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March 27, 2017

Accepted / Filed

MAR 27 2017

Federal Communications Commission
Office of the Secretary

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Business Data Services in an Internet Protocol Environment*, WC Docket No. 16-143; *Special Access Rates for Price Cap Local Exchange Carriers*, WC Docket No. 05-25; *AT&T Corp. Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, RM-10593

DOCKET FILE COPY ORIGINAL

Dear Ms. Dortch:

In accordance with the *Second Protective Order* for the above-referenced proceedings,[1] Windstream Services, LLC ("Windstream") herein submits a redacted version of the attached ex parte filing in the above-referenced proceedings.

Windstream has designated for highly confidential treatment the marked portions of the attached documents pursuant to the *Second Protective Order* in WC Docket No. 05-25 and RM-10593.

Pursuant to the *Second Protective Order*, Windstream is filing a redacted version of the document electronically via ECFS, one copy of the highly confidential version and two copies of the redacted version with the Secretary, and delivering two copies of the highly confidential versions to Marvin Sacks.

* * *

[1] *Special Access for Price Cap Local Exchange Carriers; AT&T Corp. Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, Second Protective Order, DA 10-2419, 25 FCC Rcd. 17,725 (Wireline Comp. Bur. 2010).

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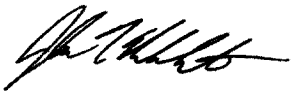
Please contact me if you have any questions or require any additional information.

Sincerely,



John T. Nakahata
Counsel to Windstream Services, LLC

Attachment

cc: Marvin Sacks

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Dear Ms. Dortch:

Windstream Services LLC ("Windstream") submits this letter in response to recent ex parte letters filed by AT&T,[1] and by CenturyLink and Frontier[2] in the above-captioned proceedings. In those letters the large incumbent local exchange carriers ("incumbent LECs" or "ILECs") recommend what amounts to nationwide deregulation of rates for DS1 and DS3 special access services, including channel terminations and the transport needed to reach those critical last-mile connections. These proposals conveniently ignore the fact that in many parts of the country—particularly in less dense suburbs, exurbs and rural areas—DS1s and DS3s are the only way that small and medium-sized businesses, governments, and health care institutions can obtain the quality data services that they need to operate. The data collected by the Commission demonstrates that for locations with less than 50 Mbps in total business data services ("BDS") demand, 86 percent lack *any* facilities-based alternative to the ILEC. In both approach and outcome, these recommendations represent the complete reversal of the Commission's proposals in the *Further Notice* issued last year, and would require repudiating findings already made by the Commission based on market experience with the large-scale pricing flexibility first granted in 1999.[3]

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1 Letter from James P. Young, et al., Counsel to AT&T, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 16-143, 05-25, 15-247, RM-10593 (filed Mar. 13, 2017) ("AT&T March 13, 2017 Ex Parte").

2 Letter from Russell P. Hanser, Counsel to CenturyLink and Frontier, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593 (filed Mar. 20, 2017) ("CenturyLink/Frontier March 20, 2017 Ex Parte").

3 *See Business Data Services in an Internet Protocol Environment; Investigation of Certain Price Cap Local Exchange Carrier Business Data Services Tariff Pricing Plans; Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special*

In the *Further Notice*, the Commission promised to implement a "new start" for customers of business data services that would be the culmination of a decade-long process of fine-tuning the Commission's regime to remove regulations where facilities-based competition is vibrant, but also to take decisive action to protect consumers and competition where facilities-based competition is not present.[4] Specifically, the Commission sought to correct its past mistakes of overestimating the presence of metropolitan statistical area ("MSA")-wide competition based solely on fiber-based collocations in a subset of ILEC wire centers. The new regulatory framework proposed by the Commission would adopt "tailored rules" in geographic and product markets in which the degree of competition would be based on granular, objective criteria, made possible in part by a data collection of unprecedented scale and scope.

AT&T's proposed competitive market test, and what CenturyLink and Frontier describe as the "next logical step" for the Commission, are radical departures from the policy proposal set forth in the *Further Notice*, and are wholly unsupported by the Commission's recent factual findings made in these proceedings. The large ILECs' proposals also ignore all of the work done by the Commission's staff and the participants in these proceedings. The voluminous data and extensive analysis reveal, among other things, the unique features of Ethernet and TDM BDS compared to "best-efforts" data communications services, the specific needs of BDS customers based on the geographic scope of their businesses, and the economics of facilities-based competitive entry and how they relate to density and demand. The product of this work enables the Commission to adopt a rational policy framework that both recognizes market nuances to help the Commission avoid over- and under-regulation, and reflects the negotiated result agreed upon by incumbent and competitive providers.[5]

If adopted, AT&T's and CenturyLink/Frontier's proposals would leave many customers, including small and medium-sized businesses, schools, healthcare providers, and government entities, without any choice of BDS provider and vulnerable to the higher prices and inferior service that often result from unregulated monopolies. The Commission should not accept this

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Access Services, Tariff Investigation Order and Further Notice of Proposed Rulemaking, FCC 16-54, 31 FCC Rcd. 4723, 4840 ¶ 270 (2016) ("*Further Notice*").

4 *See id.* ¶ 4.

5 *See* Letter from Margaret McCready, Executive Director of Public Policy, Verizon, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 16-143, 05-25, RM-10593 (filed Nov. 8, 2016) (explaining that "Verizon supports the Commission's move towards adopting a framework for business data services that applies the same set of rules to all competing providers and services"); Letter from Chip Pickering, INCOMPAS, *et al.*, to Chairman Wheeler, FCC, WC Docket Nos. 16-143, 05-25, RM-10593 (filed Oct. 27, 2016) (expressing support for the proposed framework agreed upon by competitive providers and Verizon); Letter from Kathleen Q. Abernathy, Frontier Communications, Charles W. McKee, Sprint Corporation, Eric N. Einhorn, Windstream Services, LLC, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 05-25, 16-143, RM-10593 (filed Oct. 3, 2016) ("[W]e believe that forging industry consensus is an important component of fulfilling the Commission's principles of reform.").

invitation to disregard its own prior findings and go down the path divorced from the record and from reality.

I. The Commission Should Not Adopt AT&T's Newly Proposed Competitive Market Test for DS1 and DS3 Channel Terminations.

In the *Further Notice*, the Commission proposed to adopt a competitive market test that would "determine whether a relevant market is competitive or non-competitive," and to "apply regulatory obligations on a technology and provider neutral basis where it is necessary to protect and promote competition."[6] The proposal sought comment on a variety of details about the competitive market test, but it explicitly limited the Commission's proceeding to identifying a framework that must be targeted at the "relevant market," which it found was smaller than an MSA—and must be "based on objective criteria to measure competitive effects" in such market, rather than abandoning competitive analysis all together through deregulation.[7] AT&T ignores these finding and proposes a distorted, fun-house-mirror version of the competitive market test. This outcome-driven proposal would deem entire metropolitan statistical areas ("MSAs") "competitive" even where the vast majority—approximately 86 percent—of customer locations with aggregate bandwidth demand at levels below 50 Mbps, which includes DS1s, DS3, and low-bandwidth Ethernet services, have *no provider* offering service other than the incumbent. What AT&T calls a "conservative standard" is in fact a radical recipe for the nationwide elimination of pro-consumer and pro-competition constraints on ILEC market power.[8] AT&T's proposal would also treat best-efforts Internet access services and services provided over shared coaxial facilities as competitive alternatives to BDS, in spite the Commission's determination to the contrary in the *Further Notice* and the manifest functional differences between these categories of services. The record and the Commission's prior findings do not support this proposed test, and the Commission should not adopt it.

A. AT&T's Proposed MSA-Level Competitive Market Test Contradicts Prior Commission Findings and Would Arbitrarily Reduce or Eliminate Competitive Choice for Many BDS Customers, Including Small Businesses, Multilocation Customers, Schools, and Healthcare Providers.

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6 *Further Notice* ¶ 270.

7 *Id.*

8 The outcome of this outcome-driven "test" is little in doubt. According to AT&T, 98.7 percent of all buildings with BDS demand "were within a half mile" of fiber deployed by a provider other than the incumbent, compared to the proposed threshold of 80 percent of buildings. *See* Comments of AT&T Inc. at 12, WC Docket Nos. 05-25, 16-143, RM-10593 (filed June 28, 2016). CenturyLink and Frontier forego the fig leaf and outright ask for a declaratory ruling that all price cap ILECs are non-dominant with respect to BDS at all capacity levels on a nationwide basis. *See* CenturyLink/Frontier March 20, 2017 Ex Parte at 1.

