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March 22, 2004

Ex Parte

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

Re: WC Docket No. 01-338

Dear Ms. Dortch:

Verizon is requesting that the two attached ex partes, filed on September 3, 2003 and November 13, 2003 respectively, be placed on the record in the above docket. Please let me know if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Ann D. Berkowitz".

Attachments

W. Scott Randolph
Director – Regulatory Affairs



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September 3, 2003

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

Ex Parte: CC Dockets No. 02-33, 95-20, 98-10, and 01-337

Dear Ms. Dortch:

Attached for inclusion in the records of the above-captioned proceedings is a Supplemental Declaration of Dennis W. Carlton, Professor of Economics at the University of Chicago and Hal S. Sider, Senior Economist and Senior Vice-President of Lexecon, Inc. This declaration supplements material originally submitted with Verizon's Comments and Reply Comments In CC Docket 01-337.

Professor Carlton and Mr. Sider conclude that ILECs cannot be considered "monopolists" in the provision of broadband transport services sold to independent ISPs in that competition from other retail providers of broadband Internet services would prevent ILECs from exercising market power by raising the price of wholesale DSL transport services if common carrier regulation of those services were eliminated. Further, the Declaration observes that common carrier regulation imposes costs on consumers by impeding an ILEC's ability to respond to changes in technology and to specialized customer requests for service in a timely manner.

Please associate this notification with the record in the proceedings indicated above. If you have any questions regarding this matter, please call me at (202) 515-2530.

Sincerely,

A handwritten signature in cursive script that reads "W. Scott Randolph".

W. Scott Randolph

Attachment

cc: Michelle Carey
Brent Olson
William Kehoe
Harry Wingo
Michael Carowitz
Darryl Cooper
Gail Cohen
Robert Pepper
Simon Wilkie
Barbara Esbin

**SUPPLEMENTAL DECLARATION OF
DENNIS W. CARLTON AND HAL S. SIDER**

September 3, 2003

I. OVERVIEW AND CONCLUSIONS

1. We previously submitted a declaration in this proceeding on March 1, 2002 and a reply declaration (with Gustavo Bamberger) on April 22, 2002.¹ Among other things, those reports provided the basis for our conclusion that ILECs could not exercise market power in the provision of broadband services in the sense that elimination of common carrier regulation would not be expected to result in higher retail broadband Internet prices.

2. We have now been asked by Verizon to respond to suggestions that ILECs would exercise market power following elimination of common carrier regulation by raising the price of digital subscriber line (DSL) transport services provided on a wholesale basis to independent Internet Service Providers (ISPs). We conclude that ILECs cannot be considered “monopolists” in the provision of broadband transport services to independent ISPs and that competition from other retail providers of broadband Internet services would prevent ILECs from exercising market power by raising the price of wholesale DSL transport services following the elimination of common carrier regulation faced by ILECs. The principal reason for this is that it is the presence of competition from cable companies and other technologies, not competition

¹ Our March 1, 2002, declaration summarizes our credentials and contains copies of our curriculum vita.

from ISPs that resell ILECs' wholesale DSL transport services, that constrain the pricing of ILECs' retail DSL services and wholesale DSL transport services.

3. We also conclude that common carrier regulation imposes costs on consumers by discouraging innovative forms of contracts between ILECs and a variety of other parties, including ISPs, with the likely effect of slowing the deployment of broadband Internet services and discouraging investment in new technologies. In particular, these regulatory obligations impede ILECs' ability to invest in new technology by limiting the scope of contracts they can enter into with content providers and ISPs. The regulatory obligations faced by ILECs impede their ability to respond to changes in technology and to specialized customer requests in a timely manner.

4. In the absence of common carrier regulation, ILECs would continue to face strong incentives to provide DSL services on a wholesale basis to efficient independent ISPs. However, in the absence of regulation the scope of such arrangements would be determined by considerations of economic efficiency, with all mass market broadband platforms competing on an equal footing.

II. ILECS ARE NOT “MONOPOLISTS” OF WHOLESALE BROADBAND TRANSPORT SERVICES.

5. We understand that some commenters in these proceedings have suggested that ILECs are the only providers of wholesale broadband transport services to independent ISPs and are, therefore, properly considered “monopolists” in that “market.” This characterization is wrong for two reasons.

6. First, these claims are based on the factually incorrect view that only ILECs offer broadband services on a wholesale basis to independent ISPs, as cable

companies have entered into a variety of wholesale agreements with independent ISPs.² Second, and more importantly, even if cable companies were not actively engaged in providing these wholesale services at all, it would be economically inappropriate to view “wholesale DSL transport services provided to independent ISPs” as an economic market or to view ILECs as “monopoly” suppliers of such services.

7. The first step in evaluating such a claim is to define the relevant market. This is because the exercise of defining relevant markets is undertaken in order to define the forces that influence price and to determine whether firms can exercise market power. A properly defined market, therefore, includes all firms whose participation in provision of a service significantly constrains the price under analysis. This means that in evaluating input markets, it is important to include vertically integrated firms in the market, even if these firms do not actively sell inputs to third parties.

8. More specifically, if a vertically integrated firm (that both supplies inputs to itself and sells directly to end users) competes with a non-integrated firm (that sells directly to end users and purchases inputs from another non-integrated firm), then it is essential to account for the role of the vertically integrated firm in analyzing the input market. For example, competition in sales to final customers constrains the price that the

² For example, AOL Time Warner agreed to provide transport services to a number of independent ISPs as a condition to approval of the firms’ merger. AOL Time Warner has wholesale agreements with Earthlink, Juno, and Big Net as well as a number of ISPs operating in local areas. Other cable companies have entered into voluntary wholesale agreements with independent ISPs. For example, Comcast had entered into a wholesale contract with United Online (Juno, Netzero), Cox has entered into trials with AOL and Earthlink and that, prior to its acquisition by Comcast, AT&T Broadband had entered into contracts with Earthlink, AOL and other unaffiliated ISPs. A. Breznick, *More MSOs Join Multiple-ISP Access Movement*, Cable Datacom News (Oct. 1, 2002), <http://www.cabledatcomnews.com/oct02/oct02-3.html>.

non-integrated input supplier can charge due to the ability of customers to switch between the integrated and non-integrated firms.

9. This is the approach followed by federal antitrust authorities when they analyze markets to determine whether they are susceptible to the exercise of market power. The Merger Guidelines of the Department of Justice and the Federal Trade Commission recognize that the market includes “all firms that currently produce or sell in the relevant market. This includes vertically integrated firms”³

10. Professor Areeda illustrates this principle with an example:⁴

If iron ore is the relevant market and if shares are best measured there by sales, internally used ore— so-called captive output – is part of the ore market even though it is not sold as such.

In measuring the market power of a defendant selling iron ore, the ore used internally by other firms constrains the defendant’s ability to profit by raising ore prices to monopoly levels. The higher ore price may induce an integrated firm to expand its ore production – to supply others in direct competition with the alleged monopolist, to expand its own steel production and thereby reduce the demand of other steel makers for ore, or both. Hence, captive output constrains the defendant whether or not the integrated firms sell their ore to other steel makers previously purchasing from the defendant. In sum, the integrated firm’s ore output belongs in the market.

11. Broadband Internet services encompass a variety of functions including: broadband transport and aggregation services (consolidating traffic between end users and the public Internet); routing traffic to and from Internet backbone transport networks; e-mail; and proprietary content services. Broadband Internet services are sold “at retail” to residential and small business customers by cable operators, ILEC affiliates, CLECs

³ Horizontal Merger Guidelines of the Department of Justice and Federal Trade Commission, April 8, 1997, Section 1.31.

⁴ P. Areeda, H. Hovenkamp and J. Solow, Antitrust Law vol. IIA, 535e, at 225-26 (2002).

and ISPs. In addition to their retail offerings, cable operators and ILECs offer broadband transport services on a wholesale basis to unaffiliated ISPs, which then resell these services with other components of Internet service to retail customers.⁵

12. Given retail competition between DSL, cable modem service providers and other Internet access technologies, all firms that provide broadband transport (either to themselves or to others at wholesale), including telephone companies, cable operators, and satellite and wireless providers, are properly included as participants in the “market” for wholesale broadband Internet transport services. Thus, it is economically *inappropriate* to define a separate market that consists of “wholesale DSL transport services provided to independent ISPs” alone. Although ILECs provide DSL service on a wholesale basis, that service is not properly considered a separate market as the result of competition from other technologies which constrain the price of retail services. As a result, it is economically inappropriate to characterize ILECs as “monopolists” in the provision of wholesale ADSL service.

13. Finally, independent ISPs providing service by purchasing ADSL transport on a wholesale basis from ILECs account for a relatively small share of all ADSL lines. Data from Verizon indicate that independent ISPs currently buy roughly 22 percent of all Verizon ADSL lines. Thus, in Verizon’s territory, independent ISPs

⁵ ILECs and others also offer broadband transport directly to end users, who then independently contract with ISPs to obtain Internet access. ISPs, in turn, have developed “stand alone” Internet offerings, such as AOL for Broadband, to serve those users. (AOL for Broadband’s “Bring Your Own Access” service is described at: http://www.aolbroadband.com/aolbb/nb/how/connect_byoa.adp)

account for roughly 6 percent of all mass market broadband lines. (This reflects 22 percent of ILECs' 31 percent of mass market broadband subscribers.⁶)

14. While a firm's small market shares does not necessarily imply that it does not influence market price, ILECs face rivals that are far larger than themselves in the provision of mass market broadband services. Under these circumstances, it is highly unlikely that the prices that ILECs can charge for mass market broadband services is significantly constrained by independent ISPs, as opposed to cable modem suppliers.

15. Cable companies, of course, are by far the largest retail providers of broadband Internet services and compete directly with ILEC-provided retail DSL services. As discussed in detail in our prior declarations:

- Cable modem services account for roughly two-thirds of mass market broadband subscribers. As of December 2002, cable firms provided 65 percent of broadband Internet services to mass market consumers while ADSL services provided by ILECs accounted for only 32 percent of subscribers.⁷
- Cable modem services are more widely available than ILECs' ADSL services. As of year end 2002, cable modem services were available to an estimated 84

⁶ As of December 2002, 4.9 percent of the more than 6.5 million ADSL lines in service were provided by CLECs (that utilize ILEC UNEs in providing DSL services). This reflects less than 2 percent of residential broadband Internet subscribers. High Speed Services for Internet Access: Status as of December 31, 2002, Federal Communications Commission, Industry Analysis and Technology Division, Wireline Competition Bureau, June 2003, Table 5.

