services

- Metro private line offers SONET and TDM service at speeds from DS1 to OC-192.
- Ethernet access allowing for point-to-point and point-to-multipoint connections and featuring speeds between 1 Mbps to 10 Gbps.
- IP Communications services.
  - Private IP (PIP) service provides an MPLS-based virtual private network (VPN) for secure business and network operations and communications.
  - Dedicated Internet Access provides high-bandwidth dedicated Internet access via TDM private line or Ethernet circuits.
- Wave Service provides for the transport of managed optical point-to-point circuits across Verizon's shared wavelength network. The service provides a dedicated path for each point-to-point circuit and can be used: (a) to connect a customer-designated premises to another customer-designated premises, (b) to connect a customer-designated premises to a customer point of presence (POP) location, or (c) to interconnect POP locations.

### Voice Services

- Session Initiation Protocol (SIP) Gateway Service provides a single platform for transporting VoIP media between IP networks and the telephone network (PSTN). This

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service enables customers to offer end-users complete telephony service, including local calling, directory assistance, E911, long distance, international long distance, and operator services.

- Local voice service includes ISDN-PRI (Primary Rate Interface), typically used by medium to large enterprises with digital PBXs to provide them with digital access to the PSTN. Verizon also offers facilities-based local exchange digital T-1 and associated features, including virtual foreign exchange service (VFX) (inbound only) providing service from a central office outside of the customer's exchange area, remote call forwarding, overflow routing for call center routing, disaster recovery, universal calling, service access codes, directory assistance, hunting, operator services, relay services, and 911 and E-911.

### Data Center Services

- Verizon Cloud Services is a managed computing platform that gives customers the power to provision computing resources for mission critical applications in minutes. Cloud services include Secure Cloud Interconnect (SCI). SCI allows customers to connect employees to the enterprise's cloud-based applications working in tandem with Verizon's PIP network.
- Data Center Colocation is offered through Verizon's data center portfolio of key carrier neutral Network Access Points.

**20a.** Verizon subsidiary MCImetro Access Transmission Services LLC operates as a CLEC in 49 states (all except Alaska) and the District of Columbia. Verizon subsidiary MCImetro Access Transmission Services of Virginia operates as a CLEC in Virginia. Verizon subsidiary MCImetro Access Transmission Services of Massachusetts operates as a CLEC in

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Massachusetts. Verizon subsidiary Metropolitan Fiber Systems of New York, Inc. operates as a CLEC in New York. Verizon subsidiary MCI Communications Services Inc. is certificated as a CLEC in Illinois, South Dakota, Tennessee, Utah, and Vermont but is not currently operating as a CLEC in those states.

Verizon does not expect the acquisition to materially change the existing activities of the Verizon CLECs, but as noted herein, the company is still evaluating XO's suite of services for the potential migration of services to Verizon offerings. Because Verizon plans to comply with the terms of existing XO contracts, Verizon expects that its CLEC activities will change to the extent appropriate to service those contracts. Other changes may also occur as Verizon determines the best way to fully integrate these customers and assets.

**20b.** Verizon is currently reviewing XO's products and services, including service to its wholesale customers, consistent with the response to Question 16 above. Generally speaking, Verizon anticipates that the acquisition will allow Verizon to improve the services it provides to wholesale customers and more effectively compete for them. Acquiring XO's fiber routes will boost the fiber capacity Verizon has, enabling it to deliver customer-facing benefits as described in response to Question 24. As described further in response to Question 16, Verizon also may determine to offer products that XO currently offers to Verizon's existing customers. And, as previously noted, Verizon plans to comply with the terms of existing XO contracts, which will affect Verizon's wholesale operations, offered services, and service terms as to those customers.

**20c.** Before Verizon sold its ILEC assets in Florida, Texas, and California to Frontier, various Verizon non-ILEC affiliates (for example, CLEC, wireless, and IXC operations) in California, Florida and Texas leased facilities from the Verizon ILECs on the same arms-length basis as other wholesale customers. Because Frontier purchased the former Verizon ILECs at the holding

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company level, those contracts continued according to their terms and conditions. These affiliates have continued to lease facilities from the transferred ILECs. Verizon's building analysis focused on facilities-based competition and did not include these leased facilities.

***21. Within Verizon's ILEC footprint, will Verizon apply its current policy regarding special construction charges to assets acquired from XO? Describe in detail that policy, including the factors that Verizon weighs in determining when to charge, and how much to charge, for special construction charges when deploying fiber or other facilities in order to provide wholesale special access services to Competitive Providers requesting such services.***

Verizon is still in the process of planning for the integration of XO, and therefore it is too soon to say exactly how construction practices will be handled. That said, Verizon currently expects to treat the acquired XO assets in accordance with XO's contractual commitments to its customers, and in accordance with Verizon's current policy for handling special construction for Verizon CLEC customers, which differs from Verizon's practices for ILEC special construction. These services are negotiated through individual agreements.

As a general matter, for services provided by a Verizon CLEC, currently, where a location is on-net, customers are not charged special construction costs except for out-of-pocket costs necessary to extend service within a building or from a common location to the customer's suite. If customers seek Verizon CLEC services in a building that Verizon does not currently serve, and if Verizon seeks to provide on-net services to that customer, Verizon will attempt to re-coup the costs of such network extension through a single up-front non-recurring charge, monthly recurring charges, or a combination of the two. Factors that Verizon weighs in determining the charge or charges involve the cost of installing the facilities, including equipment, materials, engineering, labor, supervision, rights of way fees, permits, and other identifiable costs related to the construction or installation of the facilities to be provided.