AT&T recommends that the Commission adopt an MSA-based regulatory regime that the Commission expressly rejected in both its 2012 *Suspension Order* and the 2016 *Further Notice*.[9] Under AT&T's proposed competitive market test, the Commission's price caps would be eliminated in an entire MSA if 80 percent of the locations served by ILECs in that MSA are within 2,000 feet of fiber owned by a competitor.[10] There is no basis in the record for the Commission to reverse itself on the appropriate geographic level for setting policy, and no record basis for an 80 percent threshold. Indeed, for precisely the reasons recognized by the Commission in the *Suspension Order*, adopting AT&T's proposal would disproportionately limit or eliminate the competitive options available to small businesses, multi-location customers, and other BDS purchasers that are located outside of high-demand business districts. Moreover, declaring an entire MSA competitive on the proposed basis would enable incumbents to raise prices on the up to 20 percent of businesses that, even AT&T would acknowledge, do not have the ability to switch providers.

1. The Commission Has Already Concluded that the Geographic Diversity of MSAs Precludes an Assumption of Uniform Competitive Entry Conditions, and ILECs—Including AT&T—Have Agreed.

Adopting AT&T's approach would require the Commission to reject its prior conclusion, based on more than a decade of experience with pricing flexibility, that "MSAs have generally failed to reflect the scope of competitive entry."[11] The Commission reached this conclusion in part because it found that "demand varies significantly within any MSA, with highly concentrated demand in areas far smaller than the MSA,"[12] and that an approach that did not account for this fact resulted in "MSA-wide relief on the basis of extremely concentrated demand."[13] Recognizing that the geographic patterns for business locations have not changed, the Commission in the *Further Notice* concluded that "[o]ur record reinforces" the view that "competitive entry is considerably less likely to occur in areas of low demand, regardless of whether other areas within the MSA contain sufficient demand to warrant competitive entry."[14] Accordingly, the Commission proposed the census block as the relevant geographic unit and sought comment on whether a smaller, i.e., individual building or cell site, or larger, i.e., a census tract, unit was more appropriate.[15] The Commission also made clear that its "goal is to learn from past experiences and to not repeat the errors of the 1999 pricing flexibility regime by

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[9] *Special Access for Price Cap Local Exchange Carriers*, Report and Order, FCC 12-92, 27 FCC Rcd. 10557, 10573 ¶ 35 (2012) ("*Suspension Order*").

[10] *See* AT&T March 13, 2017 Ex Parte at 4.

[11] *Suspension Order* ¶ 35.

[12] *Id.* ¶ 36.

[13] *Id.* ¶ 45.

[14] *Further Notice* ¶ 210.

[15] *Id.* ¶ 289.

granting relief too broadly to cover areas where competition is not present or unlikely to occur."[16]

The Commission's conclusion in the *Further Notice* is supported not only by common sense and the declarations submitted by competitive providers discussed above, but also by the analysis conducted by CostQuest Associates, based on models similar to the Commission's own Connect America Cost Model, which shows the dramatic impact that customer location density has on build-out costs, particularly for a competitive provider with a market share disadvantage compared to the incumbent.[17] MSAs cover a vast amount of space and exhibit a wide range of business densities, including many areas in which the business density and BDS demand would fall below the threshold at which constructing fiber laterals would be economically feasible.

For example, the Los Angeles-Long Beach-Santa Ana MSA covers a total area of 4,848.5 square miles, or about four times the size of Rhode Island.[18] According to the Census Bureau's County Business Patterns database, there are an average of approximately 3,000 business establishments per ZIP code among the 10 ZIP codes with the highest number of business establishments, compared to an average of only 337.8 establishments per ZIP code for the 10 ZIP codes representing the median.[19] Given the typical concentration of business establishments, 80 percent of businesses in the MSA fall within the 33 percent of the ZIP codes with the highest concentration of businesses, which leaves 410 ZIP codes with the remaining 20 percent of businesses.[20] Similarly, the Little Rock-North Little Rock-Conway MSA covers a total of

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[16] *Id.* ¶ 290. In addition to the mistakes the Commission identified in the *Suspension Order*, determinations made under the 1999 pricing flexibility regime are also out of date and overstate the extent of competition today in light of the industry consolidation that has eliminated independent CLECs from the market. *See, e.g.*, *Application of XO Holdings and Verizon Communications Inc. for Consent to Transfer Control of Licenses and Authorizations*, Memorandum Opinion and Order, DA 16-1281, 31 FCC Rcd. 12,501, 12,502 ¶ 1 (2016) ("Verizon/XO Order") (approving Verizon's acquisition of XO).

[17] *See* Letter from Jennie B. Chandra, Vice President, Public Policy and Strategy, Windstream Corporation, to Marlene H. Dortch, Secretary, FCC, at 4, GN Docket Nos. 13-5, 12-353, RM-10593, WC Docket Nos. 05-25, 15-1 (filed June 8, 2015); *id.* at Attachment A, 15-16 ("CostQuest White Paper No. 1").

[18] *See CBSA Report Chapter 3 Data*, U.S. CENSUS BUREAU, www.census.gov/population/metro/files/CBSA Report Chapter 3 Data.xls ("Census Bureau MSA Data").

[19] County Business Patterns (CBP): CBP Data Tables, *U.S. ZIP Codes Tables - 2014*, U.S. CENSUS BUREAU, https://www.census.gov/programs-surveys/cbp/data/tables.html ("CBP ZIP Codes Data"); *ZIP-FIPS-MSA-GPCI thru 2004-12*, U.S. DEPARTMENT OF LABOR, http://www.dol.gov/owcp/regs/feeschedule/fee/fee11/fs11_gpci_by_msa-ZIP.xls ("DOL ZIP Codes MSA Data"). The numbers represent the total number of business establishments, not those with demand for BDS.

[20] *See* CBP ZIP Codes Data; DOL ZIP Codes MSA Data.

4,085.2 square miles.[21] Among the top 10 ZIP codes with the highest number of business establishments in that MSA, there are an average of 839.9 establishments per ZIP code.[22] On the other hand, the 10 ZIP codes representing the median in the Little Rock MSA average 36 business establishments per ZIP code.[23] The concentration of businesses in the Little Rock MSA is even greater than that for Los Angeles, as 80 percent of the businesses are located within just 24 percent of the ZIP codes with the highest concentration of businesses.[24]

The concentration of businesses as illustrated in the two examples above is exactly what prompted the Commission to reject the MSA-based approach in the *Suspension Order*.[25] AT&T has offered no evidence showing that the "significant problems identified with grants of regulatory relief at the MSA level" have been addressed, and thus no basis for the Commission to reverse the findings set out in the *Suspension Order* and *Further Notice*.[26] Indeed, in the context of estimating deployment costs for universal service support, AT&T itself has acknowledged that deployment costs differ significantly within an MSA, and within geographically smaller units such as individual ZIP codes or even census blocks, and has urged the Commission to recognize this fact in setting policy.[27] Those economics remain the same for

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[21] Census Bureau MSA Data.

[22] CBP ZIP Codes Data; DOL ZIP Codes MSA Data.

[23] *Id.*

[24] *Id.*

[25] *See Suspension Order* ¶ 36 ("Our review of the evidence suggests that demand varies significantly within any MSA, with highly concentrated demand in areas far smaller than the MSA.").

[26] AT&T generously characterizes its proposal as "guarantee[ing] that Phase II relief is provided only where the Commission would be especially confident that competition is essentially ubiquitous." AT&T March 13, 2017 Ex Parte at 13. If 80 percent qualifies as "ubiquitous," then it would be fair to say that based on the record evidence that monopoly is ubiquitous for BDS locations with demand for 100 Mbps or less. *See* Attachment to Letter from John T. Nakahata, Counsel to Windstream, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 16-143, 05-25, RM-10593 (filed Oct. 21, 2016) (Commission's data show that more than 84 percent of buildings with cumulative demand of less than or equal to 100 Mbps are served by zero competitive providers).

[27] *See* Comments of AT&T at 45, WC Docket Nos. 10-90, 14-58, 07-135, WT Docket No. 10-208, CC Docket No. 01-92 (filed Aug. 8, 2014) ("It is likely that there are pockets within eligible census blocks where a provider's actual cost to serve is higher, perhaps significantly so, than predicted by the cost model."); Reply Comments of AT&T Inc. at 12, WC Docket Nos. 10-90, 05-337, GN Docket No. 09-51 (filed Aug. 11, 2010) ("Due to the relatively lower population densities and longer distances between network end points in rural areas, the cost of providing broadband service generally is much higher and the likely revenues from providing such service are much lower than in urban areas – creating a negative business case and sizeable investment gap for broadband in those areas.").

BDS. To eliminate price caps at the MSA level, as AT&T has proposed, would be arbitrary based on the existing record and would repeat the same error that the Commission sought to correct in these proceedings.[28]

2. AT&T's Proposal Disproportionately Harms Small Businesses, Schools, Health Care Providers, and Multi-location Customers that Are Located in Lower-Density Areas within Each MSA.

