

undersea cable capacity along the most-traveled international corridors, i.e., from the United States to Europe (the Atlantic route), from the United States to the Caribbean and Central and South America (the Caribbean/Latin America route), and from the United States to Asia (the Pacific route), has grown dramatically in recent years.

Recent Industry Trends. Foreign market liberalization has encouraged many new consortia and non-consortia cables to be developed. One effect of these developments has been increased capacity. Indeed, it has been estimated "that the available capacity in place across the Atlantic will grow from just under 800 thousand 64 Kbit/s circuits in 1998 to more than 10 million circuits by 2001."⁹⁷ At the same time, "growth for capacity across the Pacific is expected to exceed this growth rate and reach more than 12 million 64 Kbit/s circuits by the end of 2000." OECD Report at 14. Even these remarkable growth rates may understate actual growth: since these figures were estimated, plans for new cable systems have been announced, as discussed infra pp. 64, 68.

Nor is such growth surprising. According to a study commissioned by the European Communities, from 1988 to 1998, "[t]rans-Atlantic capacity as a whole between Europe and the United States grew by a factor of 50." Final Report to the Commission of the European Communities, "Study on Submarine Cable Landing Rights and Existing Practices for the Provision of Transmission Capacity on International Routes" at 7 (Aug. 1999) (EC Contract No. 48485) ("EC Study"). The study further reports that, within just the past two years, "[t]he increase of activated trans-Atlantic cables between the U.S. and Western Europe over the preceding year was

⁹⁷ OECD, "Building Infrastructure Capacity for Electronic Commerce Leased Line Developments and Pricing" at 14 (Aug. 1999) ("OECD Report").

35% in 1997 and 98% in 1996." Id. Moreover, "[t]hat capacity is projected to almost double in 1999, and to increase another six-fold by 2000-2001." Id.⁹⁸ In dollar terms, total investment in trans-Atlantic submarines was estimated to be \$3 billion in 1997; estimates for 2000 exceed \$6 billion. Id.⁹⁹ Combined with the opening of European markets, this increased capacity has resulted in "plummeting prices for units of capacity." Id. at 8. Indeed, "[i]n those markets where there are multiple suppliers, the buying and selling of telecommunication capacity is coming to resemble the market for any other commodity." OECD Report at 15.

In the WorldCom/MCI Order, the Commission examined competition in the submarine cable market by dividing the market along three routes, the Atlantic, Pacific, and Caribbean/Latin America corridors. WorldCom/MCI Order ¶ 84.¹⁰⁰ The Commission then focused on ownership of U.S. half-circuits to isolate any routes for which anticompetitive issues might exist. Id. ¶ 87.¹⁰¹ In order to include all market participants (including those that would enter within one year), the Commission included cables currently serving customers and those cable systems that were to be

⁹⁸ This final number assumes successful deployment of Project Oxygen, which is discussed infra pp. 62-63, 66, 68. EC Study at 7.

⁹⁹ Six billion may underestimate the actual investment, as it reportedly does not include several cable projects announced in early 1999. Id. at 7 n.10.

¹⁰⁰ Sprint holds a 26.7% interest in Iridium U.S. L.P., a 26.7% interest in Iridium Canada Communications, Inc. and a 3.8% interest in Iridium L.L.C. Iridium U.S., L.P. holds a transmit/receive earth station authorization, a blanket authorization for portable handheld earth terminals, and an international 214 authorization for global facilities-based and resale services.

¹⁰¹ More recently, the trend is towards owning whole circuits. In those instances, the FCC would examine ownership for the U.S. half of the whole circuit. WorldCom/MCI Order ¶ 87 & n.254.

"operational" by year end 1999, *i.e.*, those cables for which a U.S. cable landing license had been granted and for which a construction contract had been executed. *Id.* ¶ 88.

