



June 3, 2016

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

Re: *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

Dear Ms. Dortch:

In accordance with the Modified Protective Order for the above-referenced proceedings, Windstream Services, LLC (“Windstream”) herein submits a redacted version of the attached ex parte filing in the above-referenced proceedings.

Windstream has designated for confidential treatment the marked portions of the attached documents pursuant to the Modified Protective Order¹ in WC Docket No. 05-25 and RM-10593.

Pursuant to the protective order, Windstream is filing a redacted version of the document electronically via ECFS, one copy of the confidential version with the Secretary, two copies of the redacted version with the Secretary, and sending two copies of the 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*, Modified Protective Order, DA 10-2075, 25 FCC Rcd. 15,168 (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:

Eric Ralph	William Kehoe
Deena Shetler	Christopher Koves
Pamela Arluk	Richard Kwiatkowski
Irina Asoskov	Joseph Price
Robin Cohn	Marvin Saks
William Dever	Shane Taylor
Justin Faulb	David Zesiger



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Exchange Carrier Rates for Interstate Special Access Services*, RM-10593

Dear Ms. Dortch,

On June 1 and June 2, 2016, Jennie Chandra, Malena Barzilai, and Bill Kreutz from Windstream Services, LLC (“Windstream”); James Stegeman and Mark Guttman from CostQuest Associates (“CostQuest”); and Henry Shi and the undersigned from Harris Wiltshire & Grannis, met with Commission staff regarding the Further Notice of Proposed Rulemaking in the above-referenced proceedings.¹ In particular, Windstream and CostQuest spoke via phone on June 1 with Eric Ralph, Deena Shetler, Pamela Arluk, Irina Asoskov, Justin Faulb, William Kehoe, Christopher Koves, Joseph Price, and Shane Taylor, all of the Wireline Competition Bureau, and William Dever of the Office of General Counsel. The next day Windstream and CostQuest met in person (except where noted) with Deena Shetler (telephonically), Pamela Arluk, Irina Asoskov, Robin Cohn, Justin Faulb, William Kehoe, Christopher Koves, Richard Kwiatkowski (telephonically), Joseph Price, Marvin Saks, and David Zesiger, all of the Wireline Competition Bureau, and William Dever of the Office of General Counsel.

Over the course of both meetings, in response to paragraph 424 of the FNPRM, Windstream provided a conceptual overview, summarized in the attached documents, of a cost-based approach to developing wholesale last-mile input price benchmarks for packet-based business data services (“BDS”) in non-competitive product and/or geographic markets. Windstream explained how this cost-based approach builds upon existing tools available to the Commission to model the cost of last-mile fiber facilities, which the Commission can then leverage to develop price benchmarks for wholesale last-mile inputs over the range of bandwidth tiers (and potentially service quality levels) at which BDS is offered in the retail market. The cost model’s focus on last-mile connections responds to evidence, recognized by the Commission, that these connections present barriers to entry that are lower for large incumbent BDS providers (and their affiliates) in their footprint than for unaffiliated competitive carriers,

¹ See *Business Data Services in an Internet Protocol Environment et al.*, Further Notice of Proposed Rulemaking, FCC 16-54 (rel. May 2, 2016) (“FNPRM”).

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and evidence that current prices reflect the exercise of the large incumbents' market power.² To offer a competitive alternative to many business, nonprofit, and government customers, a BDS provider like Windstream that makes significant investments in its "middle-mile" network facilities as well as some on-net last mile facilities, must also purchase wholesale last-mile access to customers at off-net locations.³ Incumbents (both telephone and cable) that own these last-mile connections to customers in non-competitive markets have the capability and incentive to exercise market power in those locations where competitive providers lack a viable economic case to overbuild the incumbent.

To address such instances, Windstream proposes a two-step approach that would effectively leverage a cost model to implement technology-neutral competition policy reforms. *First*, the Commission should use a cost model to calculate, for each given geographic area (to be determined), the average revenue per BDS customer location that would be required to recover the forward-looking economic costs (including a reasonable profit and a share of common costs for other parts of the network) of deploying, operating, and maintaining a network with the capability to deliver a 1 Gbps connection to all BDS customer locations. *Second*, the Commission should use the relationship between the market leader's service tier prices (keyed to the price for 1 Gbps service) and proportion of connections provided in each service tier to establish a set of benchmark prices for wholesale last-mile inputs in each selected market. Determining a benchmark in this manner avoids disclosure of specific prices or circuit counts (instead, only percentage relationships are needed), sets evidence-based benchmarks that are technology-neutral, is flexible enough to accommodate the wide range of pricing tiers available for Ethernet, and recognizes that Ethernet prices should reflect greater efficiencies in packet-based technologies and do not have a linear per-Mbps basis. This approach also avoids anchoring reforms on BDS rates that currently include monopoly or oligopoly profits.