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As Verizon transitions the acquired XO assets, it will comply with the terms of special construction agreements that XO has entered with competitive providers that may involve remaining payment for the construction cost and/or recurring charges, as well as the terms of XO's agreements with its customers that address the customers' responsibility for payment of construction charges for construction of the XO network.

- 22. Describe the process (if any such process exists) by which XO currently provides number porting services to other entities, including interconnected VoIP providers and competitive wireless carriers. In addition:**
- a. Provide a list of entities in each market for whom XO provides access to numbering resources; and**
  - b. Will the proposed transaction reduce the availability of XO as a provider of access to numbering resources for other entities or increase the price of such services? If so, to what extent?**

**22 & 22a.** Questions 22 and 22a do not apply to Verizon.

**22b.** To the extent there are existing agreements between XO and third parties for numbering resources, the proposed transaction will not affect the terms of those agreements, including pricing, nor will it affect the ability of other entities to obtain numbering resources in a market comprised of many suppliers. As previously explained, post-closing Verizon will meet XO's contractual and regulatory obligations to its customers. This includes entities that may be acquiring numbering resources from XO via an agreement, and any pricing established thereunder. Going forward, XO, as a wholly-owned Verizon subsidiary, will not remain an independent provider of numbering resources, but there is an extensive range of suppliers of numbering resources, including ILECs (Verizon included), CLECs, wireless providers, and

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interconnected VoIP providers.<sup>7</sup> This wide range of options through which numbering resources are available ensures a competitive market for such services post-transaction. Indeed, an entity could easily obtain numbers from a significant range of other sources to the extent Verizon or any other carrier attempted to charge unreasonable prices for those resources.

**23. Provide:**

- a. Documents sufficient to show the potential for cost savings, efficiencies, synergies, or benefits resulting from the Transaction. In addition:**
  - i. Describe the steps Verizon will take to achieve these cost savings, efficiencies, synergies or benefits; the costs Verizon will incur to achieve them; the risks involved in achieving them; the underlying assumptions on how to achieve them; and the time required to achieve them, including whether they are primarily short-term or long-term.**
  - ii. Explain whether these cost savings, efficiencies, synergies or benefits will represent savings in fixed costs or marginal costs, and describe the assumptions underlying your response to this information request.**
    - A. Provide an estimate of the annual cost savings, efficiencies, synergies, benefits, and risks attributable to the Transaction for each of the first five years after closing, and an explanation of whether they will have a one- time or recurring effect;**
    - B. Provide a detailed explanation of the underlying assumptions and the methodology used to estimate the annual cost savings, efficiencies, synergies, cost savings, benefits, and risks attributable to the Transaction within the first five years after closing;**
    - C. Describe and explain in detail and provide documents sufficient to show Verizon’s plans to pass through any cost savings from the Transaction to consumers and the extent to which Verizon has passed through past cost savings to consumers; and**
  - iii. Provide documents sufficient to show the details, and calculations supporting Applicants’ claim that the synergies of the Transaction will result in total expense savings greater than \$1.5 billion on a net present value basis.**
  - iv. For each cost saving, efficiency, synergy, or benefit that you identify, please describe, explain, and produce and identify documents**

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<sup>7</sup> See, e.g., See Letter from Steven K. Berry, CCA, and Meredith Attwell Baker, CTIA, to Tom Wheeler, Chairman, FCC, at 3 (Sept. 25, 2015), [http://www.nanc-chair.org/docs/mtg\\_docs/Sep\\_15\\_CTIA\\_Letter-to\\_FCC\\_092515.pdf](http://www.nanc-chair.org/docs/mtg_docs/Sep_15_CTIA_Letter-to_FCC_092515.pdf).

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*sufficient to show: (A) each alternative to the Transaction that Verizon considered to achieve any of the claimed cost savings, efficiencies, synergies, or benefits; (B) how these cost savings, efficiencies, synergies, or benefits are directly related to the Transaction, and (C) why these cost savings, efficiencies, synergies, or benefits could not be achieved by Verizon without the Transaction.*

- b. For each new or improved product or service that Verizon claims it will be able to offer as a result of the Transaction, describe and explain in detail and produce all documents sufficient to show the amount that Verizon will need to invest and spend to provide the new or improved product or service and identifying each element of the cost and expenditure, including but not limited to, research, development, licensing fees, equipment, and manufacturing costs.*
- c. An explanation of what metrics or thresholds Verizon will use to determine whether actual cost savings, efficiencies, synergies, or benefits are consistent with its model, as well as what Verizon's plans are to address deviations from its model.*
- d. A copy of all documents, data, spreadsheets, models, and underlying assumptions prepared expressly for Verizon (whether prepared internally or by outside advisors) that were used to prepare any response to this information request.*

**23a.** The cost savings, efficiencies, synergies, and benefits (collectively “synergies”) that Verizon anticipates will result from this transaction are detailed in Exhibit 23ai and Exhibit 23aiii, as well as other documents produced pursuant to this request.

**23ai.** Steps to Achieve Synergies. To achieve synergies that Verizon expects from this transaction, Verizon has established an Integration Management Office (“IMO”) that will lead its integration planning efforts across more than a dozen functional areas. The IMO team and its role in the integration process are described in documents identified as responsive to this request and included in the document production. Based on opportunities identified by Verizon during its initial due diligence and more recent and ongoing functional assessments of XO’s operations, Verizon has assigned synergy targets to each functional area with respect to some combination, as applicable, [BEGIN CONFIDENTIAL]

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**[END CONFIDENTIAL]** Functional teams are tasked with developing formal, detailed work plans to achieve the targeted synergies. The functional teams are accountable to both IMO leadership and Verizon’s Finance organization, which together will oversee integration planning and track achievement of the anticipated synergies post-transaction.

