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

In the Matter of Special Access Rates for Price Cap Local Exchange Carriers	WC Docket No. 05-25, RM-10593

COMMENTS OF VERIZON AND VERIZON WIRELESS

Michael E. Glover
Of Counsel

Edward Shakin
Rashann Duvall
VERIZON
1320 N. Courthouse Road
9th Floor
Arlington, VA 22201-2909
(703) 351-3179

John T. Scott, III
VERIZON WIRELESS
1300 I Street, N.W.
Suite 400 West
Washington, D.C. 20005
(202) 589-3740

James G. Pachulski
Law Offices of James Pachulski
TechNet Law Group, PC
6001 Montrose Road
Suite 506
Rockville, MD 20852
(301) 770-1235

Attorneys for Verizon
and Verizon Wireless

January 19, 2010

TABLE OF CONTENTS

INTRODUCTION AND SUMMARY 1

I. THE EXISTING RECORD OF DECLINING SPECIAL ACCESS PRICES AND INCREASING VOLUMES DEMONSTRATES EFFECTIVE COMPETITION 4

A. The Real Prices Customers Pay for DS1 and DS3 Special Access Services Have Declined. 5

B. The Output of DS1 and DS3 Special Access Services Has Continued to Increase. 8

II. THE COMMISSION'S ANALYTICAL FRAMEWORK SHOULD BE FORWARD LOOKING AND CAPTURE RECENT COMPETITIVE ACTIVITIES 9

A. The Commission's Analytical Framework Should Account for the Fact that Special Access Demand is Highly Concentrated. 10

B. The Commission's Analytical Framework Should Be Forward Looking and Focused on the Competitive Alternatives That Are or Will Be Available to Retail Customers. 12

C. The Commission's Analytical Framework Should Include Intramodal Competitors. 18

D. The Commission's Analytical Framework Should Include Intermodal Competitors. 19

1. Cable Competitors. 20

2. Fixed Wireless and Other Emerging Providers. 23

E. The Commission's Analytical Framework Should Account for the Recent Ramp-Ups by Competitive Providers of High Capacity Services. 27

F. Backwards Looking Measures of Market Shares Are Not Useful in a Dynamic Industry 29

III. THE GEOGRAPHIC AREAS FOR THE COMMISSION'S ANALYSIS SHOULD REFLECT MARKETPLACE REALITIES AND BE ADMINISTRATIVELY WORKABLE 30

A. The Commission Need Not Define an "Ideal" Geographic Market. 30

B. The Commission Should Analyze Competition By MSA Areas or By Rate Zone Areas Within MSAs. 31

C. It Would Be Both Improper and Impractical to Assess Competition Within Geographic Areas That Are As Small As An Individual Building. 32

IV. A COMPETITIVE ANALYSIS SHOULD BE BASED ON COMPLETE INFORMATION ON CURRENT AND PLANNED COMPETITIVE OFFERINGS 34

A. The Commission's Competitive Analysis Should Collect Data on the Network Facilities Of All Competitors That Are Operating or Are Planning to Operate in the Relevant Geographic Area to Provide High Capacity Services. 34

B. The Commission's Competitive Analysis Should Consider the Pricing Discipline Exerted Outside the Areas Served by Competitors. 36

C. The Commission's Competitive Analysis Should Also Account for Self Supply. 38

D. There is No Need for the Commission to Collect Data in Areas Where the Presence of Competition Is Not Seriously Disputed. 39

E. The Commission Could Initially Conduct Competitive Analyses in Sample Geographic Areas to Identify Areas that May Warrant Further Analysis. 42

V. THE COMMISSION SHOULD NOT UNDERTAKE AN ANALYSIS OF ARBITRARY ACCOUNTING MEASURES OF COSTS AND PROFITS. 43

A. Any Allocation of the Costs of Shared Network Facilities and Equipment To a Specific Service Would Be Arbitrary and Would Not Provide a Meaningful Analysis of Competition. 45

B. The Commission Could Look to Proxies to Determine That Changes in Special Access Costs Are Not Dramatically Out of Line With Changes in Special Access Prices. 49

CONCLUSION 52

Attachment A: Declaration of Michael D. Topper

Attachment B: Declaration of Harold E. (Trip) West III

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

In the Matter of Special Access Rates for Price Cap Local Exchange Carriers	WC Docket No. 05-25, RM-10593

COMMENTS OF VERIZON AND VERIZON WIRELESS[1]

Introduction And Summary

As the Commission evaluates the appropriate analytical framework for use in evaluating the regulatory framework for special access services, the Commission should begin with the fact that the record evidence shows that special access prices have steadily fallen and output has increased. This is exactly the opposite of what would happen if incumbent carriers were exercising market power. Declining prices and increasing output are two of the primary indicators that market forces are working. These facts alone demonstrate that there has been no market failure requiring the Commission to impose more intrusive regulations on special access rates.

Beyond these straight forward facts, an appropriate analytical framework must take into account the characteristics of the special access business, from both a supply and demand perspective, that confirm this conclusion. From a supply perspective, an appropriate analytical framework must take into account the overwhelming weight of the evidence in the record here

[1] In addition to Verizon Wireless, the Verizon companies participating in this filing ("Verizon") are the regulated, wholly owned subsidiaries of Verizon Communications Inc.

which shows that various competitors have entered and are continuing to enter the marketplace to target the areas where demand is concentrated. Moreover, any such framework must be both forward looking, and take into account not just intramodal competitors, such as the various carriers who have widely deployed fiber throughout the metropolitan areas and office parks where demand is concentrated, but also intermodal competitors, such as cable and fixed wireless that have an even broader reach.

From a demand perspective, an appropriate analytical framework must take into account the evidence demonstrating that special access demand is highly concentrated in metropolitan areas and office parks, and that special access services are purchased predominantly by large sophisticated business customers with significant buying power who operate many locations and demand common prices across their various locations. As a result, competition for their services in the majority of locations where there are numerous competitive alternatives ultimately disciplines prices elsewhere as well.

The Commission's analytical framework must also take into account the continuing growth in demand for special access services and high capacity services. This growth in demand is continuing to fuel competitive entry and competitive expansion. An appropriate forward looking framework must take account of this growth in demand, as well as the corresponding continuing rapid growth of competitive alternatives. To properly assess competition in this dynamic industry, the Commission's analytical framework should capture recent competitive activities and demand growth as well as planned future activities and projected demand.

Consistent with this analytical framework, the Commission should focus on those limited areas that are in dispute. In particular, the proponents of more regulation have focused on

regulated TDM-based DS1 and DS3 special access services outside of the metropolitan areas and office parks where demand is concentrated. There can be no serious dispute at this point that a variety of competitors are targeting these areas, or that competitors are capable of providing higher level services. Given that, the resources of all concerned should be used to address those areas where the dispute is focused. For example, the Commission could conduct an analysis of competition for these services based on a sampling of representative MSAs that include suburban and urban areas.

The Commission's analytical framework should refrain from relying on backward looking market shares to assess competition for high capacity services because such a static analysis would be impractical and would not provide meaningful results. Such an analysis would not capture the rapidly evolving competitive impact of the availability of competitive alternatives. It would also fail to capture new and planned competitive entry and the ability of competitors to expand their networks and service offerings.

The Commission's analytical framework should also not attempt to evaluate competition by using arbitrary accounting measures of cost or profit. Given the nature of special access services, such an analysis would fail to yield meaningful data about competition. Because special access services use network components that are shared with other services, such as local exchange and switched access, any attempt to measure service-specific special access costs or profits would entail arbitrary allocations of the significant joint and common costs of the incumbent carriers' wireline networks, which would produce results that are virtually meaningless.

Moreover, the Commission does not need to determine service-specific costs or profits of special access services to evaluate whether its rules should be modified. There is no question that prices for special access services have declined under the existing rules and that output has increased. The argument made by the proponents of regulation is that prices might have declined even more if carriers had not been exercising market power. As an initial matter, the premise of their argument is misplaced. If carriers possessed the market power that these other parties allege, they would not have an incentive to reduce prices in the first instance, but instead would maintain or increase prices to maximize revenues. In addition, however, their argument can be tested without using an unreliable and meaningless measure of accounting costs and profit. Instead, the Commission could much more simply determine whether the changes in the costs of network components used to provide special access services and the changes in the prices customers pay for special access services are dramatically out of line. To achieve that limited objective, the Commission could look to cost indices to see what has happened over time to the costs of those network components associated with special access services. The AUS Telephone Plant Index (TPI) is such an index and could serve as a useful proxy to provide the Commission with information on the general direction of special access costs in recent years. Cost indices such as the TPI can provide a tool for the Commission to use to compare the relationship between the declining real prices customers pay for special access services and the cost trends of those network components used to provide special access services.

I. THE EXISTING RECORD OF DECLINING SPECIAL ACCESS PRICES AND INCREASING VOLUMES DEMONSTRATES EFFECTIVE COMPETITION

As Dr. Topper explains, "[m]arket power is generally characterized by the ability to increase prices and restrict output." Declaration of Michael D. Topper ("Topper Decl.") ¶ 71.

Neither of these two indicators of market power is present for special access services. In fact, the opposite is true – prices are declining and output is increasing. Market pressures drive prices down as competitors strive to sell more of their services to customers. And as these market forces spur price reductions, customers respond by increasing their purchases of high capacity services, including special access services. These two readily-observable market factors – declining prices and growing output – demonstrate that special access services are subject to effective competition.

The Commission can evaluate the efficacy of its current price cap and pricing flexibility rules by assessing the competition that has developed under the existing regulatory regime. With abundant evidence of declining special access prices and increasing output, the Commission can determine that competition is constraining prices for special access services and that those prices are just and reasonable. Because none of the indicia of market power – an ability to increase prices or restrict supply – is present with respect to high capacity services, there is no indication of a market failure and no justification for increased regulatory constraints on special access service pricing.

A. The Real Prices Customers Pay for DS1 and DS3 Special Access Services Have Declined.

At the time the Commission introduced pricing flexibility, special access services had been subject to artificial regulatory price constraints for long periods, including a 10-year period during which special access rates were capped and subject to annual decreases, without regard to

what competitive market prices might be.[2] Given that history, the Commission acknowledged that, once pricing flexibility was implemented, special access prices would not necessarily decline in all cases, but would instead move both up and down, pushing toward some equilibrium price, consistent with what occurs in a competitive market. The Commission noted, for example, that, in some cases, special access prices might rise "because our rules may have required incumbent LECs to price access services below cost."[3] Despite the Commission's expectations, the prices customers pay for special access services have followed an overall downward trend.