As the Commission recognized in the *Suspension Order* and reaffirmed in the *Further Notice*, eliminating pricing protection at the MSA level is more likely to affect the competitive options available to customers located in lower business-density areas. In the *Suspension Order*, the Commission noted that ten years after it granted Phase II relief to the Atlanta MSA, it found that "only 40 percent of the zip codes in the Atlanta MSA had competitive facilities supplied by even one of the . . . reporting competitors,"[29] and that those zip codes with competitive facilities-based entrants were "those with the highest average business establishment densities."[30] BDS customers located outside of the densest zip codes are more likely to include small businesses, health care providers, schools, and other organizations that are located closer to where people live rather than where they work. And zip codes themselves can cover large areas within which there are differing economics of deployment, particularly as compared with census blocks or even census tracts.

Many of these BDS customers continue to rely on DS1 and DS3 connections,[31] which competitive LECs use as inputs to be able to provide customers an alternative to incumbent service providers.[32] For example, Windstream is a service provider for the University of

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[28] In addition, the Administrative Procedure Act requires the Commission must provide notice and opportunity for public comment on the rationale for any new policy based at the MSA level that would depart so dramatically from its prior findings. *See First Am. Disc. Corp. v. Commodity Futures Trading Comm'n*, 222 F.3d 1008, 1015 (D.C. Cir. 2000) (stating that compliance with the APA requires the Commission to provide information sufficient "to advise interested parties that comments directed to the controverted aspect of the final rule should have been made," and to allow "a reasonable commenter" to anticipate that the rule at issue "would be promulgated" (internal quotation marks omitted)).

[29] *Suspension Order* ¶ 49.

[30] *Id.* ¶ 50.

[31] *See Further Notice* ¶ 90 (2016) ("While sales of IP Ethernet services have grown dramatically in recent years, many businesses and other institutional users continue to rely on TDM DS1 and DS3 circuits to meet their communications needs.").

[32] *See Technology Transitions; Policies and Rules Governing Retirement of Copper Loops by Incumbent Local Exchange Carriers; Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking, FCC 15-97, 30 FCC Rcd. 9372, 9444-46 ¶¶ 133-35 (2015) ("*Emerging Wireline Order*"). *See also* Letter from

Arkansas for Medical Sciences ("UAMS") Center for Distance Health, which uses DS1 special access services and other services to connect more than 400 rural health care facilities to specialists via live, two-way video and enables rural patients to access cutting-edge medical treatment.[33] Because many UAMS branches are in less dense areas, an MSA-wide competitive market test would deem these locations to be "competitive" even though these customers have no alternative to the incumbent's existing DS1 and DS3 connections. As a result, ILECs could dramatically increase prices, which would lead to a loss of competitive providers that rely on wholesale DS1 and DS3 inputs, increased retail prices to end users like UAMS, or both.[34]

Moreover, as the Commission has rightfully noted, competition in a geographic market "may not place a competitive constraint on supply" to customers that require connections to multiple locations.[35] This is because multi-location customers are limited in their BDS-provisioning choices by the competition (or lack thereof) in their least competitive markets. Only the "relatively rare" BDS providers "have a broad regional footprint without significant gaps in coverage to serve large enterprises with multiple sites across given geographic regions effectively."[36]

For example, Windstream provides services to O'Reilly Auto Parts, whose widespread, nationwide store footprint requires BDS connectivity at many different locations outside of core urban business districts. Currently, Windstream provides services using leased DS1 lines as the last-mile connectivity input to the vast majority of these locations where there is no alternative to the ILEC's facilities. If the Commission conducts its competitive market test at the MSA level, multi-location customers such as O'Reilly Auto Parts—which operates in hundreds of ZIP

Benton Foundation et al., to Chairman Tom Wheeler et al., at 1, WC Docket Nos. 16-143, 05-25 (filed Oct. 4, 2016) (noting that the "record clearly demonstrates that incumbents are exercising market power by charging unreasonably high prices for . . . legacy services, such as DS1 and DS3 . . . [and] [t]hese high prices harm consumers, small businesses, schools, libraries, universities, and government agencies at all levels across our economy").

[33] *See* Letter from Malena F. Barzilai, Senior Government Affairs Counsel, Windstream, to Marlene H. Dortch, Secretary, FCC, at 3, GN Docket Nos. 13-5, 12-353, WC Docket No. 05-25, RM-10593 (filed May 15, 2015).

[34] *See Emerging Wireline Order* ¶ 136 (noting that faced with increased wholesale prices, "competitive LECs may be unable to modify the terms of their long-term retail contracts to recover the increased cost of the wholesale inputs without losing customers or losing revenue and potentially exiting the market, to the detriment of its customers and the public they serve").

[35] *Further Notice* ¶ 201.

[36] *Id.* ¶ 201 (quoting Public Interest Statement of Charter Communications, Inc., Time Warner Cable Inc., and Advance/Newhouse Partnership at 35, MB Docket No. 15-149 (filed June 25, 2015)). *See also* Declaration of Dan Deem, Douglas Derstine, Mike Kozlowski, Arthur Nichols, Joe Scattareggia, and Drew Smith ¶ 22 ("Windstream Declaration"), appended as Attachment A to Comments of Windstream Services, LLC, WC Docket No. 05-25, RM-10593 (filed Jan. 27, 2016) (refiled Apr. 21, 2016) ("Windstream Jan. 27, 2016 Comments").

codes—will face anticompetitive prices even where some (but not all) of their locations are in a geographic area within the MSA that are served by facilities-based competitors.

Finally, the Commission should take no comfort in AT&T's assurance that "competitive pricing will prevail throughout any MSA" that passes its proposed competitive market test.[37] AT&T asserts that, for TDM services, "pricing almost always occurs on an MSA-wide (or even larger-area) basis,"[38] but in reality the existence of uniform published rates does not preclude AT&T from achieving customer-level pricing by offering individually contracted discounts. Indeed, as AT&T has been quick to point out, this is precisely its practice for its Ethernet BDS offerings.[39] AT&T also points out that retail BDS customers, are "sophisticated purchasers of telecommunications services,"[40] who have "the ability to negotiate lower prices from the ILEC."[41] If the Commission adopts the proposed competitive market test, it would be trivially easy for AT&T and other incumbents to provide "discounts" off of MSA-wide listed DS1 and DS3 rates to customers located in actually competitive pockets in denser business districts, and to charge supracompetitive published rates to all other customers in the MSA; indeed, this is how AT&T currently prices its Ethernet services.[42]

3. The Commission's Proposal to Adopt a Regulatory Framework at a Sub-MSA Level Is Not Overly Burdensome.

Following through on the Commission's proposal to use a geographic unit smaller than MSAs would be no more onerous than AT&T's proposal, and would generate more accurate competition findings. First, AT&T overstates the commercial difficulties of complying with a

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[37] AT&T March 13, 2017 Ex Parte at 13.

[38] *Id.*

[39] *See* Reply Comments of AT&T Inc. at 60, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593 (filed Aug. 9, 2016) ("[W]holesale customers generally negotiate prices well below those listed in the Guidebook."); Comments of AT&T Inc. at 69-70, WC Docket Nos. 16-143, 05-25, RM-10593 (filed June 28, 2016) (stating that it is "misleading" to reference AT&T's published Guidebook Ethernet rates "rather than the much lower wholesale prices" that customers "actually pay[] to AT&T under its commercial agreement[s]").

[40] AT&T March 13, 2017 Ex Parte at 3 (quoting *Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers; Interexchange Carrier Purchases of Switched Access Services Offered by Competitive Local Exchange Carriers*; Fifth Report and Order and Further Notice of Proposed Rulemaking, FCC 99-206, 14 FCC Rcd. 14,221, 14,301-02 ¶ 155 (1999)).

[41] *Id.* at 19.