⁷ FCC, Industry Analysis and Technology Division, Wireline Competition Bureau, "High Speed Services for Internet Access: Status as of December 31, 2002," (June 2003), Table 3.

percent of U.S. homes while ADSL services were available to only 61 percent of U.S. homes.⁸

- Although they now serve a relatively small number of customers, broadband services are also available from firms using satellite and fixed wireless technologies.

In addition, new technologies such as “wi-fi” and “broadband over power line” also hold promise as additional broadband Internet technologies.⁹

16. The role of competition from cable is further reflected in ILECs’ decisions to reduce DSL prices in recent months. Verizon, for example, dropped the price of its (stand-alone) DSL service to \$34.95, and lowered DSL prices to \$29.95 for customers that purchase this service from Verizon along with local and long distance service.

ILECs have dropped DSL prices in response to competition from cable firms. According to Merrill Lynch:

US cablecos have sustained a material market share lead against the telcos for broadband subs both on a cumulative and still also on a run rate basis. The three large RBOCs have all attempted to gain share by a variety of measures – but primarily through lowering the price for DSL service.¹⁰

⁸ Credit Suisse First Boston, “The Broadband Battle,” April 3, 2003, p. 8.

⁹ “Broadband over Power Line has the potential to provide consumers with a ubiquitous third broadband pipe to the home.” Statement of Chairman Michael K. Powell, Inquiry Regarding Carrier Current Systems, including Broadband over Power Line Systems; ET Docket No. 03-104, April 23, 2003.

¹⁰ Merrill Lynch, “The Telecommunicator” RBOC DSL Strategy Update – It’s (mostly) all about the price...”, July 10, 2003, p. 1.

II. ELIMINATION OF COMMON CARRIER REGULATION WOULD BENEFIT CONSUMERS.

17. While common carrier regulations do not benefit consumers by lowering prices for broadband Internet services, these rules actually harm consumers by impeding the ability of ILECs to promote utilization of their networks and to offer innovative services, and thus ILECs' ability to compete effectively with cable modem suppliers and others. More specifically, the rules (i) limit the type of contractual agreements that ILECs can enter into with third parties and thus discourage investments in which non-standard contracting terms are required to induce participation and (ii) discourage ILECs from developing innovative methods of technical coordination and interconnection with content providers and ISPs.

A. COMMON CARRIER RULES INHIBIT DEVELOPMENT OF CONTRACTS THAT RESPOND TO RISKS INHERENT IN EMERGING INDUSTRIES.

18. The provision of broadband Internet services is growing very rapidly, with the number of high speed lines in service increasing from less than three million to roughly 20 million between December 1999 and December 2002.¹¹ The industry's technology and business conditions are still emerging with ILECs, their potential partners and others competing to develop efficient service offerings. ILECs and others face complex decisions and significant risks regarding, among other things, how quickly to deploy and upgrade services, the extent to which they should vertically integrate or partner with others in providing various broadband Internet services, and how and where in the network to interconnect with ISPs and content providers.

¹¹ High Speed Services for Internet Access: Status as of December 31, 2002, Federal Communications Commission, Industry Analysis and Technology Division, Wireline Competition Bureau, June 2003, Table 1.

19. The provision of broadband Internet service requires close coordination between firms that supply various inputs (such as transport and ISP functions). Coordination between the various activities can be accomplished through vertical integration and/or through contracting. In industries characterized by technological change and risk, such as telecommunications, these contracts can be quite complex and idiosyncratic.

20. For example, studies of contracts between Internet portals and Internet content providers have found widespread use of complex, non-standard contracts. These contracts may include various forms of revenue sharing or risk sharing, and may establish performance standards and other contingency-specific considerations. Common carrier regulations, however, limit the ability of ILECs to tailor services for individual customers, and impede ILECs' ability to develop non-standard contracts with unaffiliated ISPs and content providers.

21. As noted above, it is widely recognized that firms in industries characterized by technological change and risk enter into a variety of non-standardized contracts. For example, a recent paper by Dan Elfenbein and Josh Lerner analyzes contracts entered into by Internet portals with providers of Internet content.¹² They find that portals typically enter into contracts that contain revenue shares or performance measures. They find that contracts between portals and content providers:

- Typically involve revenue sharing, typically based on product sales and less often on the number of new customers acquired.

¹² Dan Elfenbein and Josh Lerner, "Designing Alliance Contracts: Exclusivity and Contingencies in Internet Portal Alliances," unpublished manuscript, Harvard University, January 14, 2003.

- Often specify provisions relating to technical performance such as the speed with which pages are loaded, the percentage of time a web site was available, etc.;
- Often specify a minimum amount of commercial activity generated at a site through the portal (based on revenue, customers generated, the number of “click throughs”, etc.).

22. The prevalence of these types of provisions in contracts indicates that they play an important role in inducing investment and innovation in Internet industries, in which the success of any new venture is highly uncertain. Thus, impediments to these types of contracting forms, such as those resulting from common carrier regulations, will likely slow the formation of new alliances and deployment of new services. For example, as discussed above, common carrier regulation requires that contracts and terms offered to one customer be available to others and requires that price differences be justified on the basis of cost. These restrictions adversely affect ILECs’ ability to compete with cable modem firms and others, which face no such regulation.

B. COMMON CARRIER RULES INHIBIT DEVELOPMENT OF NEW FORMS OF TECHNICAL COORDINATION BETWEEN ILECS AND THEIR PARTNERS.

23. ILECs can establish interconnections with content providers or ISPs, at a variety of points in the local telephone network, and ILECs can provide varying levels of service to these providers. Different ISPs and content providers may have different preferences with respect to the nature of the service they obtain from ILECs and/or may prefer different points of interconnection with the ILEC. In addition, changes in

technology over time also result in changes in the nature of services provided by ILECs and ISPs and content providers.

24. Common carrier regulation can impose significant costs on ILECs that attempt to establish new innovative forms of interconnection and services to ISPs and content providers. For example, we understand that under common carrier regulation, if an ILEC offers a new “enhanced” service in its network, it is obligated to offer on a tariffed basis (i) any basic transport telecommunication service used to access the enhanced service; and (ii) interconnection (comparable to that the ILEC provides to itself) that would enable rival suppliers of the enhanced service to connect with the ILEC’s network.¹³ For example, as discussed in more detail below, if an ILEC and ISP devise a way to have the ILEC verify an ISP subscriber’s password (a function previously performed by the ISP itself), then the ILEC needs to define interconnection standards that enable rivals to perform this function and may further be required to establish new tariffs for transport to and from the point in the ILECs’ network where this verification function takes place.

25. ILECs face these regulatory requirements even if only one customer would like the ILEC to perform such an enhanced services. We understand that compliance with these rules is costly and reduces the ability of ILECs to respond in a timely way with changes in technology and marketplace. In addition, such rules can interfere with the ability of the ISP or content provider and the ILEC from capturing the benefits of developing new forms of technical coordination.

¹³ These are typically referred to as the “comparably efficient interconnection” (CEI) and “open network access” (ONA) requirements imposed by common carrier regulation.

26. The following section shows that concerns that common carrier regulations have hampered innovation are not merely theoretical but instead have affected Verizon's ability to introduce new services.

C. COMMON CARRIER REGULATION HAS INTERFERED WITH VERIZON'S ABILITY TO OFFER NEW SERVICES.

27. Common carrier regulations obligate ILECs to provide wholesale DSL services on a tariffed non-discriminatory basis to unaffiliated ISPs. Verizon's experience indicates that these regulations are an impediment to formation of such agreements and the deployment of innovative services. More specifically, common carrier regulations limit the ability of ILECs to: establish revenue sharing contracts with unaffiliated ISPs or content providers; and limit ILECs' ability to enter into contracts with ISPs and content providers that establish special contract terms. In addition, the CEI and ONA aspects of common carrier regulation discourage ILECs from introducing innovative forms of technical interconnection and service with content providers and ISPs.

28. This is not just a matter of economic theory. Common carrier regulation has, in fact, adversely affected the deployment of new services and ILECs' ability to enter into a variety of ventures that would be beneficial to consumers. For example, regulation caused Verizon not to pursue the following opportunities:¹⁴

- Several universities and colleges requested that Verizon provide DSL capabilities to their students and offices, and the schools would market these services to their students. As this arrangement would provide Verizon with additional customers at lower customer acquisition costs, the academic

¹⁴ These examples are described in more detail in ex parte letter from W. Scott Randolph of Verizon to the FCC dated June 26, 2003 (relating to CC Dockets No. 02-33, 95-20, 98-10, and 01-337).

institutions expected a reduced price. As the provision of such a service would likely require Verizon to establish new tariffs for each such offering (since there were differences in the precise nature of the arrangements desired by each institution), Verizon was concerned that filing such tariffs would obligate it to provide services in locations in which it would otherwise choose not to do so.

- A local government hoped to accelerate deployment of DSL in its community by purchasing its own DSL equipment and contracting with Verizon to maintain and provide DSL service using that equipment. To do this, however, Verizon would have had to tariff this special arrangement, which could obligate Verizon to offer services in other circumstances.
- Verizon could provide “enhanced” capabilities that would allow ISPs to operate more efficiently. One example, noted above, was the request that Verizon provide wholesale DSL service that includes “enhanced” verification functions (e.g., user log in, password verification). Another example would be for Verizon network equipment to store video webcasts for redistribution to ISP customers, rather than the ISP making separate transmissions for each of its customers, as is done today.¹⁵ However, to provide these enhanced services, Verizon would have to (i) file new tariffs for the basic transport service; (ii) create the ability for competitors to obtain comparably efficient

¹⁵ This would be done at a Digital Subscriber Line Access Multiplexer (DSLAM), which is located in central offices and aggregates Internet traffic from individual end users and then forward the traffic to ATM hub switch, which in turn provides access to ISPs.

interconnection (CEI) to that equipment; and (iii) develop the necessary billing and support services for such interconnection. We understand that since the equipment has not been designed to accommodate multiple providers of such services, Verizon would also need to get the manufacturer to make changes in the equipment.

29. As these examples suggest, common carrier regulations impede Verizon's ability to modify services in response to unique circumstances as well as its ability to enter into contracts with unaffiliated ISPs or content providers that enable the parties to share risks through revenue sharing, specification of performance criteria and other contingencies. These circumstances are common in industries, such as the provision of Internet services, which are characterized by new and emerging technologies and highly uncertain investments.

IV. ILECs WILL CONTINUE TO FACE STRONG INCENTIVES TO OFFER WHOLESALE SERVICES TO INDEPENDENT ISPs AND TO PROVIDE CONSUMERS FULL ACCESS TO THE INTERNET EVEN IN THE ABSENCE OF COMMON CARRIER REGULATION.