Assumptions on Which Synergies Are Based. Set forth below is a brief explanation of the assumptions and drivers of the synergies that Verizon expects to realize in the aggregate in fiscal years 2017-2020 as a result of the transaction. These synergies are further detailed in Exhibit 23ai, including an explanation of the methodology used to evaluate this transaction to estimate these synergies.

**[BEGIN CONFIDENTIAL]**

**[END CONFIDENTIAL]** Exhibit 23ai, Verizon anticipates that it will realize approximately **[BEGIN HIGHLY CONFIDENTIAL]** **[END HIGHLY CONFIDENTIAL]** in synergies primarily in the following functional areas: **[BEGIN CONFIDENTIAL]**

**[END CONFIDENTIAL]**

Verizon anticipates that the transaction will generate **[BEGIN HIGHLY CONFIDENTIAL]** **[END HIGHLY CONFIDENTIAL]** in synergies in **[BEGIN CONFIDENTIAL]**

[END

CONFIDENTIAL]

Verizon anticipates that it will realize [BEGIN HIGHLY CONFIDENTIAL]  
[END HIGHLY CONFIDENTIAL] in synergies in [BEGIN CONFIDENTIAL]

[END CONFIDENTIAL]

Verizon anticipates that it will generate [BEGIN HIGHLY CONFIDENTIAL]  
[END HIGHLY CONFIDENTIAL] in synergies in [BEGIN CONFIDENTIAL]

[END CONFIDENTIAL]

section of Exhibit 23ai, Verizon expects to realize [BEGIN HIGHLY CONFIDENTIAL]

[END HIGHLY CONFIDENTIAL] [BEGIN CONFIDENTIAL]

[END CONFIDENTIAL] The bulk of these synergies, approximately [BEGIN

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**HIGHLY CONFIDENTIAL]** **[END HIGHLY CONFIDENTIAL]** will stem  
from efficiencies that will be gained **[BEGIN CONFIDENTIAL]**

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**[END CONFIDENTIAL]** Verizon anticipates that it will  
realize approximately **[BEGIN HIGHLY CONFIDENTIAL]** **[END HIGHLY**  
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**CONFIDENTIAL]**

**[END CONFIDENTIAL]**

Anticipated Costs and Revenue-Related Dis-Synergies. Verizon has identified one-time costs that are required to achieve the anticipated level of integration. Verizon also has identified certain net revenue-based dis-synergies related to the transaction. Verizon’s primary anticipated integration costs and revenue dis-synergies for fiscal years 2017-2020 are briefly described below and are further detailed in the “One-Time Integration Costs” and “Revenue Synergy” sections of Exhibit 23ai.

**[BEGIN CONFIDENTIAL]**

**[END CONFIDENTIAL]**

Verizon expects to incur approximately **[BEGIN HIGHLY CONFIDENTIAL]**

**[END HIGHLY CONFIDENTIAL] [BEGIN CONFIDENTIAL]**

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**[END CONFIDENTIAL]** Verizon expects to incur  
approximately **[BEGIN HIGHLY CONFIDENTIAL]** **[END HIGHLY**  
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approximately **[BEGIN HIGHLY CONFIDENTIAL]** **[END HIGHLY**  
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**[END CONFIDENTIAL]**

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Risks Associated with Synergies. Verizon believes that the primary risks associated with realizing the anticipated synergies described above arise from: **[BEGIN CONFIDENTIAL]**

**[END CONFIDENTIAL]**

However, Verizon is confident it can largely mitigate these risks due to the diverse range and level of savings and synergy opportunities presented by the transaction. Therefore, Verizon expects that it will be able generally to achieve the financial benefits expected from this transaction even if certain anticipated synergy opportunities are not able to be fully realized.

Time Required to Achieve Synergies. Verizon expects to achieve the foregoing synergies both **[BEGIN CONFIDENTIAL]**

**[END CONFIDENTIAL]**

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**23a**ii. The majority of the synergies that Verizon anticipates to generate from the transaction are  
**[BEGIN CONFIDENTIAL]**

**[END CONFIDENTIAL]**

**23a**iiA. Verizon’s estimate regarding annual synergies related to the transaction for fiscal years 2017-2020 are set forth in Exhibit 23ai. Any recurring savings reflected in this spreadsheet beyond fiscal year 2020 are set forth in the “Terminal” column, and are expected to be recurring at the level shown.

**23a**iiB. An explanation of the underlying assumptions used to estimate annual synergies related to the transaction for fiscal years 2017-2020 and beyond (*i.e.*, “Terminal” recurring synergies) are provided in Verizon’s response to Question 23ai and Exhibit 23ai.

**23a**iiC. Many providers compete today to serve business customers. They compete on price, service quality, and availability, among other things. In competitive marketplaces, competitive pressures drive prices towards the costs incurred by market participants to provide products and services to their customers.

**23a**iii. Verizon’s estimate of the net present value of the synergies that it may realize from the transaction is set forth in Exhibit 23aiii. This spreadsheet uses a discounted cash flow model to calculate synergies by category from fiscal years 2017-2020, and lists anticipated synergies beyond fiscal year 2020 in the “TV” (or Terminal Value) column. Synergies listed in this column are expected to be recurring at the level shown.

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**23aiv.** The discussion herein details synergies that result directly—and only—from the transaction. None of these synergies will be realized if the transaction is not consummated. These synergies would not be achieved through any alternative to this transaction because without the transaction Verizon would have continued “business as usual.” Therefore, only the combination of the two businesses allow for these synergies to be realized relative to the costs of operating the two companies separately.