[42] *See* Declaration of Martin Kelly ¶ 5, attached to Letter from Christopher T. Shenk, Counsel to AT&T Inc., to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593 (filed Oct. 6, 2016) ("Ethernet services (and other high bandwidth BDS services) are currently all billed at AT&T's Guidebook rate, but are subject to individually negotiated discounts which today are applied via credits issued in arrears.").

regulatory regime proposed by the Commission.[43] As noted above, AT&T presently has the ability to set customer-specific prices for DS1s and DS3s though discounts, as it does for Ethernet. Moreover, it has been nearly five years since the Commission first concluded that MSAs are too large and geographically diverse to serve as the unit of regulation.[44] This was more than enough time for AT&T to prepare to upgrade its interdependent systems (e.g., sales, billing and ordering), and its decision not to do so should not affect the Commission's determination. Indeed, Verizon has stated in the record that it agrees that a regulatory framework that makes competitiveness findings at the census-block level is administratively feasible.[45]

Second, there is no "administrative feasibility" reason for adopting AT&T's MSA-based competitive market test instead of one that treats census blocks or block groups as the relevant geographic market.[46] AT&T's proposal requires the Commission to examine each BDS customer building to determine whether there is competitively owned fiber within 2,000 feet. Even assuming that the 2,000-foot condition is a reasonable predictor for competition, and it is not,[47] the same determination also identifies the business locations that are *not* within 2,000 feet of competitively owned fiber. As discussed above, AT&T's asserted use of MSA-wide pricing does not prevent it from listing supracompetitive rack rates and then providing discounts to customers where it actually lacks market power. Yet AT&T wants the Commission's blessing to raise prices on up to 20 percent of business customers in each MSA even though both it and the Commission will have already concluded that these customers do not have a competitive choice. It would be arbitrary and capricious for the Commission to adopt a rule that treats up 20 percent of customers as if they were competitive when those customers' locations fail the definition of "competitive" under that very same rule. The only benefit of such an approach accrues to the incumbent, who receives a free pass on the 20 percent of customers that do not have any competitive choice of provider even by AT&T's own, self-serving analysis (which itself is based on misstatements of the record).

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[43] *See* AT&T March 13, 2017 Ex Parte at 17-18.

[44] *See Suspension Order* ¶ 90 ("[W]e have suspended grants of pricing flexibility on the basis of these proxies because we find that the geographic market over which relief is granted, MSAs, do not correspond to the scope of competitive entry . . . ."). The Commission also noted that "incumbent LEC billing practices may not be uniform across MSAs." and that "[t]he record indicates that price cap LECs do, in at least some cases," charge different rates in different density zones within a single MSA. *Id.* ¶ 58. The Commission reaffirmed in the *Further Notice* that the geographic market should be considerably smaller than the MSA. *See Further Notice* ¶ 209.

[45] *See* Comments of Verizon at 10, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593 (filed June 28, 2016).

[46] *See Further Notice* ¶ 271.

[47] *See infra*, Section I.C.

AT&T's discussion of administrative burden also fails to account for the benefits of the more geographically precise approach proposed in the *Further Notice*, which would more accurately measure the presence of competitive options available to BDS customers and avoid the predictive errors that led to the *Suspension Order*. AT&T claims that its MSA-based proposal "addresses this concern, because it does not rely on predictions or proxies."[48] However, AT&T's proposal merely substitutes one set of predictions and proxies for another, since its competitive market test does not require a "competitor" either to actually be offering service at a customer location or even to have a physical fiber connection to that location. AT&T's reliance on the presence of fiber located within 2,000 feet of a BDS customer location is itself a prediction that a competitive provider can and would incur the costs of extending a lateral over that distance to serve a customer. As described below, this prediction is flawed and ignores the record, given the significant entry barriers to serving customers in less dense areas and/or those with lower demand.[49] The lack of competition in the vast majority of BDS customer locations, particularly those with lower bandwidth demands,[50] notwithstanding AT&T's claim about the abundance of competitive fiber, indicates that this prediction will continue to be wrong.

B. Best-Efforts Broadband and Cable Ethernet Do Not Compete with DS1 and DS3 Services or Business Data Services Provided Over Fiber.

AT&T, CenturyLink, and Frontier's arguments commit the same basic error of counting as competitive alternatives services that are unsuitable for the needs of BDS customers and thus cannot constrain BDS prices.[51] Any assessment of the competitiveness of markets for BDS must exclude services that are not substitutes for BDS and thus cannot constrain BDS prices charged by incumbents. For this purpose, the record shows that both best-efforts Internet access service and Ethernet provided over hybrid fiber coaxial facilities ("HFC") cannot be considered competitors to BDS.

The Commission reached this conclusion in the *Further Notice* after considering all of the arguments and evidence presented by AT&T, CenturyLink and Frontier in their recent letters,[52] and these incumbents cite no factual basis for the Commission to reverse its prior determination on this issue. Not only do AT&T, CenturyLink, and Frontier ignore the Commission's prior finding, they also fail to address the critical differences in functionality

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[48] AT&T March 13, 2017 Ex Parte at 18.

[49] *See infra* Section I.C.

[50] *See* Windstream October 21, 2016 Ex Parte at 3 (showing that based on the Commission's data, more than 86 percent of buildings that have aggregate demand of less than 50 Mbps have no competitive provider).

[51] AT&T March 13, 2017 Ex Parte at 14-15; CenturyLink/Frontier March 20, 2017 Ex Parte at 12.

[52] *See Further Notice* ¶ 13 ("BDS is distinctly different from the mass marketed 'best efforts' broadband Internet access services (BIAS) provided to residential end users, such as AT&T's U-verse or Comcast's XFINITY.").

between the two types of services, as well as the vast gulf between the prices that customers are willing to pay for BDS compared to best-efforts services. As the Commission stated in the *Further Notice*, and as extensively demonstrated in the record by providers and purchasers alike, the core feature of BDS is the offering of higher performance compared to other data services.[53] Best-efforts services not only lack the high-level availability feature of BDS,[54] but also are less reliable with respect to latency, jitter, and other characteristics.[55] The superior performance of BDS is essential for the critical communications needs of businesses and other organizations, and is simply not feasible with best-effort services. The distinction between BDS and best-efforts services is also evidenced by the significant premium that customers are willing to pay for BDS.[56]

Record evidence from both providers and customers of HFC-based Ethernet service confirms that it also is not competitive with BDS. First, cable providers unanimously agree that HFC-based services are, at best, an inferior, occasional substitute for BDS:

- Comcast has noted that "the record abounds with evidence that cable providers' Ethernet-over-HFC ("EoHFC") products have only modest competitive significance in today's marketplace."[57] Comcast stated that "[t]he vast majority of businesses seeking Ethernet

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[53] *See id.* ¶ 279 (defining BDS as offering "prescribed performance requirements that typically include bandwidth, reliability, latency, jitter, and/or packet loss"). *See also, e.g.*, Comments of The National Rural Electric Cooperative Association at 5 n.7, GN Docket No. 13-5, WC Docket No. 05-25, RM-11358, RM-10593 (filed Oct. 26, 2015); Comments of The Ad Hoc Telecommunications Users Committee at 11-12, WC Docket No. 05-25, RM-10593 (filed Feb. 11, 2013); Windstream Declaration ¶¶ 11-24, 37-42.

[54] *See* Windstream Declaration ¶ 30.

[55] *See* Windstream June 28, 2016 Comments at 27-28.

[56] *See* Windstream January 28, 2016 Comments at 24 (comparing Verizon FiOS best-efforts symmetrical prices to Verizon DSL prices, which show a *100-fold* difference in the per-Mbps rates). Industry analysts have noted this "significant premium" for dedicated services over best-efforts services offered by cable companies, and observed that "cable has been largely unable to serve the more complex segments, where telcos' geographically extensive networks, enterprise sales teams, network-design capabilities, and ability to offer managed services and capacity with guaranteed quality via SLAs . . . represent high barriers to cable entry." Sanford C. Bernstein & Co., LLC, U.S. Telecom: A Primer in the $70B Enterprise Telecom Market (Cable's Opportunity = Telcos' Loss?) at 6 (July 16, 2015). AT&T touts the higher advertised bandwidths and lower per-Mbps price of best-efforts services, *see* AT&T March 13, 2017 Ex Parte at 14-16, but does not explain why, if these services are indeed in the same markets, providers of the legacy TDM services continue to have customers despite the higher per-Mbps prices.

[57] Reply Comments of Comcast Corporation at 10, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593 (filed Aug. 9, 2016).

services demand full carrier-grade performance and SLAs that EoHFC cannot provide."[58] In a sworn declaration accompanying its comments, Comcast compared the reliability of its Ethernet-over-HFC services against that of its fiber-based BDS, noting that "the SLA for availability is 99.9% (rather than 99.99%)."[59] Accordingly, Comcast concluded that Ethernet over HFC "represents a very small segment of the market with little potential for significant growth."[60]

- Charter, likewise, noted that because HFC-based services "lack[] the reliability, performance, and speed of dedicated services provided over legacy loops and fiber, HFC services are often unable to compete with incumbent LECs' services, even where there is existing cable plant,"[61] and cited "the significant record evidence that Ethernet over coax is not a comparable service" to fiber-based BDS and dedicated special access.[62] Charter also submitted a declaration noting the "*****BEGIN HIGHLY CONFIDENTIAL*****
[redacted]
*****END HIGHLY CONFIDENTIAL*****."[63]

- Cox explained that its "fiber based BDS and Ethernet over HFC services are completely different,"[64] because service-quality characteristics of HFC-based Ethernet service "make[] [it] more akin to a best-efforts service than to BDS."[65] This is because "[t]he shared nature of the network underlying the [Ethernet over] HFC service also precludes Cox from offering performance guarantees, an essential characteristic of the Commission's definition of BDS."[66] The dedicated nature of BDS bandwidth means that

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[58] Comments of Comcast Corporation at 31, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593 (filed June 28, 2016) ("Comcast June 28, 2016 Comments").