30. Firms routinely face decisions about the extent to which they should vertically integrate or contract with others in producing a final product. They also routinely decide whether to use different distribution channels to deliver their products. For example, providers of broadband Internet transport services can choose to vertically integrate into the provision of retail ISP service, to contract with independent ISPs to provide retail services, or can pursue both strategies. Or they can decide to sell broadband transport to ISPs, to end users or to both. In the absence of regulation, ILECs providing broadband Internet transport services have strong business incentives to contract with efficient independent ISPs and other content providers.

31. If independent ISPs are more efficient as an ILEC, then an ILEC would benefit from providing them local broadband transport service on a wholesale basis. For example, independent ISPs that are efficient marketers can attract subscribers that otherwise would purchase cable modem services (or other broadband Internet access services). Likewise, it would be beneficial for the ILEC to provide content that attracts more subscribers. These customers generate wholesale revenue for ILECs that otherwise might be lost.

32. Some commenters have expressed concern that elimination of common carrier regulation could increase the likelihood that ILECs would pursue a strategy of impeding access to certain content providers. However, these commenters have provided no evidence to support this proposition.

33. As a preliminary matter, access to individual content providers is controlled by ISPs. Today, ISPs, including ISPs affiliated with ILECs, have no common carrier or other “access” obligation. Therefore, it is the marketplace itself, not any regulatory rule or requirement, that provides Internet users with full access to content providers on the Internet.

34. In addition, any attempt to restrict access to a given website degrades the overall quality of service received by subscribers and thus reduces the demand for the services. Broadband Internet service providers would benefit from engaging in this practice only by extracting payments from the firms that benefit from degraded access to certain sites. A broadband provider would engage in such a policy only if the profit it generates in doing so more than offsets the losses it incurs by making its service less

attractive, which reduces subscribers' willingness to pay for the service as well as the number of subscribers an ILEC can expect to attract at a given price level.

35. We are unaware of any claim that ILEC providers of DSL services or ILEC-affiliated ISPs have attempted to degrade access to any given website.¹⁶ This is not surprising since doing so would reflect an important deviation from the kind of Internet access that consumers have come to expect. Attempts by DSL providers to impede access to certain websites in this way would lessen the attractiveness of DSL as an alternative to cable modem services.

¹⁶ Commission officials have suggested that cable firms have engaged in related practices on a limited basis. However, we have no specific information regarding the nature or extent of such practices.

We declare under penalty of perjury that the above is true and correct to the best of our knowledge and belief.



Dennis Carlton



Hal Sider



Dee May
Assistant Vice President – Federal Affairs

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November 13, 2003

Ex Parte

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Broadband Proceedings, WC Docket Nos. 01-337, 02-33, 98-10, 95-20

Dear Ms. Dortch:

Some parties have argued that the Commission should define a separate “wholesale” market for broadband services provided to ISPs, and should find that local telephone companies enjoy a monopoly over that market solely by virtue of the fact that they alone have previously been required to provide such wholesale services. They are wrong. It has been black-letter law for more than half a century that a relevant product market must be defined to include *all* providers, including vertically integrated providers such as the dominant cable modem providers. The Commission itself has consistently applied that bedrock principle to reject attempts to manufacture artificially separate wholesale market definitions.

Nor is there any plausible basis for concluding that local telephone companies could exercise market power in the provision of broadband services to any separate geographic markets or to any discrete customer segment. For mass-market customers, cable modem services are far more widely available than the DSL services provided by local telephone companies, and are increasingly available to the small-business community that, until recently, has not been the focus for either DSL or cable. And a number of other technologies – including satellite, fixed wireless, third-generation (“3G”) wireless, and Wi-Fi – provide still further competition today, and the prospect of even greater competition in the future. Under these circumstances, imposing Title II obligations on one (and only one) service provider would not only be contrary to decades of established antitrust jurisprudence, but also would be affirmatively counterproductive and would jeopardize the continued development of the broadband market on a competitive basis.

A. There Is No Separate Wholesale Market for Broadband Services in Which Local Telephone Companies Could Exercise Market Power.

1. A correctly defined economic product market must include *all* providers, including vertically integrated firms, as well as any likely future entrants.

It is well-settled as a matter of antitrust law and economic theory that, in defining an economic product market, it is necessary to take into consideration *all* existing providers in that market, including vertically integrated firms, as well as likely future entrants.

The *Horizontal Merger Guidelines* issued jointly by the U.S. Department of Justice and Federal Trade Commission require that each Agency's identification of firms that participate in the relevant market begin with all firms that currently produce or sell in the relevant market, including "vertically integrated firms to the extent that such inclusion accurately reflects their competitive significance in the relevant market." *Id.* § 1.31. "In addition, the Agency will identify other firms not currently producing or selling the relevant product in the relevant area as participating in the relevant market if their inclusion would more accurately reflect probable supply responses." *Id.* § 1.32. These so-called "uncommitted supply responses" are included in the relevant market whether they come about "by the switching or extension of existing assets to production or sale in the relevant market; or by the construction or acquisition of assets that enable production or sale in the relevant market." *Id.*

The leading treatise on antitrust law, by Prof. Areeda et al., likewise emphasizes repeatedly that self-suppliers that can easily switch production to serve other customers must be considered part of the relevant market. *See, e.g.,* 2A Phillip E. Areeda, *et al., Antitrust Law* ¶ 423, at 81-82 (2002). This is because, as a matter of economics, "a defendant dominating industry output – or hoping to do so – cannot raise prices to monopoly levels by reducing output when its rivals have a large volume of efficient excess capacity that can quickly generate additional and readily saleable output." *Id.* ¶ 535c, at 221. Areeda further emphasizes that, even where sales, rather than capacity, is used as the relevant benchmark, self-supply – so-called "captive sales" or "captive output" – must be considered part of the market "even though it is not sold as such." *See id.* ¶ 535e, at 225-26. As he explains, if an alleged monopolist attempted to raise its prices to monopoly levels, "[t]he higher . . . price may induce an integrated firm to expand its . . . production – to supply others in direct competition with the alleged monopolist." *Id.* "Hence, captive output constrains the defendant whether or not the integrated firms sell" to other retail providers the inputs that the vertically integrated firm uses for its own retail offerings. *Id.* Thus, "the integrated firm's . . . output belongs in the market." *Id.*

In the landmark *Alcoa* case, Judge Learned Hand applied these principles in holding that Alcoa's entire aluminum ingot production should be included in the relevant market, regardless of whether that production was sold to independent companies that used the ingot as an input in fabricating other products, or whether Alcoa used the production to fabricate such products itself. *See United States v. Aluminum Co. of Am.*, 148 F.2d 416, 424-25 (2d Cir. 1945) ("*Alcoa*"). As Judge Hand explained, even though "[t]hat part of its production which 'Alcoa' itself fabricates does not of course ever reach the market as ingot . . . , the ingot fabricated by 'Alcoa' necessarily

had a direct effect upon the ingot market,” because “[a]ll ingot – with trifling exceptions – is used to fabricate intermediate, or end, products; and therefore all intermediate, or end, products which ‘Alcoa’ fabricates and sells, pro tanto reduce the demand for ingot itself.” *Id.* at 424. In the half-century since the *Alcoa* decision, other courts consistently have applied the same principles in similar circumstances.¹

2. The Commission itself has consistently applied these same principles, and has refused to define artificial “wholesale” markets under conditions such as those present here.

As in the proceedings here, on numerous prior occasions the Commission has been asked to define artificially separate markets for wholesale services in order to attribute providers of those services with market power that they do not possess when the market is properly defined to include all relevant suppliers. In each of these prior instances, the Commission has rejected such claims, adhering instead to the same antitrust principles that the federal antitrust agencies and the courts have consistently applied.

In its *Fourth CMRS Order*, the Commission rejected requests by wireless resellers to place switches between the switches operated by facilities-based wireless providers and the switches of wireline local exchange carriers or interexchange carriers. The Commission reasoned that there was no need to impose such an obligation – which, in effect, would have required facilities-based wireless providers to piece-out and begin offering on a wholesale basis portions of their network – given the extensive competition among integrated facilities-based providers of wireless services. *See Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services*, Fourth Report and Order, 15 FCC Rcd 13523, ¶ 20 (2000) (“*Fourth CMRS Order*”); *id.* ¶ 22 (explaining that the resellers’ request would “inevitably lead to

¹ See, e.g., *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366, 389 (1999) (faulting the Commission for failing to consider carriers that self-provide facilities in evaluating competitive alternatives); *Rothery Storage & Van Co. v. Atlas Van Lines, Inc.*, 792 F.2d 210, 218 (D.C. Cir. 1986) (“[T]he capability of other production facilities to be converted to produce a substitutable product is referred to as the cross-elasticity of supply. The higher [this] cross-elasticit[y], the more likely it is that similar products . . . are to be counted in the relevant market.”); *Calnetics Corp. v. Volkswagen of Am., Inc.*, 532 F.2d 674, 691 (9th Cir. 1976) (production cross-elasticity must be considered when defining product market); *AD/SAT v. Associated Press*, 181 F.3d 216, 227 (2d Cir. 1999) (“Where there is cross-elasticity of supply, a would-be monopolist’s attempt to charge supracompetitive prices will be thwarted by the existence of firms willing to shift resources to producing the product, thereby increasing supply and driving prices back to competitive levels.”); *Rebel Oil Co. v. Atlantic Richfield Co.*, 51 F.3d 1421, 1436 (9th Cir. 1995) (“[D]efining a market on the basis of demand considerations alone is erroneous A reasonable market definition must also be based on ‘supply elasticity.’”); *Yoder Bros. v. California-Florida Plant Corp.*, 537 F.2d 1347, 1367-68 (5th Cir. 1976) (ability of growers to switch to produce different types of flowers precludes a chrysanthemum-only market); *FTC v. Owens-Illinois, Inc.*, 681 F. Supp. 27, 47 (D.D.C.) (ease with which suppliers could shift production among types of glass bottles undercut limitation of market to certain end users), *vacated as moot*, 850 F.2d 694 (D.C. Cir. 1988); *In re ITT*, 104 F.T.C. 280, 411 (1984) (captive bakers included in market with wholesale bakers because captives could readily divert production to other retail groceries in response to an increase in wholesale baker prices); *United States v. Waste Mgmt., Inc.*, 743 F.2d 976, 983 (2d Cir. 1984) (finding that market for nonresidential solid waste was not limited to Dallas but also included firms from nearby Fort Worth, who could easily supply Dallas market if such service became profitable); *SBC Communications Inc. v. FCC*, 56 F.3d 1484, 1493-94 (D.C. Cir. 1995).

unbundling of the facilities-based provider's network"). The Commission explained that, "to the extent that resale switch interconnection is an economically attractive way of providing CMRS service, we anticipate that the increasing degree of CMRS competition should provide incentives for facilities-based CMRS providers to agree to switch interconnection to increase their revenues." *Id.* ¶ 20.