As Dr. William Taylor explained two years ago in response to the Commission's request to refresh the record,[4] between 2002 and 2006, the prices paid to Verizon for DS1 and DS3 special access services declined. Between 2002 and 2006, the prices paid for Verizon's DS1 services fell an average of 5.28 percent per year, while the prices paid for Verizon's DS3 services during that same period fell an average of 4.97 percent per year, both in real terms.[5]

---

[2] *Access Change Reform; Price Cap Reform for Local Exchange Carriers*, Fifth Report and Order and Further Notice of Proposed Rulemaking, 14 FCC Rcd 14221, ¶¶ 11-13 (1999) ("*Pricing Flexibility Order*"), *aff'd*, *WorldCom, Inc. v. FCC*, 238 F.3d 449 (D.C. Cir. 2001).

[3] *Id.* ¶ 155.

[4] *See* Comments of Verizon, *Special Access Rates for Price Cap Local Exchange Carriers*; WC Docket No. 05-25, RM-10593 (Aug. 8, 2007) ("Verizon 2007 Comments") at Attachment A: Supplemental Declaration of Dr. William E. Taylor ("Taylor Supp. Decl.").

[5] *See* Taylor Supp Decl. ¶ 7.

Other carriers offering special access services also submitted evidence of the decline in their prices. For example, both AT&T and Qwest submitted confidential information showing that their DS1 and DS3 special access prices have declined significantly.[6]

These special access price declines were further confirmed in a report issued by the Government Accounting Office.[7] The *GAO Report* noted that, between 2001 and 2005, consumers of special access services have paid less for DS1 and DS3 special access services, both in the areas where pricing flexibility has been granted and in the areas that remain subject to price cap regulation.[8]

These price declines were also noted in the more recent *NRRI Report*.[9] NRRI obtained data from buyers of special access, and that data confirms that prices for both DS1 and DS3 services declined between 2006 and 2007. In particular, the buyer data shows declines of 12 percent and 27 percent in the discounted rates for DS1 and DS3 RBOC channel terminations, respectively; a 9 percent and 10 percent decline in the discounted rates for RBOC DS1 and DS3

---

[6] *See* Comments of AT&T, *Special Access Rates for Price Cap Local Exchange Carriers*; WC Docket No. 05-25, RM-10593, at 22 (Aug. 8, 2007); Comments of Qwest, *Special Access Rates for Price Cap Local Exchange Carriers*; WC Docket No. 05-25, RM-10593, at 46-47 (Aug. 8, 2007).

[7] Government Accountability Office, *FCC Needs to Improve its Ability to Monitor and Determine the Extent of Competition in Dedicated Access Services*, Report 07-80, http://www.gao.gov/new.items/d0780.pdf (Nov. 2006) ("*GAO Report*")..

[8] *See id.* at 14, 27-28, 32.

[9] P. Bluhm & R. Loube, *Competitive Issues in Special Access Markets*, National Regulatory Research Institute, http://nrri.org/pubs/telecommunications/NRRI_spcl_access_mkts_jan09-02.pdf (Jan. 21, 2009) ("*NRRI Report*").

fixed transport discounted rates, respectively; and a 13 percent and 18 percent decline in the discounted rates for RBOC DS1 and DS3 variable transport discounted rates, respectively.[10]

More recent evidence confirms that these price declines have continued. For example, Verizon showed that between 2002 and 2008 the real prices customers paid for its DS1s and DS3s have declined by 24 percent overall.[11] These real price declines reflect the actual prices paid by Verizon's customers for DS1 and DS3 circuits under tariffs and discount plans after adjusting for inflation.[12]

B. The Output of DS1 and DS3 Special Access Services Has Continued to Increase.

As the special access prices that customers pay to incumbent carriers continued to decline, the quantities of special access services provided to customers continued to increase. These increases in output coupled with price declines are "the hallmark of increasing buyer welfare and the development of effective competition in a previously regulated industry" and "direct marketplace evidence that the competitive market setting is benefitting buyers of special access and other high-capacity services." Topper Decl. ¶ 71.

The Commission's own data for large ILECs showed that between 2003 and 2006, special access lines increased by approximately 26.3 percent per year when calculated on a

[10] *Id.* at 59, Table 7. According to NRRI, these figures represent the actual prices paid by large wholesale purchasers and have not been adjusted for inflation.

[11] *See* Letter from Donna Epps, Verizon, to Marlene Dortch, FCC, *Special Access Rates for Price Cap Local Exchange Carriers*, WC Docket 05-25 (Oct. 20, 2009).

[12] *See* Declaration of Harold E. (Trip) West III ("West Decl.") ¶ 7.

voice-grade equivalent basis.[13] Likewise, between 2006 and 2007, the most recent year for which these same data are available, special access lines grew again by 23.1 percent when calculated on a voice-grade equivalent basis.[14]

These increases in output of special access are especially significant because they occurred when demand was shifting to other higher capacity services, such as packet-based services. As explained below, these higher capacity services (which are provided by both competitors and incumbent carriers) were growing even more rapidly than the incumbent carriers' TDM-based special access services.

Moreover, the combination of real price declines and growth in output and demand have resulted in special access revenues remaining relatively flat. Between 2001 and 2007, Verizon's special access revenues remained flat,[15] even as demand for special access services continued to grow.

II. THE COMMISSION'S ANALYTICAL FRAMEWORK SHOULD BE FORWARD LOOKING AND CAPTURE RECENT COMPETITIVE ACTIVITIES.

As explained above, the record already contains substantial evidence of a healthy competitive marketplace for high capacity services. If, however, the Commission chooses to conduct any additional competitive analysis, it should adopt an analytical framework that is

[13] *See* Taylor Supp. Decl. ¶ 10. The special access lines figures reported in ARMIS exclude DSL lines.

[14] This data is collected from the ARMIS 43-08 reports for Large ILECs, http://fjallfoss.fcc.gov/eafs7/paper/43-08/PaperReport08.cfm, (Table III. Access Lines in Service by Customer) columns (fj) and (fk), row 910. This calculation likewise excludes DSL lines.

[15] Under the Commission's rules, Verizon's reported special access revenues included revenues for DSL and FiOS. Because these other services are not TDM-based special access services at issue here, Verizon excluded the revenues for these services from its analysis.

appropriate for the dynamic nature of the high capacity services marketplace. Competitors are rapidly deploying new networks and technologies and expanding existing networks to serve the growing demand for broadband. In order to properly assess competition in this dynamic industry, the Commission's analytical framework should look forward to capture recent competitive activities as well as planned future activities. It should also capture the competitive alternatives that are available to customers today as well as the competitive alternatives that have been planned and can readily be made available to them.

The Commission should not attempt to measure historical market shares, which are inherently backward looking. Market share measures would be very difficult to develop meaningfully and would not provide an accurate picture of competition for high capacity services in the immediate future given the dynamic nature of this industry. New competitive alternatives are available and expanding very rapidly. These new alternatives exert competitive pressure on special access services. But no historical measure of market share can accurately capture the impact of these recent and planned activities in the dynamic marketplace for high capacity services.

A. The Commission's Analytical Framework Should Account for the Fact that Special Access Demand is Highly Concentrated.

The record in this case already demonstrates that demand for special access services is highly concentrated in areas like metropolitan areas, office parks, cellular towers and the like. According to the USTelecom, "[a]pproximately half of ILEC special access revenue is concentrated in the top 25 largest MSAs."[16] And within these top MSAs, "demand is

[16] *High-Capacity Services: Abundant, Affordable, and Evolving*, p. 4, Report filed by USTelecom on July 16, 2009 ("USTelecom High-Cap Report").

concentrated further still, in the wire center serving areas with the highest concentration of business customers."[17] In the case of Verizon, nearly 80 percent of special access revenues in 2007 were generated in 25 MSAs, and within these MSAs special access demand is concentrated in the downtown core of cities or in certain suburban areas in which there are large numbers of customers in communications-intensive industries.[18]

The concentration of demand has important implications for the Commission's competitive analysis. First, concentrated demand is particularly attractive to competitive entry. Building a network in an area with concentrated demand presents the competitor with a multitude of customers to serve over that network. The greater the concentration of demand, the greater the incentive for competitors to enter the area and build their own networks.

Second, the concentration of demand in metropolitan areas also disciplines prices outside those areas. Special access services are purchased predominantly by large sophisticated business customers that have significant buying power and operate in many locations. These customers have demanded the ability to aggregate their special access purchases across broad geographic areas to obtain uniform pricing structures across those areas. In response to these demands, Verizon has discount plans that allow customers to aggregate their demand across broad regions

---

[17] *Id.*

[18] *See* Verizon 2007 Comments at Attachment E: Declaration of Patrick A. Garzillo ¶ 3 & Exh. 1 ("Garzillo Decl."); *see also id.* (nearly 80 percent of the demand for high-capacity special access services (as measured by revenues) is concentrated in approximately 15 percent of the wire centers where Verizon bills high-capacity special access (or 740 wire centers)); *see also Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978 (2003) ("*Triennial Review Order*"), *vacated in part and remanded*, *United States Telecom Ass'n v. FCC*, 359 F.3d 554 ¶¶ 205, 375 (D.C. Cir. 2004) (recognizing that customers of high-capacity services tend to be highly concentrated geographically).

or, more recently, the entire country.[19] These plans also offer the same special access pricing structures regardless of location within a tariff region, which means that customers get the benefits of competition wherever they purchase service.

For the typical special access customer with multiple locations, the competition for their services in the majority of their locations ultimately disciplines prices in other areas. As Dr. Topper explains, "telecommunications carriers and large business customers operating on a regional or national scale purchase services for multiple locations in different geographic areas." Topper Decl. ¶ 60. Accordingly, "[c]ompetitive pressure and the bargaining power of large customers discipline pricing across different geographic regions." Topper Decl. ¶ 60.

B. The Commission's Analytical Framework Should Be Forward Looking and Focused on the Competitive Alternatives That Are or Will Be Available to Retail Customers.