[59] Declaration of John Guillaume ¶ 6, attached as Exhibit C to Comcast June 28, 2016 Comments ("Guillaume Declaration").

[60] Comcast June 28, 2016 Comments at 31.

[61] Comments of Charter Communications, Inc., at 9-10 n.32, WC Docket Nos. 05-25, 15-247, 16-143 (filed June 28, 2016) ("Charter June 28, 2016 Comments").

[62] Letter from Samuel L. Feder, Counsel to Charter, to Marlene H. Dortch, Secretary, FCC, at 4 n.18, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593 (filed Oct. 3, 2016).

[63] Declaration of Phil Meeks ¶ 9, attached as Exhibit A to Charter June 28, 2016 Comments.

[64] Comments of Cox Communications, Inc. at 9, WC Docket Nos. 16-143 and 05-25 (filed June 28, 2016) ("Cox June 28, 2016 Comments").

[65] Reply Comments of Cox Communications, Inc. at 6, WC Docket No. 16-143 and 05-25 (filed Aug. 9, 2016)

[66] Cox June 28, 2016 Comments at 9. *See also id.* at 14 ("*****BEGIN HIGHLY CONFIDENTIAL*****
[redacted]
*****END HIGHLY CONFIDENTIAL*****" (emphasis added)).

Ethernet over HFC sales compete for the same physical network capacity as Cox's mass market and small businesses services, which "generate substantially more revenue" than its Ethernet service.[67] Cox reiterated just last Friday that the "Ethernet over HFC ("EoHFC") services that it provides are not BDS[.]"[68]

- NCTA explained that the performance objectives of Ethernet over HFC services, when they are even offered at all, "often are well below the performance commitments offered with TDM or fiber-based Ethernet services."[69]

- The American Cable Association stated that "dedicating HFC bandwidth to BDS subtracts from the available shared network capacity" for residential video and broadband services[70]—cable providers' core business. Thus, only a "small minority" of its members attempt to provide such services, and even then may only be doing so for a limited number of customers due to capacity constraints.[71]

Second, the cable providers' statements are further supported by the experience of both incumbent and competitive providers with the technical limitations of HFC-based Ethernet. These providers agree that Ethernet over HFC provides at most symmetrical bandwidth of 10 Mbps.[72] In Windstream's own experience as a wholesale purchaser of BDS, cable providers' HFC-based Ethernet services do not exceed 10 Mbps.[73] Verizon and CenturyLink have acknowledged that HFC-based Ethernet services are limited to 10 Mbps.[74] Comcast, Charter,

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[67] *Id.* at 17.

[68] Letter from Michael H. Pryor, Counsel, Cox, to Marlene H. Dortch, Secretary, FCC, at 1-2, WC Docket Nos. 16-143, 05-25 (filed Mar. 24, 2017).

[69] Comments of the National Cable and Telecommunications Association at 28, WC Docket Nos. 16-143 and 05-25 (filed June 28, 2016).

[70] Comments of the American Cable Association at 28, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593 (filed June 28, 2016) ("ACA June 28, 2016 Comments").

[71] *See id.* at 28 & n.80 (stating that one ACA member "is limiting the provision of Ethernet over HFC to no more than two customers per neighborhood").

[72] Letter from Matthew A. Brill, Counsel to Comcast Corp., to Marlene H. Dortch, Secretary, FCC, at 3, WC Docket No. 05-25 (filed Mar. 25, 2016) (noting that Ethernet-over-HFC is available at speeds between 1 Mbps and 10 Mbps);

[73] Windstream Declaration ¶ 32.

[74] Letter from Melissa E. Newman, Vice President, Federal Policy and Regulatory Affairs, CenturyLink, to Marlene H. Dortch, Secretary, FCC, at 8, WC Docket Nos. 05-25, 15-247, RM-10593 (filed Apr. 8, 2016) (noting that Ethernet-over-HFC "currently provides symmetrical speeds up to 10 Mbps"); Letter from Maggie McCready, Vice President, Federal Regulatory and Legal Affairs, Verizon, to Marlene H. Dortch, Secretary, FCC, at 3, WC Docket Nos. 15-247, 05-25, RM-10593 (filed Mar. 1, 2016) (acknowledging that the bandwidth of Ethernet-over-HFC is "limited to about 10 Mbps").

and Cox likewise confirm that their HFC offerings are generally limited to 10 Mbps of symmetrical bandwidth.[75]

Beyond its limited capacity, HFC-based Ethernet service also does not provide the level of reliability that BDS customers demand.[76] Superior performance levels are the signature feature that separates BDS from other broadband services, including both best-efforts Internet access and HFC-based services.[77] Retail BDS customers specifically require the higher level of performance,[78] and indeed are willing to pay a substantial premium per-Mbps for fiber-based Ethernet and DS-1/DS-3 TDM services compared to HFC-based services.[79] Wholesale customers who use dedicated connections—both fiber-based Ethernet and TDM circuits—as inputs into their own services have also explained that HFC-based Ethernet is not an adequate substitute.[80]

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[75] *See* Guillaume Declaration ¶ 6 ("Speeds for the [Comcast] EoHFC product are limited to 10x10 Mbps."); Declaration of Jeremy Bye and Larry Steelman ¶ 11, attached as Exhibit 1 to Cox June 28, 2016 Comments ("Bye/Steelman Declaration") (*****BEGIN HIGHLY CONFIDENTIAL*****[redacted] *****END HIGHLY CONFIDENTIAL*****);

[76] *See* Windstream Declaration ¶¶ 30-31 (explaining that "HFC and coaxial connections are shared in part and typically do not support services with higher levels of network performance-based QoS, on a customer-by-customer basis, and thus are not suitable for supporting MPLS."); Declaration of Chris McReynolds on Behalf of Level 3 Communications, LLC ¶ 22, attached as Appendix A to Comments of Birch, BT Americas, Earthlink, and Level 3, WC Docket No. 05-25, RM-10593 (filed Jan. 27, 2016) ("Jan. 27, 2016 Joint CLEC Comments") ("Ethernet-over-HFC are often subject to high levels of jitter . . . [and] are not as reliable as the cable companies' Ethernet-over-fiber services or the dedicated services offered by incumbent and competitive LECs."); Declaration of Gary Black, Jr. on Behalf of Level 3 Communications, LLC ¶ 19, attached as Appendix B to Joint CLEC Comments (same).

[77] *See Further Notice* ¶ 279.

[78] *See* Windstream Declaration ¶¶ 17-19 (describing performance demands of BDS customers).

[79] *See* Bye/Steelman Declaration ¶ 13 (*****BEGIN HIGHLY CONFIDENTIAL*****[redacted] *****END HIGHLY CONFIDENTIAL*****).

[80] *See* Letter from Jennifer Bagg, Counsel to Sprint Corporation, to Marlene H. Dortch, Secretary, FCC, at 5-9, WC Docket Nos. 05-25, 15-247, RM-10593 (filed Mar. 24, 2016) (refiled Apr. 11, 2016) (discussing several reasons why Ethernet-over-HFC products are not competitive with business data services); Windstream Declaration ¶ 30 (noting that "based on the service level objectives (not guarantees) that Windstream has seen cable companies offer," HFC-based services are "particularly unsuited to applications that require lower levels of jitter/delay variation"). AT&T states that it has "certified both fiber-based and HFC-based Ethernet offerings from cable companies for use as inputs to AT&T's flagship [Managed

Third, analyses of the Commission's data collection have not detected any significant impact of the presence of HFC-based Ethernet providers on BDS prices. Dr. Jonathan Baker's regression analysis shows that "the presence of HFC Ethernet reduces DS1 prices by between 2% and 4%."[81] This is in stark contrast to the "42% to 51% cumulative effects of rivalry" from four in-building and four nearby providers.[82] Likewise, Commission staff's analysis of the data led to the conclusion that "potential cable competition from BDS comparable HFC infrastructure did not constrain ILEC prices in areas where there was evidence that facilities-based competition was doing so."[83] Given the demonstrated inability of HFC-based Ethernet to meaningfully constrain ILEC prices, it would be arbitrary for the Commission to conclude, as AT&T, CenturyLink, and Frontier have suggested, that HFC-based Ethernet service be considered competitive with BDS.