The Commission also has applied these same principles in its analysis of the long-distance market. In approving the AT&T/McCaw merger, for example, the Commission rejected arguments that there was a separate market comprised of long-distance carriers that served wireless customers. The FCC instead found that the relevant market included *all* long-distance carriers, including those providing only wireline long-distance service, since these carriers could easily serve wireless customers as well, even if they were not currently doing so. *See Applications of Craig O. McCaw and AT&T Co. for Consent to Transfer Control*, Memorandum Opinion and Order, 9 FCC Rcd 5836, ¶¶ 13-14 (1994). The D.C. Circuit upheld the Commission's ruling, holding that "[i]t is of little consequence that consumers have no good substitutes if *producers* can immediately respond to a firm's price increase by switching production to that firm's products," and that "whatever market definition is employed, relative ease of entry by other firms should always be taken into account. The one course that would be clearly wrong would be to define the market as A alone while ignoring the ease of entry from B producers." *SBC Communications*, 56 F.3d at 1493 (internal quotation marks omitted).

In addition to repeatedly defining markets to encompass all relevant existing providers, including vertically integrated firms, the Commission also has included all likely future entrants in the relevant market. The Commission has stated, for example, that the proper analysis must "examine not just the markets as they exist today," but must also take account of "future market conditions," including "technological and market changes, and the nature, complexity, and speed of change of, as well as trends within, the communications industry."² In the broadband context, the Commission has already recognized that there are numerous new platforms and technologies entering the market, such as 3G wireless, satellite, power lines, and others, and that the "preconditions for monopoly appear absent." *Inquiry Concerning the Deployment of Advanced Telecommunications Capability*, Third Report, 17 FCC Rcd 2844, ¶¶ 79-88 (2002) ("Third

² *Applications of NYNEX Corporation, Transferor, and Bell Atlantic Corporation, Transferee, for Consent to Transfer Control of NYNEX Corporation and Its Subsidiaries*, Memorandum Opinion and Order, 12 FCC Rcd 19985, ¶¶ 3, 7, 41 (1997) ("Bell Atlantic/NYNEX Merger Order"); *Applications of Teleport Communications Group Inc., and AT&T Corp., Transferee, For Consent to Transfer of Control of Corporations Holding Point-to-Point Microwave Licenses and Authorizations to Provide International Facilities-Based and Resold Communications Services*, Memorandum Opinion and Order, 13 FCC Rcd 15236, ¶ 19 n.65 (1998); *Applications for Consent to the Transfer of Control of Licenses from Comcast Corporation and AT&T Corp. to AT&T Comcast Corporation*, Memorandum Opinion and Order, 17 FCC Rcd 23246, ¶ 27 (2002); *see also Applications of Ameritech Corp., Transferor, and SBC Communications Inc., Transferee, For Consent to Transfer Control*, Memorandum Opinion and Order, 14 FCC Rcd 14712, ¶ 98 (1999); *Application of WorldCom, Inc. and MCI Communications Corp. for Transfer of Control of MCI Communications Corp. to WorldCom*, Memorandum Opinion and Order, 13 FCC Rcd 18,025 ¶¶ 19-20 (1998); *Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from MediaOne Group, Inc., to AT&T Corp.*, Memorandum Opinion and Order, 15 FCC Rcd 9816, ¶ 11 (2000); *FCC v. RCA Communications, Inc.*, 346 U.S. 86, 96-97 (1953); *FCC v. WNCN Listeners Guild*, 450 U.S. 582, 594-95 (1981).

Advanced Services Report"); *Inquiry Concerning the Deployment of Advanced Telecommunications Capability*, Report, 14 FCC Rcd 2398, ¶ 48 (1999).

3. Applying these principles here demonstrates that there is no separate wholesale market for broadband services in which local telephone companies could exercise market power, and that there is no valid concern that ISPs and other content providers will somehow be unable to reach their customers if the Commission eliminates the requirement that local telephone companies provide wholesale services to such ISPs.

Under the well-settled principles described above, the Commission must define the relevant market in this case to include all current and likely future providers of broadband services, without regard to whether such providers are offering service only on an integrated basis or are providing services on a wholesale basis as well.

First and foremost, this means that the Commission must include cable modem providers in any relevant market for mass-market customers. Like the defendant in the *Alcoa* case, for example, cable modem operators are the dominant providers of broadband services, but operate primarily on a vertically integrated basis. These cable operators nonetheless have the ability to use their capacity to provide services at wholesale, and, therefore, constrain the behavior of competing DSL providers that do provide wholesale service. Thus, the fact that the cable operators use part or all of their transmission facilities for their own broadband services, and that such facilities do not “ever reach the market,” is irrelevant; such facilities still have a “direct effect” on the broadband market because all transmission facilities are used “to fabricate intermediate, or end, products; and therefore all intermediate, or end, products which” such cable operators provide themselves reduce the demand for the underlying facilities over which those services are provided. *Alcoa*, 148 F.2d at 424-25.

The Commission also must define any relevant market for mass-market customers to include other sources of competition, including satellite and fixed wireless providers, as well as rapidly emerging technologies such as broadband over power lines (“BPL”), 3G wireless, and Wi-Fi. As Chairman Powell has noted, “[t]he development of multiple broadband-capable platforms – be it power lines, Wi-Fi, satellite, laser or licensed wireless – will transform the competitive broadband landscape.”³ The Commission itself has already recognized that these technologies provide a growing competitive alternative in the provision of broadband services, and are poised to provide still further competition in the future.⁴ In the *Triennial Review Order*, for example, the Commission held that “the fact that broadband service is actually available through another network platform *and may potentially be available through additional platforms*

³ R. Mark, *Broadband over Power Lines: FCC Plugs In*, Internetnews.com (Apr. 23, 2003), at <http://dc.internet.com/news/article.php/2195621>.

⁴ See, e.g., *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, CC Docket Nos. 01-338, *et al.*, FCC 03-36, ¶ 263 (rel. Aug. 21, 2003) (“*Triennial Review Order*”) (“[T]he Commission also has acknowledged the important broadband potential of other platforms and technologies, such as third generation wireless, satellite, and power lines.”) (citing *Third Section 706 Report 2002*, 17 FCC Rcd 2844, ¶¶ 79-88 (2002)).

helps alleviate any concern that competition in the broadband market may be heavily dependent upon unbundled access.” *Triennial Review Order* ¶ 263 (emphasis added). And it is particularly critical to take account of these alternatives given that the broadband market is still “in the earliest stages” and is evolving rapidly. *Bell Atlantic/NYNEX Merger Order* ¶¶ 40-41. As one legal scholar has noted in making this very point, “[e]xplosive growth of the kind that the broadband transport industry is currently undergoing can render the network externalities largely irrelevant,” and enable new entrants to make rapid gains in the market.⁵

Once the Commission properly defines the relevant market to include dominant cable modem providers as well as other alternative technologies, there is no valid concern that ISPs will somehow be unable to reach their customers if the Commission eliminates the requirement that local telephone companies provide wholesale services to such ISPs. The role of the ISP in the broadband market is primarily one of supplying content.⁶ This means that the major providers of broadband access services, including local telephone companies, have strong business incentives to provide consumers access to these ISPs. If a broadband provider fails to provide its customers access to a broadband ISP that is offering valuable content, consumers would flock to competing broadband platforms that did make such content available. And even if local telephone companies decided to stop providing wholesale access to ISPs despite the fact that consumers valued access to those ISPs – which is a far-fetched assumption given that doing so would run contrary to the telco’s interests – other providers in the market, such as cable modem providers, would quickly step in to fill the gap. Moreover, the mere threat of this occurring would deter the local telco from taking the step of denying access to the ISP in the first

⁵ See C. Yoo, *Vertical Integration and Media Regulation in the New Economy*, 19 Yale J. on Reg. 171, 280 (Winter 2002) (“As Stan Liebowitz and Stephen Margolis have observed, ‘If a market is growing rapidly, the number of users who have made commitments to any standard is small relative to the number of future users.’ In such cases, the fact that a particular firm may currently dominate a market is of little consequence. People concerned about lock-in will focus on the size of the network that will exist in the future, not the size of the one that exists today.”) (quoting S.J. Liebowitz & S. Margolis, *Should Technology Choice Be a Concern of Antitrust Policy*, 9 Harv. J.L. & Tech. 283, 310, 312 (1996)) (footnotes omitted); see also *id.* (citing M. Katz & C. Shapiro, *Product Introduction with Network Externalities*, 40 J. Indus. Econ. 55, 73 (1992) (concluding that exponential market growth effectively prevents excess inertia)).

⁶ This is true for at least two reasons. First, the technological role performed by the ISP in a narrowband connection is usurped by the equipment that broadband providers use to provide broadband services – the DSLAM in the case of local telcos and the Cable Modem Termination System (CMTS) in the case of cable operators. Second, it is part of a natural evolution of ISPs that was occurring in the narrowband world – where the major ISPs such as AOL and MSN distinguished their offerings primarily by their unique content – and that evolution has accelerated in the broadband world, where the main ISPs are now attempting the same strategy. For example, after years of failed attempts at reselling other carriers’ DSL and cable modem service, AOL has recently adopted a “Bring Your Own Access” strategy to market unique broadband content that is available to any user with broadband access to the Web. See, e.g., AOL Time Warner Press Release, *America Online Launches AOL for Broadband* (Mar. 31, 2003). Other ISPs – including Earthlink – have announced similar strategies. See, e.g., C. Barrera Diaz, *Earthlink Loss Widens but Revenue Climbs*, Reuters (Apr. 22, 2003) (Gary Betty, Earthlink: “we are likely to package a BYOA product . . . before the end of the year. We won’t be left out.”); J. Hu, *AOL’s Broadband Crusade*, CNet News (Mar. 30, 2003) (“Microsoft and Yahoo, have signaled plans to launch their own standalone subscription packages as a way to lure broadband users to their services.”), at <http://news.com.com/2100-1032-994629.html>. This is also the model that Internet giants like Yahoo have adopted, bypassing completely the model of the narrowband ISP. See *id.*

place. As Areeda puts it, even though cable operators may not be providing wholesale access to their networks today, a provider cannot “reduce[] output when its rivals have a large volume of efficient excess capacity that can quickly generate additional and readily saleable output.” Areeda, *et al.*, *Antitrust Law* ¶ 535c, at 221. Rather, as the Commission found in the *Fourth CMRS Order*, “the increasing degree of [broadband] competition should provide incentives for facilities-based [broadband] providers to agree to” provide wholesale access “to increase their revenues.” *Fourth CMRS Order* ¶ 20. Finally, even if a broadband provider wanted to deny access to a content provider, it is hard to imagine that it could do so successfully and without detection given the ability of a broadband ISP to make its content available anywhere on the Internet. Indeed, we are unaware of any examples of ILEC DSL providers attempting to degrade the access that consumers receive to any unaffiliated website.