The Commission has already recognized the importance of looking forward in conducting a competitive analysis. As early as 1982, the Commission found that "[r]egulatory policy must take cognizance of the dynamic factors existing in the marketplace" and that '[i]t should not be based solely on static conditions existing today." *MTS-WATS Market Structure Inquiry*, Second Report and Order, 92 F.C.C.2d 787, ¶ 133 (1982). More recently, the Commission found that "evidence concerning dynamic factors is a more persuasive market indicator than evidence concerning static factors" and that "[g]iven the rapidly changing nature of the market . . . , we conclude that evidence of where a market is going is more relevant than evidence of where it has been." *Petition on Behalf of the State of Hawaii, Public Utility Commission, for Authority To Extend Its Rate Regulation of Commercial Mobile Radio Services*

[19] *See* Verizon 2007 Comments at Attachment B: Supplemental Declaration of Quintin Lew ¶ 7 ("Lew Supp. Decl.")

in the State of Hawaii, Report and Order, 10 FCC Rcd 7872, ¶ 26 (1995). The Commission therefore consistently rejects "arguments . . . premised on data that are both limited and static" because they "fail to recognize the dynamic nature of the marketplace forces," including growth of and investment in "existing and developing platforms." *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 14853, ¶ 50 (2005) ("*Broadband Framework NPRM*").

The Department of Justice (DOJ) also supports the use of a forward looking approach in assessing competition in dynamic industries. In a recent ex parte, DOJ said that "[i]n any industry subject to significant technological change, it is important that the evaluation of competition be forward-looking."[20] There is no question that the high capacity services industry is subject to significant technological change. And as DOJ explained, "[i]nsight can best be gained by looking at product life cycles [and] the replacement of older technologies by newer ones."[21]

In adopting a forward looking approach to analyzing competition, the Commission has not used a static analysis of the competitive alternatives available to customers. Rather, the Commission recognizes that "an emerging market . . . is more appropriately analyzed in view of larger trends in the marketplace, rather than exclusively through the snapshot data that may quickly and predictably be rendered obsolete as this market continues to evolve." *Broadband Framework NPRM* ¶ 50.

---

[20] Ex Parte Submission of the Department of Justice, *Economic Issues in Broadband Competition; A National Broadband Plan for Our Future*, GN Docket No. 09-51, at 6 (Jan. 4, 2010).

[21] *Id*.

It is particularly important for the Commission to adopt a forward looking approach for high capacity services. It can hardly be disputed that the high capacity services industry is in the midst of rapid change. The growing demand for broadband is creating more demand for high capacity services and special access services. This growth in demand provides powerful incentives for competitors to enter new geographic areas and expand their networks in existing areas.

For example, enterprise business customer "data communication services revenues as a whole are increasing – by an average of approximately 4 percent per year from 2004 to 2008, with average annual increases of 3.4 percent expected through 2011."[22] Continued growth in corporate data and both wireline and wireless broadband services will drive ongoing demand for the underlying high capacity services, such as special access. New technologies such as Dedicated Internet Access, Carrier Ethernet, and Internet Protocol Virtual Private Networks (IP-VPN) are replacing traditional services, such as special access, and are leading corporate data growth. Annual revenues for these new technologies are projected to grow from $17.8 billion in 2008 to $27.0 billion in 2012, an 11-percent compounded annual growth rate.[23]

Mobile carrier demand for wireless backhaul, which connects cell sites and mobile switch centers to voice and data networks, will grow to meet the exploding customer demand for wireless data and media-rich mobile broadband services. As noted by Dr. Topper, Raymond James forecasts growth in wireless backhaul services from $3 billion in 2008 to $8 to $10 billion

[22] Telecommunications Industry Association (TIA), *TIA 2008 Telecommunications Market Review and Forecast (2008)* at 157 & Tables III-3.9, III-3.19.

[23] Yankee Group Research, Global ConnectedView Technology Forecast (March 2009).

in the next three to five years.[24] Mobile cell sites are projected to grow from more than 242,000 supporting an average backhaul capacity of 5 Mbps – 10 Mbps in 2008 to 300,000 supporting an average backhaul capacity of 50 Mbps – 100 Mbps in 2012.[25] Bandwidth demand for wireless broadband is projected to grow at a compounded annual rate of 130 percent from 2008 through 2012[26] and "double each year for the foreseeable future."[27]

Not only is customer demand growing, it is rapidly shifting to higher bandwidth and packet-based services. As demand shifts toward these higher capacity services, it creates even more opportunities for competitors to serve customers that no longer want TDM-based special access services. As David Armentrout of FiberNet noted, "T1s are out . . . it's either going to be fiber or its going to be microwave."[28] Dan Graff of Leap Wireless recently observed that "4G will require bandwidth that current TDM networks cannot provide economically."[29] The Yankee Group has also projected that "[w]ithin the next five years, service providers will have to: transition from TDM to packet based backhaul."[30]

---

[24] Topper Decl. ¶ 43; Raymond James & Associates, Inc., *Examining the Convergence of the Telecom and Cable Sectors* (Aug. 18, 2008).

[25] J. Pigg, Yankee Group, *Mobile Backhaul: Will the Levees Hold?* at 4 (June 2009).

[26] *Id*. at 1.

[27] *See* P. Marshall, Yankee Group, *The Inevitable Transformation of the Mobile Internet*, at 1 (Apr. 2009).

[28] FCC National Broadband Plan Workshop: *Deployment – Wired*, Transcript http://www.broadband.gov/docs/ws_02_deploy_wired_transcript.pdf, at 45 (Aug. 12, 2009).

[29] Yankee Group 4G Network Backhaul Summit, PowerPoint Presentation of Dan Graf, Leap Wireless at 4 (Sept. 15, 2009).

[30] Yankee Group 4G Network Backhaul Summit, PowerPoint Presentation of Jennifer Pigg (Yankee Group) (Sept. 15, 2009).

The Commission's analytical framework should take into account the fact that incumbent carriers have no advantage over competitors in providing these higher capacity services. The higher bandwidth services that customers are demanding require either upgrades to existing incumbent facilities or the construction of entirely new network facilities. Where customer locations with demand for higher bandwidth services are currently served by copper network facilities, those facilities will need to be upgraded or replaced with higher bandwidth network facilities that can support higher bandwidth services. For example, according to New Paradigm Research Group ("NPRG"), "[f]rom the tower, traffic is backhauled on one form or another to the wireless service provider's network [and] [i]n the United States, access to towers is predominantly through copper."[31] In 2008, the percentage of cell sites served over copper was 74 percent.[32] Incumbent carriers have no inherent advantage in serving these locations as they must upgrade or replace their existing network facilities. As Frost & Sullivan explained, "[t]he demand for higher bandwidths at the first mile is driving backhaul service providers to lay fiber to the cell sites."[33] Both incumbents and competitors have the opportunity to serve these customers.

The same is true for new customer locations that lack network facilities. Both incumbents and competitors alike will need to construct or extend their network facilities to

[31] NPRG Wireless Backhaul Study at 2.

[32] NPRG Wireless Backhaul Study, Figure 4.25 at 40.

[33] Frost & Sullivan, *Wireless Service Provider Spending on Mobile Backhaul Services*, p. 1-22 (2008).

serve the customer. These locations are likewise new market opportunities for competitors and incumbents alike.

In an industry experiencing such a rapid pace of change, it does not make sense to analyze historical competitive conditions or even a static snapshot of current competitive conditions. As Dr. Topper explains, the Commission's analytical framework should focus on the longer-run indicators of competitive conditions. Topper Decl. ¶¶ 24-25. These indicators look to the competitive alternatives that are likely to be available to customers in the future. The investments that competitors are making today to upgrade and expand their networks must be part of the Commission's forward looking analysis of competition for high capacity services.

In a forward looking analysis, it would be inappropriate for the Commission to limit its analysis to the individual buildings or city blocks actually served by competitors today. Topper Decl. ¶ 56. Once competitors have deployed fiber or wireless *networks* in an area, they are able cost-effectively to use or extend those networks to serve customers in individual *buildings* where there is sufficient demand. Topper Decl. ¶¶ 58, 59. Accordingly, even if a competitor is not yet serving particular buildings, the Commission's forward looking analysis should account for the fact that they readily could do so in many cases. The prospect of such competition provides an additional check on special access rates. Topper Decl. ¶ 60. The specific data the Commission should collect is discussed in Section V, *infra*.

The Commission also should not attempt to analyze competition through market share measures. In a forward looking analysis, it would make little sense for the Commission's analytical framework to define static product markets for high capacity services according to bandwidth or speed. Topper Decl. ¶¶ 24-26. The economics of such services – from both the

demand and supply side – make one bandwidth or speed of service viable substitutes for other speeds of service, making them part of the same relevant product market. Topper Decl. ¶¶ 26, 35. For example, a customer that purchases two DS3s today might replace them with a 100 Mbps Ethernet service tomorrow. Moreover, high capacity services, including special access services, are typically sold as part of a bundle of services, in which high capacity services are just one of many components. Accordingly, there is no basis for referring to separate product markets for different bandwidths or speeds of high capacity service.

Nor is there any reason for the Commission's analytical framework to focus separately on a wholesale market. Stimulating wholesale competition is not a policy objective in itself.[34] So long as there is competition for retail high capacity services, there is no need for the Commission to address wholesale competition separately.

C. The Commission's Analytical Framework Should Include Intramodal Competitors.

There is no question that the Commission's competitive analysis should include intramodal fiber-based CLECs. The record already contains extensive evidence on the deployment of fiber-based networks by CLECs. For example, Verizon has already submitted evidence showing that in each of Verizon's top 25 MSAs in terms of special access demand,

[34] *See Application of WorldCom, Inc., and MCI Communications Corporation for Transfer of Control of MCI Communications Corporation to WorldCom, Inc.,* Memorandum Opinion and Order, 13 FCC Rcd 18025, ¶¶ 67-71 (1998) (finding loss of wholesale market of concern only to the extent that it had negative effects in the retail market); *see also Petition for Forbearance of the Verizon Telephone Companies Pursuant to 47 U.S.C. § 160(c),* Memorandum Opinion and Order, 19 FCC Rcd 21496, ¶ 21 (2004) ("it is appropriate to consider the wholesale market ***in conjunction with*** competitive conditions in the downstream retail broadband market") (emphasis added).

there is an average of nine known competitive fiber providers.[35] There are two or more known competitive fiber providers in all of these MSAs, five or more known providers in 18 MSAs, and at least 11 known providers in nine MSAs.[36]

Verizon also submitted maps based on data that Verizon has obtained from GeoTel and GeoResults, leading providers of telecommunications facilities information, together with information that Verizon has obtained directly from certain other carriers.[37] For each of Verizon's top 25 MSAs in terms of special access demand, the maps show the routes of known competitive fiber, the locations of known buildings that competitive carriers have lit with fiber, and the wire centers in the MSA where special access demand is concentrated. The maps demonstrate that there are multiple competitive fiber suppliers throughout each of the top 25 MSAs, including traditional telecom carriers (such as AT&T, Sprint, Time Warner Telecom, Level 3, PAETEC, and XO).