C. Fiber Located 2,000 Feet Away from a BDS Customer's Building Cannot Adequately Constrain ILEC Market Power or Prices

AT&T's proposed competitive market test and CenturyLink and Frontier's assertion about the nationwide competitiveness of BDS markets both rely on an erroneous assumption: that any provider that has built fiber of any kind within 2,000 feet of a BDS customer's location is a competitor for that customer, regardless of the costs of connecting to that customer location and the level of demand and associated revenue from the customer. This assumption runs afoul of both economic theory and the facts in the record, especially with respect to current purchasers of DS1 and DS3 and Ethernet services of comparable bandwidth. The significant costs of deploying last-mile connectivity, combined with the lower revenue potential of customers purchasing DS1 and DS3 and comparable Ethernet services, makes facilities-based competitive entry extremely unlikely in most cases—and only at distances that are likely to be much shorter than 2,000 feet. The Commission should not take the regulatory actions requested based on a

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Internet Service] VPN, and backhaul services." AT&T March 13, 2017 Ex Parte at 15. This claim tellingly omits any reference or comparison to AT&T's Switched Ethernet Service, which is the "carrier Ethernet" offering that provides "highly reliable switched Ethernet service" with guaranteed service levels for key performance metrics like latency and jitter that characterize BDS. Letter from Caroline Van Wie, Assistant Vice President, AT&T, to Marlene H. Dortch, Secretary, FCC, at 3, WC Docket Nos. 05-25, 15-247, RM-10593 (filed Apr. 1, 2016). *See also* AT&T Switched Ethernet Guidebook, Part 5—Special Access Services, Common, Section 4—AT&T Switched Ethernet Service § 4.2(A)(7) (July 3, 2012), http://cpr.att.com/pdf/is/0005-0004.pdf.

[81] Reply Declaration of Jonathan B. Baker on Competition and Market Power in the Provision of Business Data Services ¶ 44 & tbls. 2a-2b, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593 (filed Aug. 9, 2016) ("Baker Aug. 9, 2016 Reply Declaration").

[82] *Id.*

[83] *Competitive Effect of Cable Network Infrastructure* at 6, appended as Attachment 3 to Letter from Deena M. Shetler, Associate Bureau Chief, Wireline Competition Bureau, FCC, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593 (filed July 8, 2016).

proposed competitive market test that fails to take into account the objective criteria for determining the presence of competition.

First, Dr. Baker explained in his January 2016 declaration that economic theory establishes that two firms, or one firm and a potential entrant, are not sufficient for BDS markets to be competitive.[84] Moreover, his regressions of the Commission's data collection show that DS1 prices where the ILEC is the only provider average as much as 51 percent higher than in locations with substantial nearby *and* in-building competition.[85] These price differentials and the market power required to sustain them would not exist if competitive entry using any nearby facilities were as easy as AT&T would have the Commission believe. Similarly, the experience of competitive providers reflected in the record shows that ILECs engage in building-level pricing depending on the number of competitive providers with connections to the building, which further suggests that fiber located nearby but not connected to a building at best has a limited ability to constrain ILEC pricing.[86] The differential pricing confirms that absent regulatory constraints on ILEC market power, the Commission cannot ensure that prices for DS1 and DS3 channel terminations will be just and reasonable.

Second, the record demonstrates that it is simply economically not viable for competitive providers to deploy last-mile facilities over the distance proposed by AT&T to the vast majority of locations with business data service demand of 100 Mbps (or a little more than two DS3s) and below. The Commission is well aware that barriers to building entry are higher for competitive providers than incumbents.[87] The costs of deploying fiber laterals are significant and often prohibitive for competitive providers, even if there is a supply of fiber located nearby.[88] For

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[84] Declaration of Jonathan B. Baker on Market Power in the Provision of Dedicated (Special Access) Services ¶¶ 48-50, WC Docket No. 05-25, RM-10593 (filed Jan. 27, 2016) (refiled Apr. 14, 2016).

[85] Baker Aug. 9, 2016 Reply Declaration ¶ 5.

[86] *See* Letter from John T. Nakahata, Counsel to Windstream, to Marlene H. Dortch, Secretary, FCC, at 6-7, WC Docket Nos. 05-25, 15-247, RM-10593 (filed Mar. 14, 2016) (citing TeleGeography, *Local Access Pricing Service, H2 2015 Local Access Market Summary* at 1 (2015)). *See also* Letter from Thomas Jones, Counsel for EarthLink, to Marlene H. Dortch, Secretary, FCC, at 3, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593 (filed July 21, 2016) ("[I]t is standard business practice for buyers and sellers of Business Data Services to buy and sell services on a building-by-building basis.").

[87] *See Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) From Enforcement of Obsolete ILEC Legacy Regulations that Inhibit Deployment of NextGeneration Networks*, Memorandum Opinion and Order, FCC 15-166, 30 FCC Rcd. 6157, 6024 ¶ 83 (noting the inherently "more favorable environment" incumbents have for building out last-mile facilities "due to existing relationships with property owners and prospective customers" (citation omitted)).

[88] *See* Reply Declaration of Jonathan B. Baker on Market Power in the Provision of Dedicated (Special Access) Services ¶ 7, WC Docket No. 05-25, RM-10593 (filed Feb. 19, 2016) ("[A]

example, TDS compared the costs of deploying fiber to customers incurred by its ILEC business and CLEC business, and that comparison showed that even where the CLEC has a much shorter build distance and no material cost variation based on differing locations, the build cost for TDS CLEC was *****BEGIN HIGHLY CONFIDENTIAL***** [redacted] *****END HIGHLY CONFIDENTIAL***** than that of TDS ILEC.[89] The economic infeasibility of deploying last-mile facilities to serve customers with demand of 100 Mbps and lower is readily reflected throughout the record in the declarations and comments from BDS providers:

- TDS Metrocom submitted a declaration of Matthew Loch stating that, based on TDS's analysis of its lateral construction costs, its projected revenue over a five-year contract term, and existing ILEC Ethernet prices, "a fiber lateral build to a customer located 100 to 1,000 feet and beyond from the nearest splice point *is not competitive at speeds ranging from 10 to 100 Mbps*" given ILEC rates.[90]

- Level 3 submitted a declaration of John Merriman stating that "it is infrequently the case that Level 3 can deploy a new fiber connection to serve a customer demanding only 100 Mbps of bandwidth or below. This is because the distance between a customer location and a splice point on Level 3's network usually exceeds the construction feasibility limits for bandwidths of 100 Mbps and below."[91] Mr. Merriman also provided a cost analysis showing that "Level 3 will not be able to deploy its own loops to the vast majority of commercial buildings in the top ten MSAs."[92]

CLEC that has built a fiber ring near a building has not made all the sunk expenditures required to serve that building with its facilities.").

[89] *See* Comments of TDS Metrocom, LLC at 20, WC Docket No. 05-25, RM-10593 (filed Jan. 27, 2016); Declaration of James Butman on Behalf of TDS Telecommunications Corporation ¶ 12, attached to Letter from Thomas Jones, Counsel for TDS Telecommunications Corporation, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 05-25, GN Docket Nos. 13-5, 12-353 (filed Mar. 26, 2015).

[90] Third Declaration of Matthew J. Loch ¶ 13, appended as Attachment A to Reply Comments of TDS Metrocom, LLC, WC Docket No. 05-25, RM-10593 (filed Feb. 19, 2016) (emphasis added). *See also* Comments of TDS Metrocom, LLC at 11-12, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593 (filed June 28, 2016).

[91] Declaration of John Merriman on Behalf of Level 3 Communications, LLC ¶ 6, attached as Appendix to Comments of Birch, EarthLink, and Level 3, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593 (filed June 28, 2016) ("Joint CLEC Comments"). *See also* Joint CLEC Comments at 21-25.

[92] Declaration of John Merriman on Behalf of Level 3 Communications, LLC ¶ 13, attached as Appendix to Reply Comments of Birch, EarthLink, and Level 3, WC Docket No. 05-25, RM-10593 (filed Feb. 19, 2016).

- Level 3 has also explained that the analysis conducted by Mr. Merriman "substantially overstates" (i.e., is over-optimistic about) the extent to which Level 3 can economically deploy to locations with demand for 100 Mbps or less, because the analysis "assumed that a customer would pay the highest 'list price' that Level 3 charges for a connection of the specified bandwidths," when as a practical matter Level 3's actual revenues are significantly lower because its entry prompts the incumbent to lower its rates.[93]

- Windstream submitted a revenue hurdle study conducted by CostQuest Associates, which shows that revenue equal to at least three 100 Mbps customers—based on current retail prices and the modeled costs—is necessary for an average location to make competitive facilities-based entry viable.[94]

- Windstream also submitted a declaration from David Schirack and Mike Baer stating that "Windstream's experience is that a single 100 Mbps circuit almost never generates the amount of revenue required to justify deployment of a new last-mile connection by its competitive carrier operations, even when Windstream has already deployed fiber feeder in the customer's vicinity."[95] Moreover, the number of potential locations for facilities-based entry is further narrowed because "even when revenues on their face may have the potential to justify a build, that does not mean that all other barriers to deploying a lateral can be surmounted," including the existence of a nearby splice point and Windstream's ability to secure building access.[96]

- Other providers, like Zayo and XO, likewise have confirmed the lack of competition at lower-bandwidths.[97]

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[93] Letter from Thomas Jones, Counsel for Level 3 Communications, LLC, to Marlene H. Dortch, Secretary, FCC, at 1-2WC Docket Nos. 16-143, 15-247, 05-25, RM-10593 (filed July 14, 2016).