B. There Are No Separate Geographic Markets in Which Local Telephone Companies Could Exercise Market Power in the Provision of Broadband Services.

Just as local telephone companies do not possess market power on a national scale in any relevant broadband market for mass-market customers, there are no discrete geographic markets in which they can exercise market power. To the contrary, in the overwhelming majority of areas where DSL service is now available, there is competition from cable modem providers and other actual and likely future alternatives such as satellite and fixed wireless providers, as well as from emerging technologies such as BPL, 3G wireless, and Wi-Fi.

It is beyond dispute that cable modem service is, by a significant margin, the most widely available and widely used broadband access technology among mass-market customers today. *See Triennial Review Order* ¶ 262 (“[C]able modem service is the most widely used means by which the mass market obtains broadband service.”). Cable modem service is now available to between 85 and 90 million homes – between 77 and 82 percent of U.S. households – and there are now more than 12 million cable modem subscribers.⁷ By contrast, DSL is available to between 65 and 75 million homes – between 60 and 68 percent of U.S. households – and there are approximately 6 million DSL subscribers.⁸ And, as the Commission has found, “the gap between cable modem and ADSL subscribership continues to widen.” *Triennial Review Order* ¶ 262.

⁷ See NCTA, *Industry Statistics* (85 million homes have access to cable modem service), at <http://www.ncta.com/Docs/PageContent.cfm?pageID=86>; S.M. Linde, *et al.*, Lehman Brothers, Investext Rpt. No. 7318130, *Cable in Transition – Cable Enters the Next Frontier to Meet Its Critics Head On – Industry Report at *106* (Apr. 9, 2003) (“*Lehman Report*”) (90 million homes have access to cable modem service); NCTA, *Industry Statistics* (12 million cable modem subscribers as of April 2003), at <http://www.ncta.com/Docs/PageContent.cfm?pageID=86>.

⁸ See G. Campbell, *et al.*, Merrill Lynch, *Broadband Handbook* at 22 (Feb. 21, 2003) (“*Broadband Handbook*”) (60-65% of U.S. homes have access to DSL); J. Bazinet, *et al.*, J.P. Morgan, *The Cable Industry*, Table 4 (Nov. 2, 2001) (estimating 109.3 million households in 2003) (109.3 million x 0.60 = 65.58 million homes with access to DSL); *Lehman Report* at *106 (75 million homes have access to DSL); R. Katz, *et al.*, Bear Stearns, Investext Rpt. No. 7367089, *Cable v. DSL: Round II – Industry Report at *5* (May 5, 2003) (5.5 million DSL subscribers as of year-end 2002).

Cable operators also are now expanding the availability of cable modem services to the small fraction of homes they do not presently serve. For example, Comcast spent nearly \$1 billion on upgrades in the first quarter of 2003, to end the quarter with more than 86 percent of its footprint upgraded for cable modem service, and plans to spend an additional \$1.4 billion this year to bring that total up to 94 percent.⁹ Time Warner just reported that it has “completed” upgrades of its entire network to provide cable modem services.¹⁰ Cox and Charter likewise report that plant upgrades are “nearly complete.”¹¹ Cablevision ended 2002 with cable modem service available to 95 percent of its homes passed, and “[b]y late summer 2003 . . . the company’s cable network [will] be fully upgraded.”¹² Analysts now expect that cable modem service will be available to all cable homes within the next three to five years.¹³

In contrast to the rapid strides made by cable operators, local telephone companies are still playing catch-up, and will be required to make significant additional investments – including in advanced remote terminals – to overcome the inherent limitations of their existing networks and make broadband services more widely available.¹⁴ For example, while each of the major cable operators will have made cable modem service available to between 90 and 100 percent of their homes passed by the end of 2003, the three largest Bell companies – BellSouth, SBC, and Verizon – are expected to have made DSL available to only about 70-80 percent of their homes passed as of that same date.¹⁵ Thus, while Verizon and other Bell companies are reporting that

⁹ See Comcast Press Release, *Comcast Reports First Quarter 2003 Results* (May 8, 2003).

¹⁰ AOL Time Warner, Form 10-Q (SEC filed Aug. 13, 2003).

¹¹ David Pugliese, Vice President, Product Marketing & Management, Cox Communications, *Bundling: Our Competitive Edge*, Presentation Before the Wachovia Securities 13th Annual Nantucket Equity Conference, Nantucket, MA (June 26, 2003) (“[p]lant upgrades [are] nearly complete”); Carl Vogel, President and CEO, Charter Communications, Presentation Before the Credit Suisse First Boston Media Week Conference (Dec. 10, 2002) (“[r]ebuild is nearly complete”).

¹² N. Gupta, *et al.*, Smith Barney Citigroup, Investext Rpt. No. 7389753, Cablevision Systems Corp. – Company Report at *7 (May 15, 2003).

¹³ See, e.g., *Broadband Handbook* at 22 (“Over the next 3-5 years, we expect essentially all homes passed by cable . . . to have access to cable Internet service.”); *Lehman Report* at *56 (“By the end of 2004, [cable] networks should be fully upgraded for two-way capability.”); S. Levy, *et al.*, Lehman Brothers, Investext Rpt. No. 7377637, Wireline Equipment – Highlights of Lehman Wireline Conference – Industry Report at *3 (May 9, 2003) (“We believe a majority of the U.S. cable MSOs, with the exception of the former AT&T Broadband properties, and the now bankrupt Adelphia, have completed the vast majority of upgrade and plant rebuilds.”).

¹⁴ See, e.g., *Lehman Report* at *106 (“Even if DSL is available in a market area, there are still technology limitations for the service. A customer must be within three miles of the RBOC’s central office. In addition, if the phone lines are spliced with bridge taps . . . or use load coils to boost signals, DSL will not be available.”); S. Flannery, *et al.*, Morgan Stanley, Investext Rpt. No. 7382997, Wireline Telecom Services – Ice Age II: The Return of the Scenario Analysis – Industry Report at *16 (May 12, 2003) (“Distance from central offices and the economics of upgrading copper lines are the two main reasons why all Bell access lines are still not DSL-capable.”); S. Rosenbush, *Verizon’s Gutsy Bet*, *BusinessWeek*, Aug. 4, 2003, at 52 (“[t]he phone companies ‘have to make sizable investments to catch up’” with respect to broadband deployment) (quoting David Watson, Exec. Vice President of Marketing for Comcast); *Broadband Handbook* at 22-23 (“DSL has a coverage disadvantage, but it is narrowing,” though “it remains quite expensive to make service available where loop lengths are long.”).

¹⁵ See G. Campbell, *et al.*, Merrill Lynch, *3Q03 Broadband Update* at Table 6 (Nov. 3, 2003) (“*Merrill 3Q03 Broadband Update*”).

they plan to invest billions over the next few years on broadband,¹⁶ each of the major cable companies is now reporting that they expect their future levels of investment to decline given that the upgrade of their networks is now largely complete.¹⁷

As a result of cable's lead in the race to deploy broadband services, there are now many geographic areas where cable modem service is available, but where DSL service is not. By contrast, there are very few areas where DSL is available but that do not also have access to cable modem service. Verizon is unaware of any public sources that attempt to quantify this, so it has conducted its own analysis of the geographic availability of cable modem and DSL services using publicly available databases. Verizon has identified the percentage of homes within the former Bell Atlantic territory that have access to cable or DSL service, or both, using data from the Fourth Quarter 2002 Warren Communications Report on the availability of high-speed cable and DSL offerings by U.S. Census block group. This analysis demonstrates that 37 percent of the households in the study area had access to cable modem service but not DSL; 44 percent had access to both; only 8 percent had access only to DSL; and 10 percent had access to neither.¹⁸

¹⁶ See Verizon Press Release, *Verizon Policy Chief Urges FCC to Act Decisively and Quickly to Assert a Hands-Off Policy for Broadband* (Apr. 28, 2003) (“We are investing billions to upgrade switching, transport and other parts of our network. We are upgrading our networks to make DSL available to 10 million more households this year.”) (quoting Tom Tauke, Senior Vice President for Public Policy & External Affairs, Verizon); Rosenbush, *et al.*, *Verizon's Gutsy Bet*, *Business Week* at 52 (Aug. 4, 2003) (Verizon plans to spend \$20 billion to \$40 billion over the next 10 to 15 years to roll out fiber-optic connections to every home and business in its 29-state territory); C. Haley, *SBC Eyes \$500M DSL Push*, *Internetnews.com* (May 8, 2003) (SBC may spend between \$300 and \$500 million this year to expand DSL coverage from 66% of its access lines to 75%; Qwest will invest \$75 million this year to expand its DSL coverage by 20%), at <http://internetnews.com/infra/article.php/2203241>.

¹⁷ See, e.g., AOL Time Warner, Form 10-Q, at 27 (SEC filed Aug. 13, 2003) (Time Warner has completed its “upgrades and therefore anticipates a decrease in capital expenditures”); Charter Communications, Form 10-Q, at 40 (SEC filed Aug. 5, 2003) (Charter “expect[s] [its] capital expenditures in 2003 will be lower than 2002 levels because [its] rebuild and upgrade activities are largely completed”); Jim Robbins, President and CEO, Cox Communications, Presentation Before the Morgan Stanley Global Competitive Edge Conference (June 20, 2003) (“[r]ebuild and upgrade capital spending is behind us”); Cablevision Press Release, *Cablevision Reports Second Quarter 2003 Results* (Aug. 5, 2003) (Cablevision reported that capital expenditures for “upgrade/rebuild” were \$78 million in the first six months of 2003 versus \$119 million in the first six months of 2002).

¹⁸ This analysis was performed as follows. The Fourth Quarter 2002 Warren Communications Report identifies cable modem and DSL offerings by U.S. census block group. The 2002 Claritas Report provides total households for each census block group. Using the Warren's data, each census block group was first placed into one of four categories: (i) broadband offered by both cable and Verizon; (ii) broadband offered by cable only; (iii) broadband offered by Verizon only; (iv) no broadband offered. Using Claritas data, Verizon next calculated the total number of households for each category. In doing so, Verizon assumed that where cable modem was offered in a census block group it was offered to all homes within that group. Given that many telephone lines do not qualify for DSL (e.g., many loops are too long) Verizon did not make the same assumption for DSL, but instead used its loop qualification process to determine the percentage of households in each category to which DSL was actually available. Verizon then removed the non-DSL-qualified lines from the totals.