**23b.** Verizon has not to date identified specific amounts it may need to invest or spend to provide new or improved products or services.

**23c.** The IMO described in Verizon’s response to Question 23ai will manage integration planning and implementation activities related to the transaction. Verizon has identified specific IMO teams governing more than a dozen different functional areas. These functional area teams will develop detailed plans and actions to achieve synergy targets for their functional areas. These synergy plans will be integrated into Verizon’s forward-looking business and financial planning processes. The IMO and Verizon’s Finance organization will monitor the implementation of the plans in each functional area on a monthly basis at a high level of granularity. This should permit any deviations from Verizon’s modeled synergy opportunities to be identified early. If likely synergy shortfalls are detected, the IMO and Finance organization will work with the relevant functional teams to identify potential means to offset such deviations, including alternative synergy opportunities, acceleration of existing synergy plans, modification to integration models, or offsets within existing operational areas not otherwise impacted by the transaction. Verizon believes that this transaction provides sufficiently diverse synergy opportunities that any synergy shortfall in one functional area should be able to be counteracted through the realization of synergy windfalls in another functional area.

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**23d.** Pursuant to its discussion with Commission staff, Verizon is conducting a reasonable search and will produce responsive documents on a rolling basis. Verizon’s initial production of responsive documents will be included in its initial document production on July 8, 2016.

- 24.** *Provide a detailed explanation of and copies of documents sufficient to support (including but not limited to any analyses of or assumptions and/or data supporting) the following Verizon claims:*
- a.** *By gaining access to XO’s fiber-based IP and Ethernet networks, The Transaction will “allow Verizon to expand and improve the services Verizon Enterprise Solutions “(VES”) provides to enterprise and wholesale customers, particularly in areas outside of Verizon’s remaining ILEC footprint.”*
  - b.** *The Transaction will improve Verizon’s ability to serve multi-location enterprise customers and “more effectively compete with leading national and regional high-capacity service providers—especially cable companies, but also traditional incumbent and competitive telephone companies, wireless providers, and other non-traditional players, particularly in central business districts.”*
    - i.** *Describe in detail and provide documents sufficient to show which multi-location businesses Verizon will be able to provide business services to that it would have been unable to serve prior to the Transaction. In your description, please provide detailed information about the scale or characteristics of these potential customers, by geographic unit (such as DMA or MSA) or by each individual business, such as: revenues, proportion of the market, and how revenues that could be earned from the potential customers compare to Verizon’s total business services revenues.*
    - ii.** *Describe in detail and provide documents sufficient to show how many of XO’s 20,000 fiber route miles of national inter-city networks, and 5,600 fiber route miles of metro fiber, are located within Verizon’s ILEC footprint, and how much are in each of XO’s Top 20 Fiber Areas identified in Exhibit 2 to the Applicants’ Supplement.*
    - iii.** *Describe in detail, provide documents sufficient to show, and identify, in each of XO’s top 20 fiber areas, the amount of fiber currently leased by Verizon and the amount of fiber to be acquired from XO. Explain how owned fiber improves service to multi-location enterprise customers as compared to leased fiber.*
  - c.** *“[T]he transaction will benefit wireless consumers by enhancing network capacity and reliability, as Verizon will acquire more fiber for backhaul to serve and fuel its increasingly dense wireless broadband network. This*

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*fiber backhaul will support the speedy development and deployment of 5G technology.”*

- d. “In addition, Verizon will be able to offer existing XO Communications customers additional products and services not currently available through XO.”*
- e. Verizon assertion that it will continue to provide service and comply with XO’s “contractual and regulatory obligations to its customers, so that the transaction will be seamless to those customers.”*
- f. “Verizon has the economy of scale to invest in and support” the fiber networks being purchased from XO, including “through achieving synergies as part of this transaction.”*

**24a.** Verizon will be able to expand and improve the services that it provides to business customers and to wholesale customers by acquiring XO’s fiber-based networks, particularly in areas outside of Verizon’s ILEC footprint. As a result of the transaction, Verizon will own XO’s metro fiber in many metro markets outside of its ILEC footprint where it generally leases fiber today, including markets such as Memphis, Las Vegas, Nashville, Salt Lake City, Atlanta, and Los Angeles. Approximately 85 percent of XO’s on-net buildings are outside of Verizon’s ILEC footprint, and Verizon does not have plant in 87 percent of these buildings. (*See Supplement at 2.*) By integrating these XO facilities into Verizon’s fiber network, Verizon can provide certain customer-facing benefits that are not as readily provisioned in a leased fiber solution.

When a carrier owns fiber instead of leasing it, the carrier gains a greater amount of knowledge and control about how the fiber is managed and maintained. This leads to specific and identifiable customer-facing benefits in this case.

First, post-transaction Verizon will be able to simplify and expedite the ordering process for customers in buildings that are served by XO’s metro fiber but not by Verizon fiber. Specifically, Verizon will no longer need to evaluate the availability, characteristics, and pricing

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of leased access to these buildings as part of the customer ordering process, and will generally be able to provide immediate firm order confirmation. For customers, this means eliminating delay.

Second, Verizon can improve the provisioning process when using owned facilities because it will be able to better control the timing for service deployments and will not be beholden to the provisioning schedule of other carriers. In addition, it often is possible to avoid multiple truck rolls when provisioning on-net services.

Third, Verizon can expand services by offering more tailored and flexibly managed service offerings to on-net customers due to Verizon's heightened control of the facilities used to serve these customers. For example, Verizon will be able to provide complete maintenance, surveillance, and response to customer issues without the involvement of third-party providers, allowing for faster identification and remediation of issues that may arise. This superior network management capability will enable Verizon to better satisfy the particular needs of customers.