There is no question that the Commission's analytical framework should include fiber-based intramodal competitors. Any competitive analysis that excludes these competitors would be invalid. Topper Decl. ¶¶ 27-28.

D. The Commission's Analytical Framework Should Include Intermodal Competitors.

The Commission's analytical framework should also include any type of competitor or any type of technology – *i.e.*, intermodal competitors. End users consider the high capacity service offerings of many different intermodal competitors to be viable alternatives to the

[35] *See* Verizon 2007 Comments, Attachment F: Declaration of Kenneth J. Martinian, Exh. 1 ("Martinian Decl.").

[36] *See id.*

[37] *See* Martinian Decl. ¶¶ 6, 8, 10.

incumbent carriers' special access services. In order for the Commission's analytical framework to reach a valid conclusion about competition, it must include all intermodal competitors. And in order to ensure that its data collection is complete, the Commission should exercise its authority to compel response to its data requests.[38]

Two of the most prevalent types of intermodal competitors today are cable companies and fixed wireless providers. At a minimum, these competitors should be included in the Commission's analytical framework. In addition, as part of the Commission's forward looking analytical framework, the Commission should account for emerging technologies that will provide competitive offerings in the near future. Topper Decl. ¶ 22.

The Public Notice asks whether the Commission's existing competitive triggers, which are based on collocation by competitive carriers, are an accurate proxy for the kind of sunk investment that is sufficient to constrain incumbent carriers' special access prices. By looking at only collocated competitors, the Commission's pricing flexibility triggers exclude intermodal competitors and emerging technologies that completely bypass incumbent carrier wire centers. As such, the pricing flexibility triggers are not accurate proxies, but rather understate the true extent of competition for special access services.

1. Cable Competitors.

There is extensive evidence that cable companies are now major competitors providing high capacity services. Cable companies already have extensive broadband networks that are

[38] *See, e.g., FCC v. Cohn*, 154 F. Supp. 899 (D.C.N.Y. 1957) ("[i]n furtherance of its powers to investigate, the Commission has been granted full power of subpoena"); *Commercial Network Television Practices*, Further Notice of Inquiry, 69 F.C.C.2d 1524 (1978) (exercising subpoena authority for competitive investigation).

ready and able to provide high capacity services for both business customers and wireless customers. They have touted their successes in the marketplace and their plans for growth.

The National Cable & Telecommunications Association ("NCTA") has already explained to the Commission that "many cable operators provide high-capacity services that compete with special access services offered by incumbent local exchange carriers."[39] NCTA also explained that "many cable operators view such services as a growing segment of their business" and "offer these services to businesses and to telecommunications providers." *Id.*

Likewise, individual cable companies have publicized their marketplace successes to the investment community. For example, Cablevision's COO, Tom Rutledge, estimated at a Goldman Sachs conference that the commercial business in its footprint is worth nearly $6 billion. He added that "with its existing completive [sic] -local-exchange-carrier business -- recently rebranded Optimum Lightpath -- Cablevision already has fiber service to twice as many buildings in its Metropolitan New York footprint than incumbent phone company Verizon Communications."[40]

Comcast recently reported that its business service revenues increase by 49 percent in the third quarter of 2009 and that it was on track to close 2009 with about $884 million in commercial revenue, up from $558 million in 2008.[41] Time Warner Cable said its commercial

---

[39] Letter from Steven F. Morris, National Cable & Telecommunications Association, to Marlene H. Dortch, FCC, *Special Access*, WC Docket No. 05-25 (May 8, 2009).

[40] Farrell, Mike, "Cablevision Eyes Commercial Phone," Multichannel News, 9/20/06, http://www.multichannel.com/article/125275-Cablevision_Eyes_Commercial_Phone.php.

[41] Comcast 3rd Quarter 2009 Results Slides, http://files.shareholder.com/downloads/CMCSA/814615945x0x329413/dad4c696-0929-49e3-ad34-2ab8e8d05ff0/ComcastQ3Slides.pdf., at 11 (Nov. 4, 2009).

services revenue climbed to $236 million in the third quarter of 2009, up 15 percent from the year-earlier period.[42] Cox Communications said it will easily clear $1 billion in commercial services revenue in 2010.[43]

Cable companies are also targeting wireless providers in order to meet their backhaul needs. Comcast's COO told Wall Street that Comcast can provide backhaul services using the facilities that Comcast "already [has] out there" and that Comcast will be able to provide backhaul "cheap[er] than the typical alternative."[44] Time Warner Cable's COO has indicated that because Time Warner Cable's fiber is close to cellular towers, it will not require "much incremental expense" for Time Warner Cable to provide backhaul services to those towers.[45] Similarly, Cox has indicated that it's prepared to provide backhaul services to wireless providers deploying their 4G networks "because we're there and we can do sort of spurs off of our network" and "we're deploying capital to that area to be able to satisfy that demand."[46] And

---

[42] Light Reading's Cable Digital News (Nov. 30, 2009).

[43] Light Reading's Cable Digital News (Dec. 3, 2009).

[44] *Comcast Corporation at Merrill Lynch Media Fall Preview-Final*, Fair Disclosure Wire, Transcript 090908a1928849.749 (Sept. 9, 2008) (statement by Steve Burke, President and Chief Operating Officer, Comcast). Mr. Burke reaffirmed that backhaul is a "very substantial opportunity" because "the number of towers in the United States is going to increase, not decrease" and "the cable industry is very uniquely positioned because we have fiber close to a lot of these towers." *See* CMCSA - Comcast Corporation at Bank of America Securities Media, Communications & Entertainment Conference, Tr. at 7 (Sept. 9, 2009).

[45] *Time Warner Cable, Inc. at Merrill Lynch Media Fall Preview-Final*, Fair Disclosure Wire, Transcript 090908au.781 (Sept. 9, 2008) (statement by Landel Hobbs, Chief Operating Officer, Time Warner Cable).

[46] *See* FCC National Broadband Plan Workshop, *Wireless Broadband Deployment – General*, Transcript, http://www.broadband.gov/docs/ws_03_deploy_wireless_transcript.pdf, at 35 (Aug. 12, 2009).

Charter said that "[w]e do not have the staff and resources right now to handle all of the cell backhaul requests coming from all of the towers going up in our footprint . . . [s]o we're ramping up to accommodate that, which is a good thing."[47]

There is no question that the Commission's analytical framework should include cable companies as intermodal competitors. Any competitive analysis that excludes cable companies would be invalid. Topper Decl. ¶¶ 29-30.

2. Fixed Wireless and Other Emerging Providers.

Fixed wireless providers are quickly becoming significant competitors for high capacity services. They have acquired spectrum assets and are able to deploy fixed wireless facilities very rapidly to meet customer needs. They have also contracted or partnered with tower operators and wireless carriers to meet their growing demands for wireless backhaul services as wireless networks are upgraded to provide mobile broadband services.

For example, Clearwire says it can provide 80%[48] of its own backhaul through fixed wireless and that it will also provide backhaul to Sprint Nextel at "preferred rates."[49] XO/Nextlink provides "a high speed wireless alternative to local copper and fiber connections, utilizing licensed wireless spectrum."[50] XO/Nextlink's "primary target customers are mobile

[47] Light Reading's Cable Digital News (Dec. 4, 2009).

[48] *See* John Hodulik, UBS Investment Research, *Clearwire Corp.* at 13 (Dec. 19, 2008).

[49] Sprint Nextel/Clearwire WiMax Call-Final, Fair Disclosure Wire, Transcript 050708a1844939.739 (May 7, 2008) (statement by Ben Wolff, Chief Executive officer, Clearwire).

[50] XO Holdings Inc., Form 10-Q, http://www.xo.com/SiteCollectionDocuments/about-xo/investor-relations/Annual_Reports/XOH_1Q_2009_10Q.pdf, at 11 (March 31, 2009).

wireless and wireline telecommunications carriers, large commercial enterprises and government agencies" and XO/Nextlink "currently offers wireless backhaul, network extensions, network redundancy and diversity services."[51] FiberTower stated that it "leads the nation in providing backhaul services," and already "provides backhaul service to over 6,000 mobile base stations (or cell sites) in 13 [major] markets."[52] Towerstream offers service for small businesses (512Kbps to 3 Mbps), medium-sized businesses (5-10 Mbps), and enterprises (20-200 Mbps).[53]

Some have questioned whether fixed wireless is a viable alternative to fiber technology.[54] From an economic perspective, a technology doesn't have to be a perfect substitute in all situations in order to be considered a competitive alternative. Topper Decl. ¶ 36. So long as the technology is considered by at least some customers to be a competitive alternative, the Commission should include that technology in its analysis.

There is ample evidence that many customers consider fixed wireless to be a competitive alternative to fiber in many situations and a superior alternative in some situations. For example, Stelera Wireless recently told the Commission that "we don't have a problem with back haul

---

[51] *Id*.

[52] Written Testimony of Ravi Potharlanka, Chief Operating Officer, FiberTower Corporation: House Energy and Commerce Committee's Subcommittee on Communications, Technology and the Internet; Hearing: Competition in the Wireless Industry, http://energycommerce.house.gov/Press_111/20090507/testimony_potharlanka.pdf, at 3 and 4 (May 7, 2009).

[53] *See* Towerstream, *What We Do*, http://www.towerstream.com/index.asp?ref=products (last visited Jan. 19, 2010).