Of course, even in those limited geographic areas where DSL is currently available but cable modem is not, this situation will soon change, as cable operators complete their upgrades. And, in the interim, it is clear that DSL providers could not possibly exercise market power, both because of practical marketing realities, and because it would induce even speedier entry by cable modem and other competitors. DSL is marketed over wide regions using mass-media advertising that includes standard prices and terms. DSL providers could not, therefore, effectively discriminate between the customers in these regions that have access to cable modem service and those that do not. To the contrary, because it is impractical to market these services with prices and terms that vary from area to area, even in those very limited areas where DSL is the only currently available alternative, the prices and terms of that offering are disciplined by the competition provided elsewhere. And, even assuming it were possible to raise the prices of DSL in only limited geographic areas, such actions would ultimately prove fatal, as they would induce even more rapid entry by cable modem providers and other broadband alternatives.

C. Local Telephone Companies Could Not Exercise Market Power in the Provision of Broadband Services to Any Discrete Customer Segments.

Some parties claim that local telephone companies possess market power in the provision of broadband services to discrete customer segments – such as small businesses and large-enterprise customers – which they claim have fewer competitive alternatives than are available to other segments of the broadband market. These claims are at war with the facts. As is true of other segments of the broadband market, the small-business segment is a still-developing market, and, as is also true of other segments of the broadband market, clearly is contestable, and is, in fact, being contested, as a number of competing platform providers move to serve this segment of the market. The large-enterprise segment of the market is the most mature segment, and has long been dominated by the major interexchange carriers who historically have been the only providers able to offer the end-to-end broadband services that large-enterprise customers value most.

1. Local telephone companies could not exercise market power in the provision of broadband services to small-business customers.

The small-business segment of the broadband market is still developing, and is less developed than the broadband services market generally. Broadband providers initially focused either on providing broadband services to residential customers or on providing different broadband services to large-business customers. Consequently, as of 2002, small businesses accounted for no more than 5-10 percent of the total subscribers to mass-market broadband services.¹⁹ Indeed, Verizon and most other ILECs had long been at a disadvantage in this market segment because they provided an asymmetrical DSL service, whereas business users typically desire symmetrical services. However, a number of broadband providers have now tailored their

¹⁹ See R. Greenspan, *Big Boosts in Broadband*, CyberAtlas.com (May 20, 2002) (citing estimate by In-Stat/MDR that a third of total business subscribers that use either DSL or cable modem service are small businesses), at http://cyberatlas.internet.com/markets/broadband/article/0,1323,10099_1141701,00.html; Yankee Group, *2002 Broadband Subscriber Forecast*, Exh. 5 (Aug. 23, 2002) (“*August 2002 Yankee Group Report*”) (10,607,000 cable modem subscribers as of year-end 2002, of which 675,000 are business subscribers; 5,120,000 DSL subscribers as of year-end 2002, of which 1,000,000 are business subscribers).

services specifically to meet the needs of smaller business customers and are moving aggressively to serve this customer segment.²⁰

Cable companies – which already dominate the provision of broadband services to residential customers – have been moving particularly fast to provide cable modem services to small-business customers. The National Cable Telecommunications Association recently testified before Congress that cable operators are now “in a position to serve smaller and medium sized businesses, and as the cable modem technology itself is improved so that we can offer usage sensitive and tiered pricing arrangements, increasingly the small business market will be attractive to us.”²¹ Indeed, six of the seven largest cable system operators (which, collectively, represent over 90 percent of consumer cable modem subscribers) already offer broadband services to small businesses.²² Each of these cable operators has developed a separately branded service for business customers (*e.g.*, Time Warner’s “Road Runner Business Class” and Comcast’s “Commercial Internet Service 2.0” and “Comcast Pro”), and several have formed separate business units dedicated to the provision of broadband to business customers (*e.g.*, Comcast Business Communications, Cox Business Services, and Charter Business Networks). *See* Attachment B. They have designed their services to provide the features that small businesses desire, such as high upstream bandwidth (anywhere from 256 Kbps to 3 Mbps) and the ability to use a single connection for multiple computers and e-mail accounts. *See id.*

Cable operators already have been very successful in attracting small-business subscribers. According to analysts, cable operators were providing cable modem service to between 600,000 and 700,000 business subscribers as of year-end 2002,²³ and will be serving nearly 900,000 subscribers by year-end 2003.²⁴ This figure is projected to as much as triple to 2.2 million within the next three years.²⁵ By the same token, small businesses spent just over \$330 million on cable modem service in 2001, and were expected to spend roughly \$800 million

²⁰ On July 22, 2003, Verizon filed a tariff with the FCC to provide symmetrical xDSL service. *See* Letter from Richard Ellis, Verizon, to Marlene Dortch, FCC, Transmittal No. 343 (July 22, 2003) (filing revisions to Verizon Tariff F.C.C. Nos. 1 & 20 to introduce Verizon Infospeed Premium Digital Subscriber Line Service, a high-speed symmetrical data-only access service).

²¹ Robert Sachs, President and CEO, NCTA, Testimony Before the Subcommittee on Telecommunications and the Internet of the House Committee on Energy and Commerce, Washington, DC (July 21, 2003).

²² *See* M. Lauricella, *et al.*, Yankee Group, *Cable MSOs: Ready to Take Off in the Small and Medium Business Market* at 4 (Mar. 2002).

²³ *See August 2002 Yankee Group Report* Exh. 5 (675,000 business cable modem subscribers as of year-end 2002); E. Bergstrom & M. Paxton, In-Stat/MDR, *Broadband 2002: DSL & Cable Modem Services Fuel Worldwide Subscriber Growth* at 21 (June 2002) (“*In-Stat/MDR Report*”) (613,000 business cable modem subscribers as of year-end 2002).

²⁴ *See* Yankee Group, *2003 Broadband Subscriber Forecast* (publication forthcoming).

²⁵ *See In-Stat/MDR Report* at 21 (estimating 2.2 million business cable modem subscribers by 2006); A. Harris & B. Baldwin, IDC, *Worldwide Cable Modem Equipment and Services Forecast and Analysis, 2002-2006*, at 25 (July 2002) (estimating 1.9 million business cable modem subscribers by 2006); Yankee Group, *2003 Broadband Subscriber Forecast* (estimating 1.8 million business cable modem subscribers by 2006).

in 2002.²⁶ According to In-Stat/MDR, a larger percentage of small businesses are now using cable modem services (40 percent) than the ADSL services offered by local telephone companies (22 percent).²⁷ A June 2003 Smith Barney report finds that cable MSOs are now capturing over 50 percent of new commercial high-speed Internet customers in their addressable footprint.²⁸

Cable operators can readily reach most small-business customers with their existing infrastructure. While it is difficult to obtain figures limited to just small businesses, Credit Lyonnais estimates that “six million small- to medium-sized businesses (SMB) are located within a few hundred feet of the local hybrid fiber/coaxial network . . . [w]ith the current cable infrastructure passing nearly 2.5 million SMBs today.”²⁹ By comparison, there are an estimated 10.5 million small and medium businesses nationwide (2.2 million with 5-99 employees, 85,000 with 100-999 employees, and 8.2 million characterized as small office/home office).³⁰ Consistent with these figures, Smith Barney estimates that 30 to 50 percent of the small- and medium-enterprise market is located within 50 to 100 feet of existing cable modem networks.³¹ Jedai Networks, which develops equipment “intended to enable [cable] MSOs to serve business customers,” estimates “that roughly 25% of businesses already have a cable drop, including many in downtown office buildings.”³² And, of course, because smaller businesses tend to be concentrated in areas that cable passes already, the percentage of small businesses passed by cable today is even higher than for small- and medium-sized businesses combined. The Yankee Group has found that 85 percent of very small and small businesses (those with 1 to 19, and 20 to 99 employees, respectively) had at least two broadband choices, usually cable and DSL.³³

Cable operators themselves have acknowledged that there are many businesses that lie on or in close proximity to their networks, and that it makes sense to serve them. An In-Stat/MDR survey of 50 cable operators conducted in February 2003 found that 62 percent of respondents said they offered some kind of cable modem service to businesses.³⁴ This includes all of the major cable operators:

²⁶ See R. Greenspan, *Big Boosts in Broadband*, CyberAtlas.com (May 20, 2002) (citing In-Stat/MDR research), at http://cyberatlas.internet.com/markets/broadband/article/0,,10099_1141701,00.html.

²⁷ See In-Stat/MDR Press Release, *Cable and DSL Fighting for Business Subscribers* (Dec. 12, 2002).

²⁸ See Citigroup Smith Barney, *Cable: Capitalizing on the SME Opportunity; Detailed Note* at 3 (June 4, 2003).

²⁹ J. Shim & R. Read, Credit Lyonnais Securities, *The U.S. Cable Industry – Act I* at 196 (Nov. 20, 2002).

³⁰ See K. Burney, In-Stat/MDR, *The Big Comeback? Excerpts from ‘Business Broadband in a Changed Economy’* at 2, 4 & Fig. 2 (May 2002).

³¹ See Citigroup Smith Barney, *Cable: Capitalizing on the SME Opportunity; Detailed Note* at __ (June 4, 2003).

³² D. Sweeney, *Cable’s Plumb Position*, America’s Network (July 1, 2002).

³³ See Yankee Group, *Future of Broadband in the SMB Market* at 21 (Sept. 2002).

³⁴ See In-Stat/MDR, *MSO Survey: US Cable Operators Fine Tuning Their Bundle of Digital Services* at 38 (Feb. 2003).

- Time Warner Cable recently stated that “[w]e’ve got an infrastructure there that is just ripe for commercial services We pass 1.2 million businesses”³⁵ According to the company, “[c]able is not incredibly difficult to get to the business,”³⁶ and “[m]ost RBOCs, CLECs and ILECs have ignored that space.”³⁶ Time Warner accordingly “views the SMB market as a high-growth opportunity.”³⁷
- On July 1, 2003, Comcast launched a marketing campaign in the San Francisco bay area for its Comcast Pro service designed for small-business customers.³⁸ The company’s director of business services stated that “[o]ur competitors are going to be disappointed that we are going to spoil the market for them.”³⁹ The company has elsewhere noted that it now targets “SMBs with 1-100 employees,” “Non-profit orgs, schools, government,” and “SMBs and Enterprises with telecommuters.”⁴⁰
- Charter’s business unit has said that its Small Business Internet Service “is designed specifically for small, growing businesses.”⁴¹ “With over 600,000 small- and medium-sized businesses located within reach of our networks, this opportunity is just too good to pass up.”⁴²
- Cox Business Services “serves 19 of the Cox cable markets, covering more than 90 percent of Cox’s overall footprint nationally, marketing basic data and video services aggressively to small- and medium-sized businesses the company can

³⁵ A. Figler, *Turning Businesses into Customers*, CableWorld (Dec. 9, 2002) (quoting Ken Fitzpatrick, senior vice president of commercial services for Time Warner Cable); see also M. Stump, *Road Runner Gears Up ‘Business Class’ Offer*, Multichannel News (Feb. 25, 2002) (Road Runner “is reaching beyond the residential cable-modem market and setting its sights on providing data services to small- and medium-sized businesses.” They are “now mapping their territories, overlaying maps of the cable plant with those that show where SMBs are located.”).