Fourth, Verizon will be able to ensure diverse paths to customer premises for customers seeking route diversity for their communications services. A provider relying on leased fiber to gain access to a building has limited visibility regarding the path used. This can result in unintended route redundancy and thereby undermine route diversity.

Fifth, Verizon will be able to provide more robust and resilient service. As an initial matter, on-net services require fewer, if any, hand-offs of customer communications to other carriers. More hand-offs may create an increased risk of service disruptions and generally require the involvement of multiple carriers in the trouble ticket response process, which can delay and impair customer service and resolution. Further, Verizon will be able to more quickly and precisely detect and resolve disruptions to on-net services from its network operating centers even before its on-net customers are aware of any problem. By contrast, a provider relying on

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leased fiber must consult with another carrier (and sometimes multiple carriers) to determine the cause of service disruptions reported by off-net customers and must rely on third-party carriers' trouble ticket resolution processes. Similarly, although Verizon has more control when scheduling maintenance and other potentially service-disrupting activities effecting owned fiber, it has less control over service interruptions when the other carrier conducts maintenance and effects repairs. As a result of these factors, Verizon often can offer better service level agreements to on-net customers.

In addition, owning rather than leasing fiber can be more cost-effective. Owning fiber may provide the owner greater flexibility from an accounting perspective because construction costs may be able to be capitalized over multiple years. By contrast, leased fiber costs generally are expensed annually. Owning fiber also may enable better control over costs and thus the ability to provide more stable pricing to customers. By contrast, a provider relying on leased fiber typically is faced with agreements with fixed lease terms that must be renegotiated. In addition, fiber leases often contain fixed rent escalators.

The transaction will enable Verizon to improve the services that it offers in metro markets, as well as improve Verizon's ability to compete with other carriers in these markets. Moreover, these same benefits will accrue to XO customers that XO currently serves using leased facilities but that can be transitioned to Verizon-owned facilities post-closing.

**24bi.** The transaction will enable Verizon to “more effectively compete” (Public Interest Statement at 3) for multi-location business customers that have locations in the portion of XO's network footprint that is outside of Verizon's ILEC region. Currently, Verizon generally relies on leased facilities to serve the businesses' locations that are outside of Verizon's network

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footprint; whereas, post-closing Verizon will be able to utilize more owned facilities to serve more businesses' locations.

In addition, in some instances it may not be cost-effective for Verizon to serve certain, often smaller offices of Verizon's current multi-location business customers if the offices are off-net for Verizon. As a result, these customers might have other carriers serve certain offices while relying on Verizon for services at most of their locations. To the extent that these off-net offices are located in markets within XO's network footprint, Verizon will be able to more efficiently and effectively provide services to more of the offices of these customers and to do so using owned facilities.

Current XO customers similarly will benefit from the transaction. To the extent that XO utilizes leased facilities to serve some of the offices of its multi-location customers, these customers may be able to be transitioned to Verizon facilities post-closing. As a result, these XO customers will receive all the attendant benefits of on-net service discussed in Verizon's response to Question 24a.

It is unlikely that there are multi-location businesses that Verizon does not have the technical capability to serve at all using owned facilities or facilities leased from other carriers. However, by incorporating XO's owned fiber facilities into Verizon's fiber network, Verizon will be better able to compete for multi-location business customers, in particular small and mid-sized business customers, with locations outside of Verizon's ILEC footprint. By leveraging XO's metro fiber to complement Verizon's fiber, Verizon will be able to increase its reliance on owned fiber when serving multi-location business customers with offices outside of Verizon's ILEC footprint.

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Exhibit 24bi provides a list of the businesses with offices in buildings that are served by XO fiber facilities but not by Verizon fiber facilities. Among these businesses, Verizon has identified approximately [BEGIN CONFIDENTIAL] [END CONFIDENTIAL] that are Verizon customers in some capacity. These customers are in all of the various segments that Verizon markets to, from the largest enterprise customers down to small business customers, and public sector accounts as well. Of course Verizon does not serve many of the businesses in these buildings. Having the ability to offer on-net services across a customer's multiple locations allows Verizon to provide the customer-facing benefits described in response to Question 24a.

**24bii.** Of XO's 20,000 fiber route miles of national inter-city networks, [BEGIN CONFIDENTIAL] [END CONFIDENTIAL] are located within Verizon's ILEC footprint. Of XO's 5,600 fiber route miles of metro fiber, [BEGIN CONFIDENTIAL] [END CONFIDENTIAL] are located within Verizon's ILEC footprint. Thus, of the approximately 25,600 fiber route miles constituting XO's combined inter-city and metro fiber networks, [BEGIN CONFIDENTIAL] [END CONFIDENTIAL] are located in Verizon's ILEC footprint. The national inter-city network figures were derived by comparing mapping data supplied by XO with Verizon ILEC wire center locations, and measuring the length of XO routes that appear within and outside of Verizon's ILEC footprint. The metro fiber figures were derived by comparing XO's fiber route miles of metro fiber in Exhibit 24bii (which was created by and obtained from XO) to Verizon's ILEC footprint.

XO's Top 20 Fiber Areas listed in Exhibit 2 of the Supplement were determined by the number of XO-owned Fiber Miles as set forth in Exhibit 24bii. Based upon the data in Exhibit

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24bii, XO has the following amount of fiber route miles of metro fiber in its Top 20 Fiber Areas (as defined by Fiber Miles) and identified in the Supplement: **[BEGIN CONFIDENTIAL]**

**[END CONFIDENTIAL]** National inter-city fiber networks, which by their nature run between cities, are generally not associated with a single market area. Accordingly, the number of inter-city fiber route miles is not available for the XO Top 20 Fiber Areas.