[54] Comments of Sprint Nextel Corporation – NBP Public Notice #11, *Impact of Middle and Second Mile Access on Broadband Availability and Deployment*, GN Docket No. 09-47, at 10 (Nov. 4, 2009).

because we're using 300 MIP microwave off of those cell sites, so I've got plenty of back haul capacity to go back."[55]

In addition, FiberTower and Sprint have recently advised the Commission that fixed wireless "would provide an urgently-needed solution for affordable 'middle mile' backhaul for wireless carriers and Internet service providers in rural areas."[56] According to FiberTower and Sprint, "[b]y far, the most cost-effective backhaul solutions, particularly in rural areas, can be provided by wireless fixed licensed point-to-point systems."[57] They claim that "a 100-mile wireless broadband connection . . . would cost less than $100,000-200,000 to construct."[58]

Service providers are also able to guarantee their service quality for fixed wireless services. For example, Towerstream offers service level agreements with the following three components: (1) Service Availability Guarantee: Towerstream guarantees 99.99% network availability, annualized method; (2) Network Latency: Less than 75ms round trip delay on Towerstream Backbone, and less than 50ms round trip delay on Towerstream last mile; and (3)

---

[55] *See* FCC National Broadband Plan Workshop, *Wireless Broadband Deployment – General* Transcript, http://www.broadband.gov/docs/ws_03_deploy_wireless_transcript.pdf, at 42-43 (Aug. 12, 2009).

[56] FiberTower Corp. et al., Reply to Oppositions, *Unlicensed Operation in the TV Broadcast Bands*; *Additional Spectrum for Unlicensed Devices Below 900 MHz and in the 3 GHz Band*, ET Docket Nos. 04-186 & 02-380, at 1 (May 18, 2009).

[57] FiberTower Corp. et al., Petition for Reconsideration, *Unlicensed Operation in the TV Broadcast Bands*; *Additional Spectrum for Unlicensed Devices Below 900 MHz and in the 3 GHz Band*, ET Docket Nos. 04-186 & 02-380, at 3 (March 19, 2009) (internal citation omitted) ("FiberTower Petition").

[58] *Id*.

Packet Loss: Packet Loss less than 1% on Towerstream Backbone.[59] In addition, FiberTower and Sprint claim that fixed wireless services in licensed spectrum can meet "strict service level agreement (SLA) standards for signal availability" that are "typically required by commercial mobile providers or first responder networks, and transport connectivity to government or medical buildings."[60]

The Commission's analytical framework should therefore include fixed wireless providers as intermodal competitors. Any competitive analysis that excludes fixed wireless providers would not be valid. Topper Decl. ¶¶ 31-32.

The Commission's analytical framework should also take into consideration other emerging technologies. In a forward looking analysis, emerging technologies and competitors can provide significant competitive pressures to existing providers of high capacity services. Topper Decl. ¶ 22. These competitive pressures need to be considered in order to obtain a complete picture of the marketplace.

One such emerging competitor is based on fixed wireless laser-based technology. This new competitive offering is being provided by SkyFiber, Inc. ("SkyFiber"). According to SkyFiber, this emerging technology "is an excellent and innovative option to address certain middle mile, second mile, 'next' mile and backhaul needs in wireline and wireless networks" and is "particularly valuable in mission critical disaster recovery, public safety and homeland

[59] *See* Towerstream, *Service Level Agreement*, http://www.towerstream.com/index.asp?ref=sla. (last visited Jan. 19, 2010).

[60] FiberTower Petition at 2, n.3.

security applications."[61] It "can be rapidly deployed in hours or days, do[es] not depend on wireless spectrum and avoid[s] the costs and delays involved with trenching and permitting for fiber optic lines and frequency coordination, zoning or roof leasing often involved in establishing conventional wireless links."[62]

In a forward looking analysis, the Commission should take into account emerging technologies and intermodal competitors. These competitive developments are critical to make a valid assessment of competition for high capacity services. Topper Decl. ¶ 22.

E. The Commission's Analytical Framework Should Account for the Recent Ramp-Ups by Competitive Providers of High Capacity Services.

The marketplace for high capacity services is very dynamic. In order to properly assess competition in this dynamic industry, the Commission's analytical framework should capture recent competitive activities as well as planned future activities. Topper Decl. ¶¶ 24-25. Such information is important for the Commission to make valid determinations about competition for high capacity services.

Cable companies, for example, continue to aggressively target additional business customers for high capacity services and are experiencing double digit growth. Cablevision reports that it has "gone to an all Ethernet product" that "has been growing at 40% plus revenue growth for the last several years."[63] Comcast reports that it "[d]oubled [its] capital investment in

[61] Letter from Catherine Wang, SkyFiber, to Marlene Dortch, FCC, *A National Broadband Plan for Our Future*, GN Docket No. 09-51, at 1-2 (filed Dec. 11, 2009).

[62] *Id*. at 1.

[63] Final Transcript of CVC - Cablevision Systems Corp. at Bank of America Securities Media, Communications & Entertainment Conference at 11 (Sept. 9, 2009).

business services [in 2008] to $231 million" and plans to spend more than $3 billion between 2007 and 2012.[64]

Fixed wireless is now starting to have a major impact in the marketplace. FiberTower, for example, reported that, as of the end of the first quarter of 2009, it had increased the number of installed sites by 19 percent and the number of billing customer locations by 39 percent over the previous year.[65] Airband states that "[a]s part of its national expansion strategy, [Airband] has increased the market reach and service area in the Houston market by 50%," "significantly increased its market reach and service area . . . in the Greater Phoenix area including Scottsdale, Tempe, Deer Valley, Chandler and Mesa" and expanded service throughout the Atlanta area.[66]

---

[64] *Q4 2008 Comcast Corporation Earnings Conference Call – Final FD (Fair Disclosure) Wire*, Transcript 021809a2035827.727 (Feb. 18, 2009) (statement by Comcast CFO Michael Angelakis); Thomson StreetEvents, *CMCSA – Q1 2009 Comcast Corporation Earnings Conference Call*, Final Transcript, at 3 (Apr. 30, 2009) (statement by Comcast Corp. CFO Michael Angelakis); *Comcast Corporation at Merrill Lynch Media Fall Preview – Final*, FD (Fair Disclosure) Wire, Transcript 090908a1928849.749 (Sept. 9, 2008) (statement by Comcast President and COO Steve Burke); *Comcast Investor Day A.M. Session – Final*, FD (Fair Disclosure) Wire, Transcript 050107ai.739 (May 1, 2007) (statement by Comcast EVP for National Engineering & Technology Operations John Schanz); Comcast Press Release, *Comcast Unleashes New 50/5 Mbps Extreme High-Speed Internet Services Using DOCSIS 3.0 Technology in the Twin Cities*, http://www.comcast.com/About/PressRelease/PressReleaseDetail.ashx?PRID=741 (Apr. 3, 2008) (last visited Jan. 19, 2010); *Q4 2008 Comcast Corporation Earnings Conference Call – Final*, FD (Fair Disclosure) Wire, Transcript 021809a2035827.727 (Feb. 18, 2009); Q. Hasan et al., The Buckingham Research Group, *Cable Goes Commercial: Examining Cable's Next Growth Phase* at 28 (Jan. 11, 2007).

[65] FiberTower Press Release, *FiberTower Reports 2009 First Quarter Results*, http://www.fibertower.com/corp/news-press-releases.shtml (May 7, 2009).

[66] Airband Press Release, *Airband Communications Brings More WiMAX Bandwidth to Houston*, http://www.airband.com/press-releases (Jan. 7, 2008); Airband Press Release, *Airband Communications Completes WiMAX Expansion in Phoenix*, http://www.airband.com/press-releases (June 25, 2008); Airband Press Release, *Atlanta Businesses Recognize Key Benefits from*

These are just a few examples of recent developments that are important indicators of competition in a forward looking analysis. The Commission's analytical framework should therefore account for these and other recent ramp-ups by competitive providers. Topper Decl. ¶¶ 38-39.

F. Backwards Looking Measures of Market Shares Are Not Useful in a Dynamic Industry.

In a dynamic industry like the one for high capacity services, it would be inappropriate for the Commission to rely on backwards looking measures of market shares. These static measures tend to understate the real impact of competitive alternatives and therefore have limited utility in dynamic industries.

First, static measures, by their very nature, become out of date very quickly. The data submitted to the Commission would likely be historical data, rather than data that reflects what is happening at the time it is submitted. Analyzing the data that would ordinarily be used to calculate market shares is also a time consuming process. Topper Decl. ¶¶ 22, 38, 53. By the time the Commission actually completed market share measures, they could easily be two years out of date and obsolete. In a rapidly changing marketplace, "historical market share information based on sales volumes will likely understate the competitive significance of alternative providers" and therefore would not be useful or meaningful in assessing competition. Topper Decl. ¶ 53. The DOJ has likewise noted that "market share and market concentration data may understate . . . the likely future competitive significance of a firm . . . in the market."[67]

Fixed-Wireless Broadband Services Deployed by Airband Communications, http://www.airband.com/press-releases (Feb. 3, 2009).

[67] Horizontal Merger Guidelines, § 1.52.

Second, market share measures understate competition because they do not account for self supply. As explained in Section IV.C., *infra*, there are many companies, such as Clearwire, that supply their own high capacity services rather than purchasing them from other providers. Cable companies also deploy their own network facilities in lieu of purchasing high capacity services from other carriers. These instances of self supply are competitive alternatives that should be considered in a competitive analysis. However, by their very nature, market share measures only capture commercial transactions and exclude self supply. Topper Decl. ¶¶ 33-34.

III. THE GEOGRAPHIC AREAS FOR THE COMMISSION'S ANALYSIS SHOULD REFLECT MARKETPLACE REALITIES AND BE ADMINISTRATIVELY WORKABLE

The Commission's analytical framework will need to select a geographic area for assessing competition. That geographic area should be based on marketplace realities and ease of administration. It makes little sense to analyze competition in geographic areas that are too cumbersome to administer and do not reflect how competitors offer their services.

A. The Commission Need Not Define an "Ideal" Geographic Market.

In adopting the relevant geographic area for its analytical framework, the Commission should not let the "perfect" be the enemy of the good. The relevant geographic area needs to be one that can be used for both a meaningful competitive assessment and an administratively workable regulatory regime. Adopting a geographic area that does not meet both objectives would not serve the Commission's intended purpose.

It not necessary for the Commission to define precisely the relevant geographic market. As Dr. Topper explains, "[t]he choice of geographic scale should reflect the reach or 'footprint' of all competing provider networks deployed within a given area." Topper Decl. ¶ 56.

Accordingly, the choice of geographic unit should "be guided by a cost-benefit analysis that balances accuracy in measuring competitive conditions against the cost and feasibility of administering a regulatory regime in narrow geographic areas." Topper Decl. ¶ 61.