³⁶ M. Stump, *Road Runner Gears Up ‘Business Class’ Offer*, Multichannel News (Feb. 25, 2002) (quoting Jason Welz, vice president of commercial services for Road Runner).

³⁷ J. Barthold, *Small Business, Big Money, No Guarantees*, Telephony Online (Aug. 12, 2002), at http://telephonyonline.com/ar/telecom_small_business_big/index.htm.

³⁸ See R. Mullins, *Comcast Targets Small Biz in Its Broadband Marketing*, Silicon Valley/San Jose Bus. J. (Aug. 4, 2003).

³⁹ *Id.*

⁴⁰ Jason Livingood, Director of Comcast Commercial Internet Services, *Overview of Cable Modem Offerings for Businesses in Maryland* (Aug. 15, 2002).

⁴¹ Charter Business Networks, *Small Business Internet Service*, at <http://www.charterbusinessnetworks.com/resources/pdfs/sbi.pdf>.

⁴² A. Figler, *Turning Businesses into Customers*, CableWorld (Dec. 9, 2002) (quoting Charter Communications spokesman David Andersen).

easily serve with current network connections.”⁴³ Cox recently reported that more than 320,000 businesses lie within 100 feet of its network, providing Cox a “significant opportunity.”⁴⁴ Cox Business Services now serves more than 65,000 business customers, and the company’s business efforts have grown in the past three years from less than 1 percent of Cox’s overall revenue to just more than 5 percent of Cox’s consolidated revenue.⁴⁵ Cox “has really embraced commercial” services.⁴⁶

- Cablevision offers Business Class Optimum Online for small businesses, with connections speeds up to 10 Mbps downstream and 1 Mbps upstream.⁴⁷ “Rather than just concentrating on customers that are easy to connect to the existing network, the business sector opportunity has ‘actually helped us build the network into the business areas and business parks.’”⁴⁸ Kevin Curran, senior vice president of marketing and sales for Cablevision Lightpath, stated that “[w]e can’t keep up with demand.”⁴⁹

Analysts have recently begun to take note of the significant strides that cable operators are making in serving small-business customers. In-Stat has noted that “‘certain operators, such as Cox and Comcast, have been really pushing marketing efforts towards the business community.’”⁵⁰ The Yankee Group has noted that “‘Cox and Time Warner have really been forging ahead with it and have really been successful with offering business-class services.’”⁵¹ The Yankee Group recently changed the assessment it has made in each of the last three years that DSL would achieve dominance over cable in the low end of the business market, and now holds that “‘cable modem providers are anticipated to make a significant impact on the business segment.’”⁵²

⁴³ D. Hayes, *Pickers’ Dilemma*, CED (Sept. 2002), at <http://www.cedmagazine.com/ced/2002/0902/09a.htm>; see also Jim Robbins, President and CEO, Cox Communications, Presentation to the Sanford Bernstein 19th Annual Strategic Decisions Conference (June 2003) (Cox is leveraging its residential infrastructure for its business offering).

⁴⁴ Jim Robbins, President and CEO, Cox Communications, Presentation to the Sanford Bernstein 19th Annual Strategic Decisions Conference (June 2003).

⁴⁵ See *A Snapshot of the Cox Business Strategy*, Interview with Coby Sillers, Vice President and General Manager for Cox Business Services, Xchange Mag. (June 1, 2003).

⁴⁶ *Id.*

⁴⁷ See Cablevision Lightpath, *Business Class Optimum Online*, at <http://www.lightpath.net/solutions/internet/business/bcinfo.html>.

⁴⁸ J. Barthold, *Small Business, Big Money, No Guarantees*, Telephony Online (Aug. 12, 2002) (quoting Kevin Curran, senior vice president of marketing and sales for Cablevision Lightpath), at http://telephonyonline.com/ar/telecom_small_business_big/index.htm.

⁴⁹ *Id.*

⁵⁰ R. Mullins, *Comcast Targets Small Biz in Its Broadband Marketing*, Silicon Valley/San Jose Bus. J. (Aug. 4, 2003) (quoting Mike Paxton, In-Stat/MDR senior analyst).

⁵¹ P. Bernier, *The Business of High-Speed Cable Service*, Xchange Mag. (June 1, 2003) (quoting Yankee Group analyst Lindsay Schroth).

⁵² Yankee Group, *2003 Broadband Subscriber Forecast*.

Moreover, these trends are rapidly accelerating, as cable operators are increasingly offering telephony services that can be bundled with broadband services to serve all the telecom needs of small-business customers.⁵³ In addition to the fact that two of the major cable operators – Comcast and Cox – already offer circuit-switched cable telephony to large fractions of their total footprint, all of the major cable operators have announced plans soon to deploy IP cable telephony, which is becoming increasingly popular among business customers.⁵⁴ Indeed, a number of major cable operators – including Time Warner, Cablevision, and Charter – have begun deploying the service commercially, and every other major cable operator is currently conducting trials of IP telephony and has announced plans for commercial deployment.⁵⁵ Cablevision plans to deploy cable IP telephony across its entire footprint – consisting of 4.4 million homes in New York, New Jersey, and Connecticut – by the end of 2003.⁵⁶ Cox has recently announced that “it will be proceeding from trial to launch with VoIP in Roanoke, Virginia in 4Q03.”⁵⁷ Merrill Lynch recently noted that “trials and deployments involving VoIP technology [by cable operators] are now gaining momentum in both the enterprise segment and in the residential market.”⁵⁸ It predicts that, “[i]n the small/medium business segment, . . . cableco network investments made for the residential triple play could be leveraged to connect additional customers. Virtual VoIP operators are already targeting this market, offering both cost reductions and also innovative features such as ‘virtual’ numbers.”⁵⁹

In addition to cable operators, two DBS providers – Hughes and Starband – have introduced two-way broadband services designed specifically for small businesses, and fixed wireless and other emerging technologies such as 3G wireless and Wi-Fi also are potential alternatives.

⁵³ According to the Yankee Group, “10% of the SMB market for data and voice communications services is currently being served by cable operators in North America. The business services over cable subscriber base should grow over 13% annually for the next five years.” Juniper Networks, Solutions Brief, *Delivering Business Services over Cable* at 2 (Apr. 2003).

⁵⁴ An In-Stat survey found that, as of year-end 2002, 2 percent of all U.S. businesses, or 260,000 firms, were using some sort of IP telephony solution. The same survey found that, by 2007, 19 percent of all firms, or 2.2 million firms, will be using IP telephony in some form. See *Communications Daily*, Aug. 12, 2003, at 8.

⁵⁵ See, e.g., G. Campbell, *et al.*, Merrill Lynch, *3Q03 Broadband Update* at 9 (Nov. 3, 2003) (“*3Q03 Broadband Update*”) (“Comcast disclosed in early October to the Wall Street Journal plans to expand its VoIP trials to include three new markets in 2004: Hartford, Indianapolis and Springfield (in addition to the current trial in Philadelphia). Comcast expects commercial service launches late next year or early in 2005. . . . On the 3Q conference call, management noted that the economics of VOIP look increasingly attractive and that they see it as a potentially important source of growth in 2005 and beyond.”); *id.* (“Cox indicated that it will be expanding its VoIP trial in Roanoke, Virginia, established in April 2003, to a full launch.”).

⁵⁶ See *Merrill 3Q03 Broadband Update* at 15.

⁵⁷ *Id.*

⁵⁸ J. Moynihan, *et al.*, Merrill Lynch, *Voice over Broadband* at 2 (June 24, 2003).

⁵⁹ *Id.* at 5-6; see also *3Q03 Broadband Update* at 1 (VoIP services “could reinforce cable’s lead in HSD and open the door to new market opportunities – for example, the small business sector”).

Hughes offers “DIRECWAY Business Edition . . . for owners of small and medium-size businesses who want the rich experience and benefits of fast Internet access.”⁶⁰ Compared to its two-way residential service, Hughes’ business service offers “increased download capacity, larger data volume, and support for multiple users.”⁶¹ DIRECWAY Business Edition services also now offers VoIP as an additional feature.⁶² Hughes also has announced that it was proceeding on schedule with its plans to deploy a new satellite-based service – the \$1.8 billion Spaceway project – that is designed to provide broadband to small- and large-business customers.⁶³ A second satellite provider, StarBand, offers its “StarBand Small Office” package, which provides businesses “world-class, two-way, always on, high-speed Internet access,” and includes support for multiple users and Web hosting capabilities.⁶⁴ In January 2003, Starband unveiled a new service, Starband 480 Pro, a “professional-strength, network-ready, business-grade satellite modem delivering faster speeds, instant networking capability and enhanced software” that “make[s] it extremely attractive to small businesses and corporate teleworkers.”⁶⁵

Fixed wireless also continues to be a viable alternative for high-speed Internet access for many small businesses. Both Teligent and WinStar have emerged from bankruptcy and are offering fixed wireless broadband services in a large number of markets.⁶⁶ Chairman Powell recently stated that he was “extremely impressed” with the fixed wireless broadband services that are being provided by Roadstar Internet to business customers in rural Virginia, a technology he described as “the face of things to come,” and that could indeed be provided nationwide using unlicensed spectrum.⁶⁷

Both Wi-Fi and 3G wireless provide potential alternatives as well. Vivato has recently developed the capability to use Wi-Fi technology – which many small businesses already are using for their internal networks – to provide last-mile high-speed Internet access.⁶⁸ Vivato recently raised \$44.5 million,⁶⁹ and began shipping an outdoor Wi-Fi switch in May 2003 that

⁶⁰ DIRECWAY, *DIRECWAY Business Edition*, at <http://be.direcway.com>.

⁶¹ *Id.*

⁶² See DIRECWAY, *Find Out More*, at <http://be.direcway.com/newcustomers.html>.

⁶³ See A. Pasztor, *Hughes Expects to Pull Plug on Web-Offering Initiatives*, Wall St. J., Dec. 12, 2002.