**24biii.** Verizon's responses to Questions 24a and 24b above explain how owned fiber can improve service to multi-location enterprise customers as compared to leased fiber. The response to Question 24bii and Exhibit 24bii discussed above include the amount of fiber route miles and fiber miles owned by XO in its Top 20 Fiber Areas. In addition, Verizon leases fiber

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route miles of metro fiber in certain of XO's Top 20 Fiber Areas (which also does not include inter-city route miles), and will provide that data as part of its rolling production.

**24c.** The transaction will provide Verizon with fiber in major metropolitan markets that will assist Verizon in the provision of backhaul for its increasingly densified mobile broadband network. As stated in Verizon's response to Question 24bii, **[BEGIN CONFIDENTIAL]**

**[END CONFIDENTIAL]** of XO's 5,600 route miles of metro fiber are located in Verizon's ILEC footprint. The remaining approximately **[BEGIN**

**CONFIDENTIAL]** **[END CONFIDENTIAL]** of XO's metro fiber serves metro areas outside of Verizon's ILEC footprint.

As explained in Verizon's Application and Opposition, Verizon is actively densifying its mobile broadband network by deploying increased numbers of more densely packed wireless cell sites in an effort to satisfy the exploding customer demand for mobile broadband capacity. (*See* Application at 6, 8-10; Opposition at 4, 22.) Verizon's deployment of additional small cells, distributed antenna systems, in-building systems, and macro cells will improve the capacity and coverage, and thereby improve the performance, of Verizon's existing 4G network. It also will facilitate and expedite Verizon's future 5G network deployment because 5G technology is designed to be operated using smaller, more densely packed cell sites.

In addition, the use of owned fiber for backhaul will increase the quality and resiliency of Verizon's wireless network by providing Verizon with more ability to control and manage these backhaul facilities. Thus, by better connecting its cell sites to its networks through the use of XO fiber facilities, Verizon will improve its ability to serve its wireless customers.

**24d.** See response to Question 16 above.

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**24e.** See response to Question 16 above. Moreover, Verizon is devoting substantial resources to ensuring that the transaction is seamless to XO's customers. As set forth in documents provided in the document production, Verizon is establishing an extensive Integration Management Office ("IMO") to administer the integration of XO's business, customers, and network. The primary objective of this cross-disciplinary IMO team will be to migrate XO's customers to Verizon's back-office administrative and IT systems, including Verizon's highly automated Verizon Rapid Delivery ("VRD") ordering platform, in a manner that is transparent to the customers.

Verizon successfully implemented the VRD platform approximately three years ago to provide a holistic overlay across all of Verizon's various operating teams and thereby improve the internal communication of these teams. Verizon's successful and seamless introduction of the technically complex VRD platform demonstrates Verizon's high level of competence in handling massive integration projects. VRD enables Verizon to provide a more efficient and customer-focused ordering process and faster service installations involving fewer truck rolls. VRD also has reduced trouble tickets, and it enables Verizon to respond to customer service issues more rapidly and effectively. Further, the VRD platform provides enhanced information to customers about their services, as well as increased invoice accuracy. Once migrated to VRD, XO's customers will realize all of the benefits of this automated platform relative to the largely manual processes used by XO today.

By the time it migrates XO's customers, Verizon expects to have spent a year or more preparing. During this year, the IMO team will conduct a detailed evaluation of XO's systems, develop new integration tools and interfaces, and extensively test the migration process prior to its implementation. However, Verizon recognizes that not all of XO's systems will be

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compatible with Verizon’s back-office administrative and IT functions. Therefore, Verizon intends to maintain certain XO systems on a case-by-case basis as necessary to avoid any service disruptions and to ensure that the highest level of customer care is maintained.

**24f.** Verizon is a substantially larger company than XO. Therefore, its operating and capital improvement budgets, as well as its access to capital, far exceed XO’s. **[BEGIN**

**CONFIDENTIAL]**

**[END**

**CONFIDENTIAL]** As a result of its scale, Verizon is able to realize certain economies and efficiencies in its operations that are not available to XO. For these reasons, Verizon will be better positioned to support XO’s network expansions, improvements, and maintenance and to do so pursuant to a lower cost structure.

- 25. *Provide all documents cited in the Applicants’ Public Interest Statement in support of the Transaction’s claimed benefits, as well as any data or competitive analyses relied upon in preparing that document, grouped by benefit.***

Verizon is providing documents responsive to this request in the document production.

Commission decisions, filings that are in the public record (*e.g.*, comments filed in other FCC proceedings), and websites for which links were provided in the Public Interest Statement were excluded from the document production.

**B. BDS Data Collection**

- 26. *Separately for each Applicant, answer the following questions in the Data Collection (inclusive, where applicable, of all lettered sub-questions that fall within the numbered question specified), in each case where applicable substituting “as of May 31, 2016” for “during 2013” and, where no date is specified, providing information as of May 31, 2016:***

- ***II.A.3***

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- *II.A.4, except that (a) notwithstanding the text of II.A.4(c), the geocode for the Location (i.e., latitude and longitude) must be provided in each case; and (b) Applicants need not respond to question II.A.4(d).*

Pursuant to its discussion with Staff, Verizon anticipates that it will provide data responsive to this request on or before July 21, 2016.