B. The Commission Should Analyze Competition By MSA Areas or By Rate Zone Areas Within MSAs.

The Commission's current regulatory regime is based on MSAs. For the last ten years, the Commission, incumbent carriers and customers have gained practical experience with the process for obtaining regulatory relief at the MSA level. Many of the service arrangements that are in place today between incumbent carriers and customers were developed and negotiated on the basis of the current MSA-based regime.

Using the current MSA-based regime for purposes of analyzing competition would be more consistent with the manner in which competitors market and deploy their high capacity services. When competitors announce their entry into new areas, the geographic scope of those areas is often quite large. For example, when Clearwire announced entry into the Atlanta and Las Vegas markets last year, it claimed to be "adding nearly five million people and 1,800 square miles to [its] coverage footprint."[68] Similarly, PAETEC claims it can "reach 100% of its MSA coverage area via Ethernet utilizing existing partnership agreements."[69]

---

[68] Clearwire Press Release, *Clearwire Reports Second Quarter 2009 Results*, http://investors.clearwire.com/phoenix.zhtml?c=214419&p=irol-newsArticle&ID=1319733&highlight= (Aug. 11, 2009) (last visited Jan. 19, 2010).

[69] PAETEC Press Release, *PAETEC Announces Continued Expansion of Ethernet Local Loop Access Nationwide*, http://www.paetec.com/about-us/media-center/press-releases/PAETEC-Announces-Continued-Expansion-of-Ethernet-Local-Loop-Access-Nationwide.html (Oct. 19, 2009) (last visited Jan. 19, 2010).

If the Commission determines that MSAs are too large for competitive analysis and regulatory relief, the Commission should consider using clusters of wire centers, such as rate zones within MSAs. The Commission's price cap rules allow incumbent carriers to set special access prices by rate zone. 47 C.F.R. § 69.123(b)(1). As such, existing MSAs could be further disaggregated by each incumbent carrier's current rate zones. For example, Verizon established its rate zones in the early 1990s based on the density of DS1 equivalents. These rate zones could be used to approximate urban, suburban and rural areas within an MSA. These rate zones are already listed in tariffs on file with the Commission and are used for billing purposes. They could readily be used for competitive analyses. Both customers and incumbent carriers have practical experience with rate zones and wire center-based rates. Using geographic areas different from MSAs or clusters of wire centers, such as rate zones, would impose costs on both carriers and customers. Those costs would be minimized if the Commission based its analytical framework on MSAs or some multiple of wire centers, such a rate zones, because these geographic areas are already being used by customers and carriers.

C. It Would Be Both Improper and Impractical to Assess Competition Within Geographic Areas That Are As Small As An Individual Building.

If the Commission does move away from assessing competition within an entire MSA, it should in no event move to a framework that assesses competition within individual buildings or company locations. Such a granular competitive assessment would be at odds with how competitors provide their services. Competitors rarely, if ever, enter a market to serve just a single building. Nor do competitors typically price their services on a building by building basis.

The evidence shows that competitive entry and customer purchases occur over a fairly large geographic area, such as a metropolitan area. Competitors deploy network facilities that

can be used to serve many buildings and customer locations in that area. For example, Level 3 claims that it has "an extensive footprint throughout north Georgia that passes nearly 15,000 businesses."[70] And Towerstream claims that "[b]y expanding into Philadelphia, Towerstream will have access to more than 64,250 additional businesses."[71]

The analysis the Commission needs to undertake here is different from the ones it has undertaken in merger proceedings. In those proceedings, the Commission's analysis was focused on a snapshot in time and a limited number of buildings where both merging companies had network facilities. Such an analysis would not be appropriate for the Commission's analytical framework here. The Commission's analytical framework needs to be one that can operate prospectively on a potentially unlimited number of buildings.

It would be completely impractical from an administrative perspective for the Commission's analytical framework to assess competition within individual buildings or customer locations. The sheer quantity of buildings at which the Commission would need to make such assessments would overwhelm the Commission and its limited resources. And even if the Commission could undertake such building-level assessments, they would be quickly out of date as soon as new facilities were constructed or planned.

Moreover, basing a regulatory regime that grants relief based on proving competition at individual buildings would not be practical for service providers or customers. Many customers

---

[70] Level 3 Press Release, *Level 3 Expands Commitment to Atlanta*, http://www.level3.com/index.cfm?pageID=491&PR=821 (Nov. 12, 2009) (last visited Jan. 19, 2010).

[71] Towerstream Press Release, *Towerstream Launches Wireless Broadband Network in Philadelphia, PA*, http://ir.towerstream.com/releasedetail.cfm?ReleaseID=427312 (Dec. 1, 2009) (last visited Jan. 19, 2010).

have multiple locations within a geographic area and would expect to purchase services on a consolidated basis for those locations. Building-by-building level relief would be too granular to provide the sort of services many customers expect. While the Commission should not base relief on a building-by-building basis, as discussed further below, it could collect building-level data along with other data on the location of competitive facilities to include in an analysis of the areas that providers are capable of serving.

IV. A COMPETITIVE ANALYSIS SHOULD BE BASED ON COMPLETE INFORMATION ON CURRENT AND PLANNED COMPETITIVE OFFERINGS

In order for the Commission to perform a meaningful competitive analysis, it must base that analysis on competitive information that is comprehensive, complete and valid. Any attempt to perform a competitive analysis without all of the relevant competitive information would likely result in erroneous findings that there is less competition for high capacity services than actually exists. It would be inappropriate to base any new regulatory requirements on such erroneous findings.

A. The Commission's Competitive Analysis Should Collect Data on the Network Facilities Of All Competitors That Are Operating or Are Planning to Operate in the Relevant Geographic Area to Provide High Capacity Services.

In order to make a valid and complete competitive analysis, the Commission must collect network facility data from all competitors that are currently serving the relevant geographic area and that are planning to enter that area to provide competitive services.[72] If the Commission is

[72] The Commission can do so through a rulemaking or by exercising its subpoena authority. *See, e.g., FCC v. Cohn*, 154 F. Supp. 899 (D.C.N.Y. 1957); *Commercial Network Television Practices*, Further Notice of Inquiry, 69 F.C.C.2d 1524 (1978).

not able to collect network facility data from all the relevant competitors, its competitive analysis will be invalid because it will understate the true extent of competition in that geographic area.

The Commission should collect data from all competitors on their existing and planned network facilities in the relevant area. Topper Decl. ¶ 53. In particular, at a minimum, the Commission should require all high capacity service (*i.e.*, point-to-point service) competitors to provide data or maps that show the location of all of their transmission facilities, whether wireline or wireless, that they or their affiliates own, lease or otherwise obtain that are capable of providing high capacity transmission for their own use or for their retail or wholesale customers.[73]

The Commission may also be able to use information in its licensing database to identify the location of some fixed wireless networks that are capable of providing high capacity point to point services. According to the Commission's Universal Licensing System (ULS) database, wireless carriers, such as Sprint and T-Mobile have thousands of active two-way microwave licenses throughout the country and those licenses show the areas where they are used to provide high capacity service.[74] Moreover, the ULS database shows these carriers are continuing to apply for many new licenses.

The Commission should not, however, confine itself to a static set of data on network locations. Many competitors have already announced network expansions and increased

[73] *See* Letter from Donna Epps, Verizon, to Marlene Dortch, FCC, *Special Access Rates for Price Cap Local Exchange Carriers*, WC Docket 05-25, at 1-2 (June 18, 2009) ("Verizon June 18 Ex Parte").

[74] *See* FCC, Universal Licensing System Database; *see also* 47 C.F.R. § 101.65(b) (requiring a microwave licensee to cancel a license that has not been operated within one year).

investments in network facilities. *See* Section II.C., *supra*. The Commission's analysis should therefore be forward looking and identify not only the current locations of network facilities but also the locations where network facilities will be located in the future. Topper Decl. ¶ 53. In particular, the Commission should collect data or maps that show the geographic areas where an entity or its affiliates plans to offer retail or wholesale high capacity services, whether wireline or wireless, in the near future (*i.e.*, next 2 years), and information identifying the nature and type of such services.[75]

The Commission should also collect data from all competitors on their network expansions and extensions during the last few years. Such recent historical data should enable the Commission to make reasonable assessments or predictions of where future network expansions and extensions will occur. Again, such information is critical for a forward looking competitive analysis.

B. The Commission's Competitive Analysis Should Consider the Pricing Discipline Exerted Outside the Areas Served by Competitors.

It is not sufficient for the Commission to collect data on the location of built and planned network facilities. The Commission's analysis should be forward looking and consider the pricing discipline that competitors exert outside the areas they serve. Even customer locations without direct access to competitive networks can receive competitive benefits.

In assessing competition, the Commission should consider the ability of competitors to expand their networks and the impact such possible expansion has on special access prices. Competitors have frequently made public statements regarding the areas where they serve or

[75] *See* Verizon June 18 Ex Parte at 1-2.

where they are targeting customers. For example, tw telecom told its investors that of the approximately 2 million "target" businesses (*i.e.*, sites with 2 or more DS1s of bandwidth) in the cities it serves, nearly one million are within one mile of tw telecom's fiber.[76] Similarly, Level 3 told investors in May 2009 that there are "[o]ver 100,000 enterprise buildings within 500 feet of [Level 3's] US network."[77] These types of statements should also be collected by the Commission and considered as part of the Commission's competitive analysis. Topper Decl. ¶ 59.

As part of its analysis, the Commission should collect data or maps from all competitors that show the geographic areas where they or their affiliates currently offer retail or wholesale dedicated high capacity services, whether wireline or wireless, and information identifying the nature and type of such services.[78] The Commission should also collect data or maps that show the geographic areas where an entity or its affiliates plans to offer or is able to offer retail or wholesale high capacity services, whether wireline or wireless, in the near future (*i.e.*, next 2 years), and information identifying the nature and type of such services.[79]

After collecting data on competitors' service territories and planned expansions, the Commission should allow the parties to review the data and make recommendations to the

---

[76] tw telecom, *Investor Presentation*, http://www.twtelecom.com/files/dec_09_Investor.pdf, at 10 (Dec. 2009) (last visited on Jan. 19, 2010).

[77] Level 3 Presentations and Events, http://lvlt.client.shareholder.com/events.cfm?EventView=Archive&Mode=Test, follow May 19, 2009 to View Presentation, *12th Annual Meeting of Stockholders*, at 8.