As summarized in Attachment 1, CostQuest discussed a cost model based approach, which can leverage existing platforms already reviewed and approved by the Commission: the Connect America Cost Model ("CACM") and the Alternative Connect America Cost Model ("A-CAM"). By using CACM and its inputs where possible, this approach offers an efficient means for determining the forward-looking, greenfield cost of building a fiber network to BDS customer locations. This approach provides an administratively efficient solution that the Commission can implement, with only limited development and data requirements. At the same time, using a cost model also offers the Commission the flexibility readily to calculate new or update costs using updated inputs for components, such as electronics, or for different network topologies.

² See *id.* ¶ 233 ("Incumbent LECs face lower overall barriers within region Carriers with incumbent LEC and competitive LEC affiliated entities confirm the lower incumbent LEC barriers to entry."), ¶ 237 *et seq.*

³ See Comments of Windstream Services, LLC, at 36, WC Docket No. 05-25, RM-10593 (filed Jan. 27, 2016) (stating that Windstream has invested billions in its fiber network).

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CostQuest also summarized the process for deriving an average wholesale last-mile revenue requirement for deployment to BDS customer locations. This amount represents the average revenue that the market leader would need to generate across all bandwidth tiers at/below 1 Gbps to recover costs of deploying the last-mile connection to each BDS customer location. The revenue requirement takes into account additional factors such as the market leader's market share, depreciation expenses, cost of capital (assumed to be 9.5%), and other operational expenses. Because the revenue requirement addresses recovery of last-mile costs under wholesale arrangements, the model does not include cost elements that are focused on retail service.

Windstream then explained how wholesale last-mile input pricing benchmarks for different bandwidth tiers can be calculated using three sets of inputs: (1) the average wholesale last-mile revenue requirement per-location, which is the output of the cost model; (2) the relative price, expressed as a percentage, of the market leader's retail Ethernet circuit for each bandwidth tier, as compared to the market leader's retail price for a 1 Gbps Ethernet circuit; and (3) the distribution of Ethernet circuits sold by the market leader across all of its bandwidth tiers at/below 1 Gbps, each expressed as a percent of the total number of these Ethernet circuits sold. As Attachment 2 shows, the Commission, using these inputs, can calculate the wholesale last-mile input benchmark price for each bandwidth tier—given the distribution of circuits at each tier—needed by the market leader to reach the average wholesale last-mile revenue requirement determined by the cost model.

This cost-based method for establishing wholesale last-mile Ethernet price benchmarks offers several advantages over using the market leader's existing TDM special access prices as the benchmark:

- As discussed above, cost model-based wholesale Ethernet input prices that represent the forward-looking economic costs do not include monopoly or oligopoly rents that are factored into the market leader's current retail and wholesale service prices.
- This proposal accounts for technological efficiencies now possible when BDS services are provisioned as IP-based. Such efficiencies are evidenced by comparing TDM to IP service pricing across a wide variety of geographies. In particular, a comparison by TeleGeography of prices across four large cities around the world shows that outside of the United States, the price-per-Mbps of a DS3 circuit (45 Mbps) is significantly higher than the price-per-Mbps of a 50 Mbps Ethernet circuit.⁴ And because the price-per-Mbps for Ethernet decreases as bandwidth increases, the distortion created by benchmarking using a DS3 circuit will be even greater at higher bandwidth tiers.
- The proposed wholesale benchmark process will more accurately reflect the behavior of Ethernet's price-per-Mbps as bandwidth increases. In contrast, as shown in Attachment

⁴ See Letter from John T. Nakahata to Marlene H. Dortch, Secretary, FCC, at Attachment 1, WC Docket No. 05-25 & 15-247, GN Docket No. 13-5, RM-10593 (filed Mar. 14, 2016).

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3, using a the price-per-Mbps of DS1 and DS3 connections to benchmark Ethernet rates produces for certain bandwidth tiers wholesale last-mile input benchmark prices that are *higher* than actual retail end-to-end service prices for the same bandwidth tiers.⁵

- A model is more adaptable with respect to the size of the geographic unit in which to set benchmark prices, in contrast to the study area (or broader) geographies used in setting tariffs.
- The cost-model approach can be more readily updated as TDM services decline and are phased out.
- A TDM-based benchmark will not easily accommodate the varied service quality levels that are typically available for Ethernet services. The methodology Windstream outlined can address different service quality tiers.

In sum, the cost-based approach, as outlined above, enables rational comprehensive pricing reform that targets the broken components of the BDS markets, while continuing to motivate incumbent and competitive investments in all areas where fiber deployment is economically feasible. This proposal is designed to be technology-neutral, and the benchmarks can apply to the market leader regardless of whether it is an incumbent or competitive local exchange carrier, or a cable company. And by using existing Commission analytical tools, it is administratively efficient. Adopting this approach, the Commission can set wholesale last-mile benchmarks that ensure that, in non-competitive markets, just and reasonable rates are available in the market for wholesale inputs, which in turn helps enable widespread competition in retail BDS markets.