[94] *See* CostQuest White Paper No. 1 at 9.

[95] Declaration of David Schirack and Mike Baer ¶ 16 ("Schirack/Baer Declaration"), appended as Attachment A to Windstream June 28, 2016 Comments. *See also* Letter from John T. Nakahata, Counsel to Windstream, to Marlene H. Dortch, Secretary, FCC, at 2, WC Docket No. 05-25, RM-10593 (filed Apr. 21, 2016).

[96] Schirack/Baer Declaration ¶ 18.

[97] *See* Letter from Wendy Cassity, VP, General Counsel and Secretary, Zayo, to Marlene H. Dortch, Secretary, FCC, at 6, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593 (filed Oct. 4, 2016) (stating that "BDS below 50 Mbps should be presumed non-competitive"); Draft [sic] Declaration of George Kuzmanovski ¶ 8, appended to Comments of XO Communications, LLC on the Further Notice of Proposed Rulemaking, WC Docket No. 05-25, RM-10593 (filed Jan. 27, 2016) ("Kuzmanovski Declaration") (noting that "[w]hile XO has picked up the pace of leveraging its existing networks . . . in the majority of instances, for XO, the ILEC is the only entity capable of offering . . . last-mile access").

- Comcast stated that "areas with low [BDS] demand" may not present enough revenue to overcome its costs of network construction—even though Comcast, unlike competitive carriers, has the ability to leverage its own legacy infrastructure and has substantial scale in its customer base to unlock build cases, unlike traditional CLECs.[98]

- In the places where they do not possess incumbent advantages to a significant degree (i.e., out of market), cable providers have indicated that they are unlikely to enter. For example, Comcast executive David Cohen has noted, "[T]he cable part of this industry has never competed against each other . . . . [G]iven the expense to build in any particular community, I think no cable company, or only rarely would a cable company choose to compete against another cable company."[99]

- The American Cable Association acknowledged that "low-demand customer[s] may only be attractive to a provider—typically the ILEC—that already has incurred the fixed costs of deploying a network in that immediate vicinity."[100]

- Contrary to AT&T's assertion,[101] the existence of earlier-built fiber to buildings with lower demand does not reveal any meaningful information about *current* entry conditions. Dr. Baker observed that "[a] low-bandwidth connection observed in the data could have been built any time within the past three decades; even if its electronics have been upgraded in the meantime, its presence would largely reflect entry conditions (or irrational exuberance) in an earlier era."[102]

When entry with fiber-based construction is possible, the distance between the fiber and the customer location will likely need to be far shorter and the aggregate bandwidth demand far greater than what AT&T, CenturyLink, and Frontier have suggested. In its recent order approving Verizon's acquisition of XO, the Commission concluded that, "relying on Commission precedent, . . . when demand is at least 100 Mbps . . . and the provider is already

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[98] Comcast June 28, 2016 Comments at 19 (quoting *Further Notice* ¶ 227).

[99] Jon Brodkin, *Comcast Says It's Too Expensive to Compete Against Other Cable Companies*, ARS TECHNICA (Sept. 24, 2014), http://arstechnica.com/business/2014/09/comcast-says-its-too-expensive-to-compete-againstother-cable-companies/. Cohen also noted that the Commission and U.S. Department of Justice "have addressed this question of what they would call potential competition on multiple occasions before" and likewise "have concluded on multiple occasions that not only do cable companies like Comcast and Time Warner Cable not compete against each other but that they are also not potential competitors to each other." *Id.*

[100] ACA June 28, 2016 Comments at 38.

[101] *See* AT&T March 13, 2017 Ex Parte at 11-12.

[102] Baker Aug. 9, 2016 Reply Declaration ¶ 15 (citation omitted).

within 0.1 miles of the location,"[103] nearby competitive fiber can act as a constraint on the incumbent's prices. The record in this proceeding does not support a conclusion that competitive entry is sufficiently likely to ensure just and reasonable prices when the nearest fiber is nearly four times farther away, and where demand can be as low as a single DS1 connection.

AT&T misconstrues declarations from Windstream and XO in arguing that competitive providers "regularly" construct laterals to customers located more than 2,000 feet from fiber facilities.[104] AT&T's references to the record cite the extreme ends of feasible build-distances, ignore the necessity of splice points, and represent the exceptional case and the ordinary. Windstream's declaration in fact states that Windstream "will not consider building new fiber facilities to buildings that are further than *****BEGIN HIGHLY CONFIDENTIAL***** [redacted] *****END HIGHLY CONFIDENTIAL*****."[105] Likewise, XO's declaration actually states that XO is "extremely unlikely to build if the building is more than *****BEGIN HIGHLY CONFIDENTIAL***** [redacted] *****END HIGHLY CONFIDENTIAL***** linear feet from a splice point on XO fiber," and that "the overwhelming number of builds XO undertakes have been within *****BEGIN HIGHLY CONFIDENTIAL***** [redacted] *****END HIGHLY CONFIDENTIAL***** linear feet."[106] If misconstruing statements of Windstream and XO is the strongest record evidence that AT&T can present, it is clear that the record simply does not support their proposal.

D. The Proposed Competitive Market Test Conflicts with the Commission's Finding that Competition Is "Lacking" at BDS Bandwidths below 50 Mbps, which Includes DS1 and DS3 Service.

Based on the unprecedented scope of data collected in this proceeding, the Commission has found that "the data and our analysis suggests that competition is lacking in BDS at or below 50 Mbps in many circumstances."[107] As discussed above, the absence of competition is confirmed by the pricing regression analyses,[108] the data showing the lack of competitive

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[103] Verizon/XO Order ¶ 23 & n.76. *See also Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Deployment of Wireline Services Offering Advanced Telecommunications Capability*, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, FCC 03-36, 18 FCC Rcd. 16,978, 17,156 ¶ 298, n.859 (2003) ("[N]othing in the record to indicate that the passage of time has lowered" the barriers to entry that underlie the regulatory framework for DS1 and DS3 UNEs and special access.").

[104] *See* AT&T March 13, 2017 Ex Parte at 12.

[105] Windstream Declaration ¶ 51.

[106] Kuzmanovski Declaration ¶ 24.

[107] *Further Notice* ¶ 271.

[108] *See* Marc Rysman, *Empirics of Business Data Services*, 31 FCC Rcd. at 4933, Table 7 ("Rysman White Paper"), attached as Appendix B to *Further Notice*; Baker Aug. 9, 2016 Reply Declaration ¶ 5; *See* Declaration of John Kwoka ¶¶ 23-26, 32-33, attached as Exhibit

connections to customer locations, and the high barriers to entry at locations with lower bandwidth demand. Against the weight of evidence in the record and the Commission's conclusion based on that evidence, AT&T is now asking the Commission to eliminate *ex ante* rate regulation for DS1 and DS3 channel terminations effectively on a nationwide basis.

To do so, the Commission would have to decide at least one of the following. It could attempt to conclude that there is sufficient facilities-based competition in the markets for DS1 and DS3 services, but this would fail because the record does not support such a reversal of prior Commission determination on this precise question. Alternatively, the Commission could articulate a policy rationale for concluding that neither facilities-based competition nor *ex ante* regulation is necessary for the rates, terms, and conditions of DS1 and DS3 services to be just and reasonable, but it could not promulgate this radical new regulatory regime without first proposing it in a public notice and providing an opportunity for the public to comment.[109] Either way, based on the present record, the Commission cannot conclude in a non-arbitrary manner that price caps for DS1 and DS3 channel terminations should be eliminated on effectively a nationwide basis.[110]

Although the focus of AT&T's filings, and of this response, is on DS1 and DS3 services, there is also no factual support for AT&T's suggestion that the Commission forbear from application of *all* of Title II with respect to all Ethernet BDS.[111] Of course, to grant AT&T's request, the Commission would need to conclude that enforcement of any of the provisions of Title II is "not necessary to ensure" that Ethernet rates and terms are just and reasonable, and not unjustly or unreasonably discriminatory, and not necessary for the protection of consumers, and that doing so would be consistent with the public interest.[112] For the same reasons discussed herein, and those discussed extensively elsewhere in the record,[113] there is no basis in the record for reaching this conclusion.