⁶⁴ StarBand, *Starband Small Office*, at <http://www.starband.com/smalloffice/more.asp>. On August 15, Starband filed a reorganization plan with the bankruptcy court to exit Chapter 11. Starband expects to receive court approval for the agreement by year-end 2003. See Starband Press Release, *Starband Files Plan of Reorganization to Exit Chapter 11* (Aug. 15, 2003).

⁶⁵ Starband Press Release, *Starband to Launch Professional-Strength ‘480 Pro’ Satellite Modem* (Jan. 9, 2003).

⁶⁶ See Teligent News Release, *Teligent Announces Lender Support for Fixed Wireless Successor Company* (Jan. 22, 2002); IDT Press Release, *IDT Corporation Announces That Winstar Will Become IDT Solutions* (Dec. 12, 2002).

⁶⁷ G. Witte, *Bringing Broadband Over the Mountain: Roadstar Puts Wireless Technology to the Test*, W. Post, Sept. 15, 2003, at E1.

⁶⁸ See, e.g., Peter Cohen, *Vivato’s ‘Wi-Fi Switch’ Provides Large-Scale Coverage*, MacCentral (Nov. 4, 2002), at <http://maccentral.macworld.com/news/0211/04.vivato.php>.

⁶⁹ See Vivato Press Release, *Vivato Raises \$44.5 Million in Series C Funding Round* (June 23, 2003).

allows carriers to extend the coverage of their Wi-Fi/WLAN systems.⁷⁰ Vivato's outdoor switch "completely changes the value proposition for service providers; making it practical to deliver Wi-Fi to entire office buildings, campuses, warehouses, arenas, shopping malls and airports."⁷¹ Mobile wireless providers are now in the process of deploying 3G wireless services that provide broadband capabilities and are ideal for use by small businesses.⁷² As the FCC has noted, "[t]he successful deployment of 3G services may significantly expand availability of advanced services, especially to consumers that are currently unserved by wireline connections."⁷³

2. Local telephone companies could not exercise market power in the provision of broadband services to large enterprise customers.

Large-enterprise customers have been purchasing high-speed data services far longer than other segments of the broadband market, and this segment of the market is accordingly the most mature. It is also different from other segments of the broadband market in its national scope. It is comprised of customers that typically demand end-to-end services provided across LATAs, states, and often countries. *See, e.g., Triennial Review Order* ¶ 302 ("Enterprise market customers . . . prefer a single provider capable of meeting all their needs at each of their business locations which may be in multiple locations in different parts of the city, state or country.").

In analyzing competition for this segment of the market, therefore, the inquiry is very different from the analysis in the *Triennial Review Order* of whether competing carriers are impaired in the deployment of facilities to enterprise customers. In the *Triennial Review Order*, the Commission adopted a framework for a "granular route-specific review" to identify the precise locations where competitive local facilities have been deployed. Regardless of the merits of the Commission's decision in that context, what is at issue here are sophisticated data services that are provided on a nationwide basis, either on some carriers' nationwide networks or by stringing together the networks of multiple carriers. There can be no serious dispute that, for these services, there is extensive competition and that local telephone companies could not possibly exercise market power.

As the Commission has recognized, competitive carriers first began providing high-speed data services to large businesses in central business districts more than 15 years ago.⁷⁴ Today, the largest providers of broadband services to enterprise customers by far are AT&T and MCI. These two carriers control nearly two-thirds of the nationwide market for Frame Relay and

⁷⁰ See Vivato Press Release, *Vivato Redefines Wireless LAN Coverage with Industry's First Outdoor Wi-Fi Switch* (Mar. 17, 2003).

⁷¹ *Id.* (quoting Vivato chairman and CEO Ken Biba).

⁷² *See, e.g., Third Advanced Services Report* ¶ 80 ("Providers are beginning to deploy third generation wireless (3G) systems."); AT&T Wireless Press Release, *AT&T Wireless Outlines Actions It Will Take to Meet 2003 Goals* (Jan. 28, 2003) (announcing plans to rollout W-CDMA in four cities (Dallas, San Diego, San Francisco, and Seattle) by year-end 2004).

⁷³ *Third Advanced Services Report* ¶ 80.

⁷⁴ *See, e.g., Expanded Interconnection with Local Telephone Company Facilities, Amendment of the Part 69 Allocation of General Support Facility Costs*, Report and Order and Notice of Proposed Rulemaking, 7 FCC Rcd 7369, ¶ 4 (1992).

ATM, which are the primary broadband services used by enterprise customers.⁷⁵ As one analyst has noted, these carriers “own the U.S. frame relay market, have scale economies and are best positioned to influence users and move the market.”⁷⁶ These two carriers also dominate the enterprise market as a whole. According to a Merrill Lynch report, for example, AT&T and MCI now control approximately 59 percent of all corporate accounts.⁷⁷ AT&T’s Chairman has recently boasted that the company is now “serving virtually all Fortune 1,000 companies”⁷⁸

Numerous other competing carriers also provide broadband services to large-business customers.⁷⁹ According to data that competing carriers report to the FCC, CLECs as a whole serve 23 percent of the lines provided to “medium and large business, institutional, and government users,” not even counting the tens of millions of high-capacity data lines that these carriers provide to enterprise customers.⁸⁰ Competing carriers earn approximately half of all their revenues from data services.⁸¹ As Morgan Stanley notes, “[i]n the enterprise market, competition remains intense in the small and medium and the large enterprise segments.”⁸²

While the Bell companies compete in the provision of these services as well, they are playing catch-up because they had been limited in the right to provide interLATA packet-switching services, despite the fact that customers typically desire a single carrier to provide both

⁷⁵ See R. Kaplan, IDC, *U.S. Frame Relay Services Forecast and Analysis, 2001-2006*, Fig. 4 (Apr. 2002) (“*IDC Frame Relay Report*”) (AT&T and WorldCom accounted for approximately 68% of the nationwide frame relay market in 2001); R. Kaplan, IDC, *U.S. ATM Services Forecast and Analysis, 2001-2006*, Fig. 4 (June 2002) (“*IDC ATM Report*”) (AT&T and WorldCom accounted for 44% of the nationwide ATM market in 2001) (AT&T and WorldCom accounted for 63.3% of the combined nationwide ATM/frame relay market in 2001, based on revenue).

⁷⁶ Stratecast Partners, *ATM and Frame Relay Market Assessment* at 12 (Sept. 2001) (“*Stratecast ATM/Frame Relay Report*”).

⁷⁷ A. Quinton, et al., Merrill Lynch Capital Markets, Investext Rpt No. 7207766, *The Telecommunicator – WorldCom Survey Results – Industry Implications – Industry Report* at * 2-3 (Feb. 6, 2003).

⁷⁸ Presentation of David Dorman, Chairman and CEO, AT&T, Goldman Sachs Communacopia XII Conference, at 4 (Oct. 1, 2003).

⁷⁹ The FCC already has recognized that “it is precisely in the provision of services like frame relay that competition is most intense, and we acknowledge the sensitivity of the LECs’ position as they face increasing competition, especially regarding these services that are likely to be related to nonregulated and highly competitive services.” *Policy and Rules Concerning Rates for Dominant Carriers*, Memorandum Opinion and Order, 8 FCC Rcd 7474, ¶ 63 (1993).

⁸⁰ Industry Analysis and Technology Division, Wireline Competition Bureau, FCC, *Local Telephone Competition: Status as of December 31, 2002* at Table 2 (June. 2003); *Triennial Review Order* ¶ 300 & n.872 (acknowledging that the FCC’s data “does not count” high-capacity “special access lines”); *AT&T 2Q Earnings Conference Call* (July 23, 2002) (AT&T provides “more than 40 million DS0 equivalents,” the majority of which are high-capacity data lines provided to enterprise customers).

⁸¹ New Paradigm Resources Group, *CLEC Report 2003*, Chapter 2 at 19 (17th ed., 2003).

⁸² Morgan Stanley Equity Research, *Wireline Telecom Services – Ice Age II: The Return of the Scenario Analysis* at 34 (May 12, 2003).

intraLATA and interLATA packet switching.⁸³ As Morgan Stanley has recently found, “the Bells do not yet have the capabilities to compete” in the “large enterprise market.”⁸⁴ The Bell companies represent only 14 percent of the revenues for broadband services provided to large-enterprise customers.⁸⁵ Verizon’s share of the nationwide market for these services is less than 3.5 percent.⁸⁶ Thus, local telephone companies plainly do not have market power in the provision of broadband services to large-enterprise customers, and there is no basis to continue to regulate them as if they did.

Conclusion

The Commission has already recognized that unnecessary regulation acts as an impediment to much-needed investment for advanced services. Because all telco-provided broadband services face significant competitive alternatives, including cable operators in every geographic market and for all customer segments, the Commission should remove them from existing Title II obligations.

Sincerely,

/S/ Dee May

cc: W. Maher
M. Carey
B. Olson
W. Kehoe

⁸³ As noted by industry analysts and CLECs alike, Bell companies had been limited in their broadband offerings due to restrictions on the provision of interLATA services. See, e.g., *Stratecast ATM/Frame Relay Report* at 12 (“Thus far, the RBOCs have held a very small share of the frame relay market, primarily because they have only been allowed to offer intra-LATA services.”); MCI WorldCom, *Metro Frame Relay Service* (WorldCom’s Metro Frame Relay service “offers an aggressive price position compared to that offered by LECs. LECs can offer local (intraLATA) service, but they aren’t able to cross LATA boundaries or move into other Regional Bell Operating Company (RBOC) territories. WorldCom is in the unique position to provide both interLATA (IXC) and intraLATA frame relay service by capitalizing on our wholly-owned nationwide network.”), at http://www.isp-select.com/MCI/Frame_Relay1.htm.

⁸⁴ Morgan Stanley Equity Research, *Wireline Telecom Services – Ice Age II: The Return of the Scenario Analysis* at 34 (May 12, 2003).

⁸⁵ See *IDC ATM Report* Fig. 4 (the Bell companies accounted for 16.5% of the nationwide ATM market in 2001); *IDC Frame Relay Report* Fig. 4 (the Bell companies accounted for 14% of the nationwide frame relay market in 2001) (the Bell companies accounted for approximately 14% of the nationwide ATM/frame relay market in 2001, based on revenue).

⁸⁶ See *IDC ATM Report* Fig. 4 (Verizon accounted for 3.6% of the nationwide ATM market in 2001); *IDC Frame Relay Report* Fig. 4 (Verizon accounted for 3.4% of the nationwide frame relay market in 2001) (Verizon accounted for approximately 3.44% of the nationwide ATM/frame relay market in 2001, based on revenue).