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

Sincerely,



John T. Nakahata

Counsel to Windstream Services, LLC

⁵ Indeed, ensuring that the price-per-Mbps do not increase as a result of the transition from TDM to Ethernet generally just protects current customers that depend on affordable services using the lowest bandwidth wholesale inputs, i.e., generally below 10 Mbps. *See Technology Transitions et al.*, Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking, 30 FCC Rcd. 9372, 9464-65 ¶ 165 (2015). Windstream proposed and supports this rule as an *interim* solution to prevent sudden price increases, and not as a substitute for long-term, comprehensive reform of the BDS market.



cc:

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ATTACHMENT 1

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Dedicated Fiber Access

COST MODEL AND REVENUE REQUIREMENT STRUCTURE



Cost Model

Reflect a single fiber network that supports dedicated connectivity for all business data service locations, including wireless macro towers.

Use a forward-looking, greenfield approach to value the fiber network.

Use Connect America Model inputs (OpEx, Plant Mix, CapEx where ever possible).

Identify building locations and fiber-served businesses using Connect America Model methods.

For business data service locations, model last-mile construction and operation of a 1 Gbps MetroE connection to each location.

Non-last mile costs (e.g., middle mile costs) are not addressed.

Wholesale Revenue Requirement

Use the output of the cost arm to develop an average monthly cost required for the market leader to deploy a last-mile connection to each business data service customer location.

Take rate can be accounted for in development of this revenue requirement.

Monthly cost should capture depreciation expense, cost of money (presuming 9.75%), taxes, plant specific OpEx, and non-plant specific OpEx.

Modeled cost elements directed at retail service should be excluded.

ATTACHMENT 2

Calculating a Wholesale BDS Rate Benchmark for Specific Speed Tiers

General Description:

Apply the market leader's pricing curve, as it exists for retail business data service ("BDS") customers, to develop wholesale rate benchmarks for BDS connections at varying speed tiers. This can be accomplished by using 1 Gig as a reference for per-circuit wholesale BDS rate benchmarks, and then, accounting for both relative differences in circuit pricing and preponderance of different speed tiers in the marketplace, solving for wholesale BDS rate benchmarks for other speed tiers so that the market leader can achieve, on average, the wholesale revenue requirement for each BDS location.

To perform this calculation, the only facts needed are relative retail BDS pricing of circuits as compared to 1 Gig (e.g., 10 Mbps price = 20% of 1 Gig) and how much specific BDS speed tiers constitute circuits at/below 1 Gig (e.g., 10 Mbps is 90% of all such circuits).

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Example:

Presume the following hypothetical facts:

- Only 2 BDS circuit speed tiers: 10 Mbps, 1 Gig
- Relative retail BDS pricing: 10 Mbps = 20% of 1 Gig price
- BDS circuit distribution: 10 Mbps is 90% (900) of all circuits (1,000), 1 Gig is 10% (100)
- Average amount need to recover per BDS location is \$400

Use the following equation to solve for the 1 Gig wholesale BDS price benchmark (= X):

Average BDS location revenue requirement = $[X * (\% \text{ of 1 Gig price that is equivalent to 10 Mbps price}) * (\% \text{ of total ports at 10 Mbps})] + [X * (\% \text{ of total ports at 1 Gig})]$

Applied to the hypothetical numbers above:

$$\$400 = (.2 * X * .9) + (X * .1)$$

$$\$400 = (.18X) + (.10X)$$

$$\$400 = .28X$$

$$X = \$400/.28$$

$$X = \$1,429$$

This means the 1 Gig wholesale BDS rate benchmark, with hypothetical facts above, would be \$1,429, and the 10 Mbps wholesale BDS rate benchmark would be \$286 (i.e., 20% of 1 Gig).

ATTACHMENT 3

FCC TDM-to-IP Benchmarking Proposal:

Bandwidth	AT&T TDM 36-month Rate (As Tariffed) ¹	TDM Prices per Mbps	Initial X-Factor Adjusted Prices per Mbps ²	Retail IP Rate AT&T - Retail Contract	Benchmark Allowable Wholesale IP Rate
1.5	\$126.00	\$84.00	\$65.62		\$98.43
2					\$131.24
4					\$262.48
5					\$328.10
8					\$524.97
10					\$656.21
20					\$427.92
45	\$1,232.50	\$27.39	\$21.40	N/A	
50					\$1,069.81

Highlighted text contains confidential information.

1. AT&T Tariffs, available at <http://cpr.bellsouth.com/pdf/ilecmain.html>. Prices do not include commercially negotiated discounts.

2. Values assume a 21.88% initial reduction from Table 9 of the FNPRM.