A to Comments of Sprint Corporation, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593 (filed June 28, 2016) ("Sprint June 28, 2016 Comments"); Declaration of William P. Zarakas and Jeremy A. Verlinda ¶¶ 14-19, attached as Exhibit D to Sprint June 28, 2016 Comments.

[109] *See* Letter from Paul Margie, Counsel to Sprint, to Marlene H. Dortch, Secretary, FCC, at 23-25, WC Docket Nos. 05-25, 16-143, 15-247, RM-10593 (filed Mar. 22, 2017).

[110] *Id.* at 25-30.

[111] *See* AT&T March 13, 2017 Ex Parte at 23 n.69.

[112] *See* 47 U.S.C. § 160(a).

[113] *See, e.g.*, Windstream June 28, 2016 Comments. *See also* Overview of the BDS Record, attached to Letter from Jennifer P. Bagg, Counsel to Sprint, to Marlene H. Dortch, Secretary, FCC, at 1-7, WC Docket Nos. 05-25, 15-247, 16-143, RM-10593 (filed Sept. 28, 2016).

II. Given the Absence of Facilities-Based Competition at 50 Mbps and Below, *Ex Ante* Rate Regulation for Wholesale DS1 and DS3 Inputs Remains Essential for Customers that Seek Choice in Integrated Communications Solutions.

As the discussion above demonstrates, meaningful last-mile facilities-based competition is absent in many markets. The high barriers to facilities-based entry relative to the revenue opportunity mean that competitive providers must use the existing ILEC last-mile connections as an input into their own retail BDS offerings for customers in areas with lower bandwidth demand. Because Ethernet generally is sold in large bandwidth increments, an end user that can use a DS1 faces substantial price increases if the ILECs can raise DS1 prices to Ethernet levels.[114] In addition, unless wholesale prices allow for a sustainable margin, efficient competitive providers would not be able to maintain a business case for staying in the market. The result would be a loss of competitive alternatives for customers of finished communications solutions that use existing ILEC DS1 and DS3 inputs (and more generally BDS customers that use lower-bandwidth services).

In part by using ILEC DS1 and DS3 inputs, competitive providers currently are able to offer BDS customers alternatives for their finished communications solutions that include benefits such as better service, more service options, and state-of-the-art technology. As the Commission recognized in the *Emerging Wireline Order*, the benefits to customers of having multiple actual service providers include service options that are simply not offered by the incumbent.[115] Indeed, one of the key characteristics of BDS is the individualized tailoring of communications solutions and personalized support offered by the service provider, and competitive providers—including Windstream—can and do distinguish themselves by offering a superior customer experience.[116] The Commission concluded in the *Emerging Wireline Order* that competitive LECs' access to wholesale last-mile DS1 and DS3 inputs is critical for ensuring that customers such as small businesses, schools, health care providers, and government entities continue to have a choice among service providers, and that the absence of such wholesale access means that "competition from competitive LECs could be irrevocably lost."[117]

AT&T's proposal would lead to that irrevocable loss of competition. Eliminating *ex ante* rate regulation for DS1 and DS3 services would nullify the protections implemented in the

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[114] *See* FCC TDM-to-IP Benchmarking Proposal, appended as Attachment 3 to Letter from John T. Nakahata, Counsel to Windstream, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 05-25, RM-10593 (filed June 3, 2016) (comparing AT&T DS1 and DS3 discount plan rates with AT&T Switched Ethernet commercial contract rates).

[115] *See Emerging Wireline Order* ¶ 147 (citing letters from business data services customers describing the benefits of more choices of service options offered by competitive providers).

[116] *See* Windstream Declaration ¶ 21; Comments of Windstream Corporation, GN Docket No. 13-5, RM-11358, WC Docket Nos. 05-25 and 15-1, RM-10593, at 8 (filed Feb. 5, 2015) ("As Windstream's experience demonstrates, many small and medium-sized business customers appreciate the innovative options and personalized service that competition has bred.").

[117] *Emerging Wireline Order* ¶ 136.

Emerging Wireline Order and enable ILECs to engage in the same price squeeze against competitive providers using TDM inputs as they are currently doing with Ethernet inputs. A wide range of parties, including the U.S. Small Business Administration and various associations representing service providers and customers, have agreed on the necessity of ensuring continued wholesale access by competitive providers.[118] The record in the Commission's BDS proceeding further confirms the lack of facilities-based competition particularly for lower bandwidth services, and shows that there has been no change in marketplace conditions justifying a reversal of this recently adopted policy.

III. There is No Basis for Finding that the Market for DSn Transport Is Competitive.

AT&T, CenturyLink, and Frontier also assert that the market for DS1 and DS3 transport services is competitive on a nationwide basis.[119] The record does not support this sweeping conclusion, and the large ILECs do not even attempt to muster relevant supporting evidence. Indeed, these ILECs acknowledge that there is little in the record addressing the competitiveness of transport services in BDS markets, and that the Commission did not propose any changes to the regulatory treatment of transport services separately from DS1 and DS3 channel terminations.[120] The Commission's decision not to propose a separate regulatory treatment for transport services stems from its finding that when a BDS purchaser buys a channel termination from an ILEC end office to its customer's premises, that purchaser frequently also will have to purchase ILEC transport to reach from the closest point of interconnection between the purchaser's and ILEC's networks (whether a Point-of-Interconnection, Point-of-Presence, or Network-to-Network Interface) to the ILEC end office in which the channel termination is

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[118] *See* Letter from Jamie Belcore Saloom, U.S. Small Business Administration, to Tom Wheeler, Chairman, FCC, at 3, GN Docket No. 13-5, RM-11358 (filed June 23, 2015) ("Incumbent carriers should not be allowed to remove these choices from small business consumers by charging competitive carriers higher wholesale rates or demanding more onerous contract terms when modernizing their network technology."); Letter from Edison Electric Institute et al. to Tom Wheeler, Chairman, FCC, at 1, GN Docket Nos. 13-5, 12-353 (filed July 8, 2015) ("As technology transitions and more services move to IP based solutions, we encourage you to protect the wholesale access market so that competitive telecommunications companies can continue to maintain access to reach their end users."). *See also, e.g*, Reply Comments of Windstream Services, LLC, WC Docket Nos. 05-25, 15-1, RM-10593, GN Docket No. 13-5, RM-11358, at 7 & n.9 (filed March 19, 2015) (noting support on the record of Ad Hoc Telecommunications Users Committee, Birch, Integra, Level 3, Competitive Carriers Association, COMPTEL, Granite Telecommunications, National Association of State Utility Consumer Advocates, New York Public Service Commission, Pennsylvania Public Utility Commission, Public Interest Commenters, Sprint, Utilities Telecom Council, XO Communications, Wholesale DS-0 Coalition).

[119] *See* AT&T March 13, 2017 Ex Parte at 5-10; CenturyLink/Frontier March 20, 2017 Ex Parte at 16-17.

[120] *See* AT&T March 13, 2017 Ex Parte at 7-9; CenturyLink/Frontier March 20, 2017 Ex Parte at 16-17.

located. The only way to avoid having to purchase ILEC transport is if a competitive provider has collocated in the ILEC end office where the channel termination is located, and that competitor can obtain a cross-connect to connect its collocated equipment to the ILEC channel termination. All other competitive providers must bypass the ILEC channel termination and transport altogether, and that requires having competitive fiber facility to the end user premises, which only exists for 14 percent of locations with 50 Mbps of demand or less.[121]

There is no evidence in the record showing the extent to which competitive providers are collocated at ILEC end offices such that there are alternatives to ILEC transport services. Without any such evidence, the Commission has no basis to reach the conclusion proposed by AT&T, CenturyLink, and Frontier.

The evidence cited by AT&T does not support its proposal. First, it presents a table purporting to show the number of "competitive providers with fiber facilities" within each of a list of MSAs.[122] However, the table does not reveal any information about whether any of the competitive providers are collocated at every ILEC end office in the MSA. Second, AT&T takes selective statements from competitive providers, out of context, for the unremarkable (and irrelevant) proposition that where they can hand off traffic from an ILEC's network to their own transport networks, they prefer to carry customer traffic over their own networks.[123] But these statements do not demonstrate how often a competitive provider is able to hand off traffic to its own network at the ILEC end office closest to the customer. Although the Commission's data collection does not address specifically the presence or absence of competition for transport services, Windstream has submitted industry reporting indicating that ILECs remain the dominant providers of wholesale local transport.[124]

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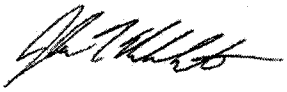
Please contact me if you have any questions or require any additional information.

Sincerely,



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Counsel to Windstream Services, LLC

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[121] *See* Windstream October 21, 2016 Ex Parte at 3.

[122] *See* AT&T March 13, 2017 Ex Parte at 6.

[123] *See id.* at 7-8.

[124] *See* Windstream June 28, 2016 Comments at 10-11.