[78] *See* Verizon June 18 Ex Parte at 1-2.

[79] *See* Verizon June 18 Ex Parte at 1-2.

Commission on the ability of competitors to expand their networks. Such potential expansion can discipline special access prices in areas where competitors have not yet built facilities.

The Commission's analysis should also consider the ability of customers with multiple locations to demand uniform pricing for all of their locations, even those in areas where competitors have not yet built competitive networks. This is another example of how competitive pressure can be exerted on special access prices in areas where competitors have not yet built facilities. The Commission should likewise allow the parties to make recommendations on these issues after they have had the opportunity to review the collected data.

C. The Commission's Competitive Analysis Should Also Account for Self Supply.

The Commission should not confine its competitive analysis to commercial transactions between customers and competitive providers. As Dr. Topper explains, a proper competitive analysis must include customers' self supply of high capacity services. Topper Decl. ¶ 34. Self supply of high capacity services is a viable competitive alternative to purchasing high capacity services from competitive providers.

There is already evidence that customers are self-supplying high capacity services. For example, Clearwire claims to have "one of the largest wireless backhaul networks in the world"[80] and has told analysts that it is investing in microwave equipment so it can self provision facilities to meet "roughly 80 percent of its [wireless] backhaul . . . from microwave links."[81]

---

[80] *Leap Wireless International at Jefferies Panel Discussion*, Fair Disclosure Wire, Transcript 090908ay.703 (Sept. 9, 2008) (statement by Scott Richardson, Chief Strategy Officer, Clearwire).

[81] John Hodulik, UBS Investment Research, *Clearwire Corp*. at 13 (Dec. 19, 2008).

Enterprise customers are also self-supplying their own high capacity services. For example, HP Enterprise Services provides IT services to its clients over its "wholly-owned, private Multi-Protocol Label Switching (MPLS) network."[82] HP's self-provisioned network is so extensive that "[m]ore than 5,300 of the best network people in the world" support it.[83]

In conducting its own competitive analysis, the Commission should collect competitive data regarding self supply.[84] However, the Commission may encounter practical difficulties in collecting self supply data from entities that fall outside the Commission's jurisdiction, such as state governments. The Commission's competitive analysis should nonetheless take into account the ability of customers to self supply their own high capacity services even if the Commission is not able to collect complete competitive data on self supply. Topper Decl. ¶ 34.

D. There is No Need for the Commission to Collect Data in Areas Where the Presence of Competition Is Not Seriously Disputed.

Conducting a competitive analysis is not an easy task for the Commission or the participants. In order to conserve resources and keep the task within manageable proportions, the Commission should not attempt to collect competitive data for geographic areas where competition is readily apparent. By limiting the Commission's competitive analysis in this fashion, the Commission can better focus its resources on the areas that are in question. For example, the Commission could exclude from its analysis the Rate Zone 1 areas in the top 50 MSAs because they contain a high level of competitive presence and could serve as a proxy for

---

[82] HP Enterprise Services, Global Services Network, http://h10134.www1.hp.com/services/advantage/gsn/ (last visited Jan. 19, 2010).

[83] *Id*.

[84] *See* Verizon June 19 Ex Parte at 1-2.

the metropolitan areas where demand is concentrated. If the Commission determines that Rate Zone 1 areas are too broad, the Commission could use a subset cluster of wire centers within Rate Zone 1 areas as the proxy for metropolitan areas where demand is concentrated. This would allow the Commission to focus on the availability of competitive alternatives for lower capacity TDM-based services (DS1s and DS3s) in remote areas, as identified by several parties. *See, e.g.*, Sprint ex parte letter (Jan. 13, 2010) (addressing the "Importance of DS1s to wireless networks"); T-Mobile ex parte letter (Oct. 22, 2009) ("T-Mobile [sic] continuously looking for solutions and alternatives, which are particularly scarce in rural areas").

There seems to be little dispute that competitive alternatives are widely available in metropolitan areas and office parks or other locations of concentrated demand. Verizon and other carriers have submitted maps to the Commission showing the extensive deployment of competitive network facilities and competitors acknowledged that this evidence showed a concentration of competitive facilities in the metropolitan areas. For example, XO acknowledged that "[d]etailed transport maps submitted by the RBOCs in the Triennial Review Remand proceeding showing competitive transport deployment and other information on an MSA basis, 'confirm that competitive fiber consistently is located in and around the core business district of every major city.'"[85] More recently, even T-Mobile, a vocal proponent of more stringent special access regulation, had to concede that "competitive forces work in metro

[85] *See* Comments of XO, *Special Access Rates 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*, WC Docket No. 05-25; RM-10593, at 11 (June 13, 2005) (internal citation omitted).

areas where there's a lot of fiber, be that from the cable company, from the existing, you know, telco provider. So I think market forces are starting to work there."[86]

The record before the Commission already documents the presence of competitive facilities in these metropolitan areas where demand is concentrated. As of 2007, for each of Verizon's top 25 MSAs in terms of special access demand, there was an average of nine known competitive fiber providers.[87] These competitive facilities were concentrated in metropolitan areas where demand was concentrated.

Moreover, including these metropolitan areas in the Commission's competitive analysis would overwhelm the Commission with data. It is the metropolitan areas with concentrated demand that are likely to generate the greatest volume of competitive data. Those are the areas where competitors have most extensively deployed their networks and have the greatest capability to serve customers. Collecting data for such areas would only confirm what is already apparent – that there is extensive competition for high capacity services in metropolitan areas where demand is concentrated.

---

[86] Neville Ray, Senior VP Engineering, T-Mobile, FCC National Broadband Plan Workshop, *Wireless Broadband Deployment – General*, Transcript, http://www.broadband.gov/docs/ws_03_deploy_wireless_transcript.pdf, at 45-46 (Aug. 12, 2009). *See also* T-Mobile Comments – NBP Public Notice #11, *A National Broadband Plan for our Future*, GN Docket No. 09-47, et al., at 2 (Nov. 4, 2009) ("[i]n most urban areas, several potential providers, including incumbent local exchange carriers ('ILECs'), cable companies, and other competitive access providers ('CAPs'), compete to provide second- and middle-mile connectivity, which significantly increases the chance that such connectivity will be available at reasonable rates, terms and conditions").

[87] *See* Martinian Decl., Exh. 1.

E. The Commission Could Initially Conduct Competitive Analyses in Sample Geographic Areas to Identify Areas that May Warrant Further Analysis.

Conducting a competitive analysis throughout every geographic area of the country would be an overwhelming task. Before undertaking such a task, the Commission could conduct a competitive analysis in a sample of geographic areas. Such a sample analysis could provide important guidance to the Commission on the presence of competition for special access services.

One way the Commission could perform a sample analysis would be to collect data from a representative sample of MSAs. The sample MSAs should be representative of the various incumbent carriers and the various regions of the country. Each of the sample MSAs should include rural, suburban and urban areas as indicated by tariffed rate zones. However, the Commission would not need to collect data for the metropolitan areas in the sample MSAs because, as explained in Section IV.D., *supra*, there is little dispute about the availability of competitive alternatives in the metropolitan areas where demand is concentrated.

If such a sample analysis shows the presence of workable competition for special access services, the Commission can reasonably conclude that it need not conduct further analyses. On the other hand, if the Commission's sample analysis detects a concern in some areas, the Commission could then conduct further analyses in those and other similar areas. Such further analyses would then enable the Commission to more fully evaluate the competitive landscape. Such a full evaluation and competitive analysis is necessary before the Commission considers imposing new regulatory constraints.

V. THE COMMISSION SHOULD NOT UNDERTAKE AN ANALYSIS OF ARBITRARY ACCOUNTING MEASURES OF COSTS AND PROFITS.

As Dr. Topper explains, economists have long recognized that accounting cost and profit data are poor indicators of effective competition. Topper Decl. ¶ 77. Market performance data, such as the decline in prices and growth in output, are far better indicators that market forces are working than profit or cost data. So too are market structure data, such as the availability of competitive alternatives and the ability of competitors to expand their networks to serve even more customers. There would be little or no value in the Commission undertaking an analysis of arbitrary accounting measures of costs or profits of special access services. Indeed, the entire premise of looking to costs is faulty – regardless of costs, prices would not have fallen if carriers were exercising market power.

Even if the costs or profits of special access services were relevant to assessing competition for high capacity services, it would not be practical or feasible for the Commission to measure or calculate them. Special access services are provided over networks that also provide other services, such as switched access and local exchange services. Any attempt to allocate such joint and common costs to special access services, or to specific geographic areas where those services are provided, would be arbitrary and invalid for purposes of assessing competition.

Moreover, the Commission abandoned cost-based regulation more than 15 years ago in order to sever the relationship between rates and costs and replicate the efficiency incentives of a competitive market.[88] The Commission found that price cap regulation, "by creating incentives

[88] *See Policy and Rules Concerning Rates for Dominant Carriers*, Second Report and Order, 5 FCC Rcd 6786 (1990) ("*LEC Price Cap Order*"); *see also Price Cap Performance*

for carriers to become more productive, generates powerful motives to innovate, and is a better way of regulating."[89] The Commission has since acknowledged that progressive regulation should avoid consideration of accounting rates of return: "reducing our regulatory reliance on earnings calculations based on accounting data is essential to the transition to a competitive marketplace."[90] Attempting to derive service-specific profitability for special access would effectively turn back the clock to the age of rate-of-return regulation, which is widely regarded as an inferior form of regulation.

In any event, the Commission doesn't need to examine accounting costs or profits to evaluate the reduction in the real prices customers pay for special access services. Instead, the Commission can simply compare the recent changes in the components of special access costs to the corresponding changes in the prices customers pay for special access services since the advent of pricing flexibility. As explained further below, commonly-available telephone plant cost indices can be used to assess the relative change in the costs of the key network components used to provide special access services. These indices are sufficient to put into context what's going on with special access prices because they will provide useful directional data on whether changes in special access prices and costs are dramatically out of line.

Review for Local Exchange Carriers, First Report and Order, 10 FCC Rcd 8961, ¶ 64 (1995) (recognizing that a price cap system "was not only superior to rate-of-return regulation, but could also act as a transitional system as LEC regulated services became subject to greater competition").

[89] *LEC Price Cap Order*, ¶ 32.