**27. Provide the information requested below for each Location to which Verizon had a Connection as of May 31, 2016, where all of the following are true: (a) Verizon was a Competitive Provider; and (b) the Location in question was within 1,000 meters or fewer of another Location to which XO had a Connection as of May 31, 2016:**

- a. As to Verizon:**
  - i. A unique ID for the Location;**
  - ii. The actual situs address for the Location (i.e., land where the building or cell site is located);**
  - iii. The geocode for the Location (i.e., latitude and longitude); and**
  - iv. The total sold bandwidth of the Connection provided by you to the Location in Mbps.**
- b. As to each Location to which XO had a Connection that was within 1,000 meters or fewer of the Location identified in response to sub-question a above:**
  - i. A unique ID for the Location;**
  - ii. The actual situs address for the Location (i.e., land where the building or cell site is located);**
  - iii. The geocode for the Location (i.e., latitude and longitude) if kept in the normal course of business, otherwise providing this information is optional; and**
  - iv. The total sold bandwidth of the Connection provided by you to the Location in Mbps.**

***For purposes of this question 27, each reference to a Connection encompasses only a Connection where all of the following are true: (a) any of the Connection to the Location was provided using fiber; and (b) the Provider (i) owned the Connection or (ii) leased the Connection from another entity under an IRU agreement. The phrase “within 1,000 meters or fewer” encompasses a Connection to the same Location.***

Pursuant to its discussion with Staff, Verizon anticipates that it will provide data responsive to this request on or before July 21, 2016.

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28. *Provide the information requested below for each Location to which XO had a Connection as of May 31, 2016, where all of the following are true: (a) any of the Connection to the Location was provided using fiber; (b) XO either (i) owned the Connection or (ii) leased the Connection from another entity under an IRU agreement; and (c) the Location is within Verizon's ILEC footprint.*
- a. *A unique ID for the Location;*
  - b. *The actual situs address for the Location (i.e., land where the building or cell site is located);*
  - c. *The geocode for the Location (i.e., latitude and longitude); and*
  - d. *The total sold bandwidth of the Connection provided by you to the Location in Mbps.*

Verizon does not have data responsive to this request and understands XO will be responding.

29. *For each Location identified in response to either (or more than one of or all of) questions 27.a, 27.b, or 28 above, provide the following information as of May 31, 2016:*
- a. *The number of distinct Providers (excluding Verizon, XO, or any Affiliates of either) that had a Connection, within 1,000 meters or fewer of such Location;*
  - b. *The name of each such Provider;*
  - c. *The distance of such Provider's Connection from the nearest XO or Verizon Connection; and*
  - d. *The unique ID of such nearest XO or Verizon Connection, if provided in response to one or more of questions 27-28 above.*

*For purposes of this question, each reference to a Connection encompasses only a Connection where all of the following are true: (a) any of the Connection to the Location was provided using fiber; and (b) the Provider (i) owned the Connection or (ii) leased the Connection from another entity under an IRU agreement.*

Pursuant to its discussion with Staff, Verizon anticipates that it will provide data responsive to this request on or before July 21, 2016.

30. *If an Applicant's method of answering any of the requests in this sub-section B differs from its method of answering analogous questions in response to the Data Collection, describe those differences in methodology and the reasons for such differences.*

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Pursuant to its discussion with Staff, and following completion of our data compilation, Verizon anticipates that it will provide information responsive to this request on or before July 21, 2016.

Respectfully submitted,

William H. Johnson  
*Of Counsel*

\_\_\_\_\_  
/s/  
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July 7, 2016

**Verizon Enterprise Solutions (VES) and Verizon Partner Solutions (VPS) Services**

**Networking products** and solutions primarily include the following and are offered US Nationwide.

- Private IP (MPLS) – Services include a multiprotocol label switching (MPLS)-based solution, which enables customers to securely leverage the efficiency, performance and value of Internet Protocol (IP). The Private IP network allows customers to communicate over a private secure network in more than 120 countries. Private IP enables the consolidation of voice, data and video applications over an integrated network infrastructure and puts all traffic on a single network.
- Internet Services - Provides Dedicated Internet access via a high-capacity, global backbone for customers with a range of bandwidth needs (T1 to OC192, plus Dedicated Ethernet, Gigabit Ethernet (GigE) and 10 Gigabit Ethernet (10GigE). The service is integrated into the customer's LAN environment.
- Ethernet Services - Ethernet Access services allow customers to connect their internal network environments around the world including data centers, Local Area Networks (LANs) and remote sites, helping enable applications and technologies to work seamlessly and with little disruption. Links multiple locations whether inside a Local access and Transport area (LATA), intra-LATAs, or Internationally, EVPL is able to connect data centers, LANs, and remote sites with point-to-point and point-to-multipoint connections
- Private Point to Point Services provide a dedicated path for each point-to-point-circuit and can be used to connect a Customer designated Premises to another Customer designated Premises, a Customer designated Premises to a Customer Point of Presence (POP) location, or to interconnect POP locations. They include mobile backhaul services, which provide fiber facilities and hub arrangements which allow wireless carriers to aggregate mobile voice, data, and video traffic from cell sites and distributed antenna systems at designated hub locations before transporting the traffic to the mobile switching centers via other networking services such as Ethernet and wavelength services.
  - Private Line Services include a group of point-to-point service that provides IntraLata, international, national, and metro connectivity with speeds up to 10Gbps
  - Wavelength Services provides ultra-high speed dedicated point-to-point service configurations between customer locations on Verizon's optical network. Services are provided globally. Wavelength Services are available from 1 Gbps to 100 Gbps speeds.
  - Dedicated SONET Ring provides a dedicated high capacity customized network. The Service is designed in a diversely routed ring architecture or topology that assures survivability. The ring architecture allows for point-to-point optical and high capacity special access services of different bandwidths to be multiplexed on or off of the ring.
- ATM Service - Asynchronous Transfer Mode (ATM) Network Service is a form of 'fast packet' switching service for high speed networks which require flexible bandwidth, high-performance transport and switching for connectivity between and among widely distributed customer locations. ATM is a cell-based, connection-oriented, switching and multiplexing technology designed to be a fast, general-purpose transfer mode for multiple services.

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- Frame Relay Service - A data communications service that provides for data connectivity (up to the DS3 level) between and among widely distributed end-user locations. Frame Relay Service provides high speed throughput over digital facilities.
- Managed Network – Managed network services relate to Verizon managed wide area network (WAN) services which range from simple monitoring and reporting to complete outsourcing of a customer’s corporate network and data center activities and are supported by service level agreements.

**Security and IT Solution** services include a number of offerings from managed hosting services that provide enterprise and government customers with data center and network facilities, connectivity, security, architecture and the support required to maintain these; data center collocation services that house and protect customers’ critical applications and systems, such as several facilities that offer extensive carrier neutral options; application management services that provide customers with comprehensive monitoring and management of applications, with a focus on critical business processes and the end-users experience; and, advanced enterprise-class cloud services that provide customers with the ability to improve IT infrastructure and boost application performance.

- **Infrastructure and Clouds services** are offered US Nationwide and include:
  - Cloud compute and storage services and service tiers
  - Colocation services
  - Managed hosting and Application management services
  - Information security services
- **Security services include integrated solutions to help companies secure their networks and data that include the following offerings that are offered US Nationwide:**
  - Governance, Risk & Compliance – Assists customers in assessing risk levels based on current security controls and developing a plan to address security-related compliance objectives;
  - Identity Management – Provides identity-based access management for customer data, applications, and systems across multiple IT environments;
  - Managed Security – Allows leveraging Verizon expertise and best practices to design, implement, and maintain a secure IT infrastructure as well as and help prevent, detect, and report security threats.

**Business Communications and Voice** products and solutions primarily include the following and are offered US Nationwide.

- Contact Center as a Service – This service uses cloud functionality to provide a flexible solution for efficient customer service. This includes Intelligent queuing, enhanced routing, e-mail, and web integration combine multiple contact centers into a single virtual enterprise, Data integration by delivering key information to support personnel, Capabilities like CRM, knowledge management, social media, web customer service and automated outbound options help enhance the customer experience and Customized applications and integrated third-party solutions.

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- Unified Communications and Collaboration (UC&C) – These solutions provide a cost-effective way to connect employees to co-workers, customers, and company information, Voice over IP (VoIP) integrates voice and data traffic, Audio and video conferencing can enhance teamwork and improve response times, Cloud-based applications make access easy.
- IP Communications - Voice over Internet Protocol, also called VoIP, IP Telephony, Internet telephony, Broadband telephony, Broadband Phone and Voice over Broadband is the routing of voice conversations over the Internet or through any other IP-based network.
- Voice - Voice solutions are a core set of services providing local voice, domestic long distance, international long distance and conferencing voice services.

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**EXHIBIT 2c'XGU+**

**REDACTED – FOR PUBLIC INSPECTION**

**EXHIBIT 2c'XRU+**

**REDACTED – FOR PUBLIC INSPECTION**

**EXHIBIT 2d'XGU+**

**REDACTED – FOR PUBLIC INSPECTION**

**EXHIBIT 2d'XRU+**

**REDACTED – FOR PUBLIC INSPECTION**

**EXHIBIT 2c**

**REDACTED – FOR PUBLIC INSPECTION**

**EXHIBIT 33**

## Verizon Products

### Customer Premises Equipment (CPE)

(for CPE sold by MCI Communications Service, Inc. d/b/a Verizon Business Services)

Customer Premises Equipment and Related Services

### Local and Long Distance Voice Services

Managed Mobility

Enterprise Mobility Dial Access

Location Data Service

Mobile Workforce Manager

### Managed Services

Internet Dedicated - Managed

Managed Content Delivery - Enterprise

Managed Global Network

Managed LAN

Managed Session Border Devices

Managed WAN Optimization Services

Managed Wireless ATM

Managed Wireless LAN

Network Discovery

Secure Gateway

Wi-Fi for Business

### Non-Categorized Services

Application Acceleration Services

Application Assurance

Data Center Interconnection Services

Document Delivery

Do-Not-Call Access Service

Intelligent Cloud Control

IP Application Hosting

National Unified Messaging Service

Remote Backup and Restore

Risk Analytics for Privacy Management

Satellite Mobile Service

Software Defined Perimeter

Telecommunications Service Priority (TSP)

Virtual Network Services

WAN Analysis Reporting

Wavelength Service Solution

Web Based Directory Service

### Professional Services

Professional Services

**Security**

DDoS Shield

DoS Defense

Managed Certificate Services

Managed E-mail Content Service

Managed Security Services – Cloud

Security Management Program

Security SaaS

SSL OnDemand/Corporate ID

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**EXHIBIT 39c**

**REDACTED – FOR PUBLIC INSPECTION**

**EXHIBIT 39d**

**REDACTED – FOR PUBLIC INSPECTION**

**EXHIBIT 25ck**

**REDACTED – FOR PUBLIC INSPECTION**

**EXHIBIT 25c**

**REDACTED – FOR PUBLIC INSPECTION**

**EXHIBIT 26dk**

**REDACTED – FOR PUBLIC INSPECTION**

**EXHIBIT 26dlk**