[90] *See Price Cap Performance Review for Local Exchange Carriers*, Fourth Report and Order in CC Docket No. 94-1 and Second Report and Order in CC Docket No. 96-262, 12 FCC Rcd 16642 ¶ 150 (1997).

A. Any Allocation of the Costs of Shared Network Facilities and Equipment To a Specific Service Would Be Arbitrary and Would Not Provide a Meaningful Analysis of Competition.

It would not be practical or meaningful for the Commission to attempt to calculate the service-specific costs of special access services. The costs of providing special access service include not only the dedicated fiber or copper cable, but also shared network costs. Those shared network costs cannot be ignored, but any assignment of those costs to any specific service is economically arbitrary. Topper Decl. ¶ 75. Any attempt to use costs to assess competition or set rates will ultimately be arbitrary as an economic matter, highlighting why the market is far more efficient at setting prices than regulators. Topper Decl. ¶¶ 77-83.

The problem of allocating shared network costs is not limited to specific services. Any attempt to isolate costs for special access within a specific geographic area, such as an MSA, would encounter the very same problems. Any allocation of shared network costs to a specific geographic area would be arbitrary. For example, when Verizon provides special access services in a specific geographic area, such as an MSA, it uses shared network facilities located outside that MSA. For example, Verizon monitors its wireline networks through centralized network operations centers (NOCs). These NOCs monitor network facilities in multiple MSAs. The costs of these NOCs are therefore shared across several MSAs. Any attempt to allocate such shared costs to specific geographic areas would be arbitrary and the resulting profitability analysis would not be meaningful.

It would also be an error to use ARMIS data to look at special access costs or rates of return. ARMIS reports themselves do not provide rates of return – they merely provide cost and revenue data that some parties have used to try to calculate returns. But the Commission has

long recognized that the data reported in ARMIS "do[ ] not serve a ratemaking purpose."[91] As described in further detail by Dr. Topper, ARMIS data suffer from shortcomings that make them unreliable both for analyzing returns in any given year, and for comparing annual returns over time. Topper Decl. ¶ 82.

The ARMIS accounting categories for special access do not track the economic costs for these services, but are driven instead by artificial regulatory considerations such as jurisdictional separations and divisions between regulated and unregulated services. Topper Decl. ¶ 82. The economically arbitrary nature of the ARMIS category-specific data is evident from comparing the ARMIS "returns" for individual interstate service categories. For example, in 2007, Verizon's ARMIS return was only 6.64 percent for the interstate common line component, only 4.61 percent for the traffic-sensitive switching component, and a negative 3.72 percent for the traffic-sensitive transport component.[92] This disparity shows that ARMIS data is not useful for purposes of calculating service-specific rates of return. Once costs and revenues are divided among jurisdictions and service buckets in an economically arbitrary manner, the rates of return for individual service categories become meaningless as an economic matter. Topper Decl. ¶ 81.

Relatedly, the ARMIS cost categories were subject to a separations freeze in June 2001 that further distorts any attempt to use these data to approximate special access rates of return.[93]

---

[91] *Policy and Rules Concerning Rates for Dominant Carriers*, Order on Reconsideration, 6 FCC Rcd 2637, ¶ 194 (1991).

[92] Based on Verizon data in ARMIS Report 43-01 – Annual Summary Report for 2007, excluding data associated with the Fairpoint transaction (Maine, New Hampshire and Vermont).

[93] *See Jurisdictional Separations and Referral to the Federal-State Joint Board*, Report and Order, 16 FCC Rcd 11382 (2001).

This freeze was implemented "to provide stability and simplification for the separations process pending comprehensive reform."[94] Having determined that it made no sense to make carriers endure the "regulatory burden" of recalibrating their cost allocations "during the transition from a regulated monopoly to a deregulated, competitive environment in the local telecommunications marketplace,"[95] it would be arbitrary and capricious for the Commission to turn around and rely on those frozen categories here as a proxy for the costs of providing special access that carriers incur today.

Indeed, the effects of the separations freeze are particularly pronounced with respect to special access. Since 2001, because of the freeze, the proportion of major investments assigned to special access has not increased significantly.[96] In fact, only 16 percent of total investment is in the directly assigned categories (with even a smaller proportion assigned to interstate), yet 87 percent of special access investment is comprised of these categories.[97] As a result, growth in special access is accounted for on the revenue side of the ledger, but not on the cost side, which has the effect of artificially inflating the ratio of revenues to costs (*i.e.*, the rate of return). Even NRRI admits that the separations freeze "has inflated ARMIS special access earnings reports and made them unreliable."[98] For precisely this reason, ARMIS is not a useful tool both for

---

[94] *Id.* ¶ 10.

[95] *Id.* ¶ 13.

[96] *See* Taylor Supp. Decl. ¶ 40.

[97] *See id.* ¶ 42.

[98] *NRRI Report* at 70.

measuring absolute special access rates of return in a given year nor for assessing trends in such returns from year to year.[99]

In order to avoid arbitrary allocations of joint and common costs among individual services, only profitability at the total company level can be considered. Of course, total company profitability says nothing about the profitability of an individual service and therefore has little relevance to a competitive analysis of that service.

Even if the Commission were to consider total company profitability on the basis of accounting data, which it should not, the readily available accounting data show that Verizon's total company profits are barely sustainable. In 2007, the most recent year for which ARMIS data is available, Verizon's total company return was only 9.5 percent.[100] This is well below the Commission's last authorized return of 11.25 percent.

In any event, competitive pressures are driving these total company returns down, not up. Verizon and other incumbent carriers are experiencing significant declines in access lines and switched access minutes as customers switch to wireless and other competitive services. In addition, market forces are driving down real prices for special access services while the cost of network components remain flat or creep up.

[99] *See* Taylor Supp. Decl. ¶ 44.

[100] Based on Verizon data in ARMIS Report 43-01 – Annual Summary Report for 2007, excluding data associated with the Fairpoint transaction (Maine, New Hampshire and Vermont).

B. The Commission Could Look to Proxies to Determine That Changes in Special Access Costs Are Not Dramatically Out of Line With Changes in Special Access Prices.

The Commission does not need to determine service-specific costs or profits of special access services to evaluate whether its rules should be modified. There is no question that prices for special access have declined under the existing rules and that output has increased. The argument made by the proponents of regulation is that prices might have declined even more if carriers had not been exercising market power. As an initial matter, the premise of their argument is misplaced. If incumbent carriers possessed the market power that these other parties allege, they would not have an incentive to reduce prices in the first instance, but instead would maintain or increase prices to maximize revenues.

Nonetheless, the Commission could test this argument without using an unreliable and meaningless measure of accounting costs and profit. The Commission could much more simply use cost indices as proxies to examine what has happened to the costs of the network components used to provide special access services over time and compare those proxies to changes in the prices customers pay for special access services.

The AUS Telephone Plant Index is an example of the type of proxy that the Commission could use to determine the trend of special access costs since the advent of pricing flexibility. West Decl. ¶¶ 9-11. AUS Consultants and their predecessors have been preparing TPIs since 1946. Beginning in 1990, the AUS TPIs have been based on the Commission's Uniform System of Accounts, Part 32. Sources of information include telecommunication equipment manufacturers such as Alcatel-Lucent and Nortel for switching and circuit equipment, cable and wire manufacturers, and labor rate information related to central office technicians, installers,

lineman and cable splicers from several major carriers. As new technologies are introduced, AUS Consultants review the composite weight included in development of the account level indices to reflect the new mix of the property in the TPIs. The AUS TPIs have been used extensively in the telecommunications industry for such things as the determination of trended original cost in fair value rate jurisdictions, insurance valuations, property tax valuations, cost forecasting, and price cap productivity adjustments. They are also used by state agencies responsible for ad valorem taxation, including the California Board of Equalization and Assessment, the New York State of Real Property Services, and the Massachusetts Department of Revenue.

The AUS TPI reports individual cost indices (TPIs) for the typical network components used to provide special access services: digital circuit equipment, fiber cable, copper cable, poles and conduit. Mr. West's attached declaration explains how the Commission could assess the changes in the costs of the network components used to provide special access using the AUS TPIs.

Regardless, the Commission may wish to evaluate more generally changes in the prices paid for special access services. If the Commission elects to collect additional data on the prices of high capacity and special access services, such data should satisfy several criteria. First, the pricing data should be reasonably consistent between companies to facilitate comparisons. Second, the pricing data should be consistent over time in order to facilitate comparisons between years. Third, the pricing data should be adjusted for inflation. Fourth, the pricing data should take into account the variable charges for mileage. Finally, the data should take into account the various discount plans offered to customers and reflect the average price paid per

unit. The Commission could compare the cost change proxies to these price changes to determine whether the changes in prices are dramatically out of line with the changes in costs.

Mr. West explains how he calculated the prices customers paid for DS1s and DS3s consistent with these criteria. West Decl. ¶¶ 5-7. In his analysis, he used Verizon's DS1 and DS3 revenues for the years 2002, 2005 and 2008. These revenues have two basic components: channel termination and mileage. These special access revenue categories were totaled separately for DS1s and DS3s and then averaged on a per channel termination basis. Yearly fluctuations in mileage quantities were normalized by using the average mileage for DS1s and DS3s for 2002 in all subsequent years. These calculations yielded average special access revenues per DS1 channel termination and DS3 channel termination for the years 2002, 2005 and 2008 in nominal terms. Mr. West then adjusted these nominal revenue figures for inflation by using the GDP-PI for the corresponding years. The resulting real average revenue figures were then scaled to index values with the year 2002 set to 100. This analysis showed that between 2002 and 2008, the prices paid for Verizon's special access DS1s and DS3s both declined in real terms by about 24 percent. West Decl. ¶ 7.

CONCLUSION

The Commission should adopt an analytical framework that is consistent with Verizon's comments.

Respectfully submitted,

Edward Shakin
Rashann Duvall
VERIZON
1320 N. Courthouse Road
9th Floor
Arlington, VA 22201
(703) 351-3179

John T. Scott, III
VERIZON WIRELESS
1300 I Street, N.W.
Suite 400 West
Washington, D.C. 20005
(202) 589-3740

James G. Pachulski
Law Offices of James Pachulski
TechNet Law Group, PC
6001 Montrose Road
Suite 509
Rockville, MD 20852
(301) 770-1235

Attorneys for Verizon and Verizon Wireless

Michael E. Glover
Of Counsel

January 19, 2010