Since then, numerous other cable systems have been or are being deployed. Several of the cable systems that had been announced at the time of the WorldCom/MCI Order but lacked a license or an executed construction contract, have now satisfied that Order's requirement. As a result, the capacity of these cables must now be considered in any analysis of international transport capacity. For the Atlantic corridor,

- On August 20, 1999, the FCC granted a U.S. cable landing license for the Columbus-III cable.¹⁰² Columbus-III will extend between the United States, Italy, Spain, and Portugal and will be equipped with two fiber optic pairs operating at 2.5 Gbps per wavelength per fiber pair. Columbus-III License at 2.¹⁰³ With the construction contract having been awarded last year,¹⁰⁴ the cable is expected to be operational in the near future. MCI WorldCom has less than a 5% ownership interest in Columbus-III. Sprint has no ownership interest.
- On March 15, 1999, the FCC granted ten U.S. cable landing licenses for the privately owned OXYGEN Network cable.¹⁰⁵ The first phase of the project will include 168,000 kilometers of fiber optic cable "linking together a total of 78 countries and locations on all continents except Antarctica." Oxygen License at 1. The undersea portion of the network consists of four amplified fiber pairs with a total transmission capacity of 640 Gbps, and twelve unamplified fiber pairs with transmission capacity of 1.92 Terabits per second ("Tbps"). *Id.* at 2. Each fiber "will support sixteen-color wavelength division multiplexing, with each color operating at a transmission rate of

¹⁰² Joint Application for a License to Land and Operate the Columbus-III Cable, File No. SCL-98-005, Cable Landing License (TD, IB Aug. 20, 1999) ("Columbus-III License").

¹⁰³ "[T]he submerged plant has been designed to support up to eight wavelengths per fiber pair." Columbus-III License ¶ 4.

¹⁰⁴ Pirelli News, "Pirelli, Tyco and Alcatel Sign A 236 Million Dollar Contract for the Columbus 3 Submarine Link" at 1 (Feb. 11, 1998) <www.pirelli.com/cgi-bin/news/shownews.pl?id=108>.

¹⁰⁵ Project Oxygen (USA) LLC Application for a License to Land and Operate A Private Fiber Optic Submarine Cable System, File No. SCL-LIC-19981014-00020, Cable Landing License (TD, IB Mar. 15, 1999) ("Oxygen License").

10 Gbps." Id. Completion of the Atlantic portion of the network is slated for 2001, with the entire network scheduled for operation by 2002.¹⁰⁶ A contract to supply ships for the construction, installation and maintenance of the network was executed in the second quarter of 1999.¹⁰⁷ Moreover, Alcatel Submarine Networks, NEC Corp., and Tyco Submarine Systems, Ltd. have contracted to provide the network's submarine cable links.¹⁰⁸ Neither Sprint nor MCI WorldCom has an ownership interest in the OXYGEN cable system.

- On October 1, 1999, the FCC granted a U.S. cable landing license for TAT-14.¹⁰⁹ Fifty-one carriers, including AT&T, BellSouth, Cable & Wireless, GTE, IXC, KDDA, MCI WorldCom, PGE, RSL COM, Sprint, STAR, Startec, Swisscom, TeleBermuda, Teleglobe, Telenor, Telia, and Viatel, will construct TAT-14. TAT-14 License ¶ 2. Using WDM technology, TAT-14, which is scheduled to be operational by December 2000, will be able to attain speeds of up to 640 Gbps. Id. ¶¶ 2, 5. KDD Submarine Cable Systems was awarded a \$1.2 billion contract to lay the cable.¹¹⁰ MCI WorldCom has a 13% ownership interest in TAT-14; Sprint has less than a 5% ownership interest.
- Also on October 1, the FCC approved the cable landing license for the FLAG Atlantic-1 cable system connecting the United States, the United Kingdom, and France.¹¹¹ The dual cable system is set to be operational by October 2000. FLAG A-1 License ¶ 4. While initially designed to handle 1.28 Tbps, recent news reports state that FLAG Atlantic-1's capacity is to be almost doubled to 2.4 Tbps. Alcatel was

¹⁰⁶ Project Oxygen Closer to First Round of Financing at 1 (May 3, 1999) <www.teledotcom.com/news0599/news050399_3.html>.

¹⁰⁷ Project OXYGEN Newsletter, "Issue 3, Supply Contract Signed with Hyundai Mipo" at 1 (1999) <www.projectoxygen.com/newsletter3-06_ships.html>.

¹⁰⁸ See id., "Optical Fiber -- It Isn't Just Glass" at 1 (1999) <www.projectoxygen.com/newsletter3-09_glass.html>.

¹⁰⁹ Joint Application for a License to Land and Operate A Submarine Cable System, File No. SCL-LIC-19990303-00004, Cable Landing License (TD, IB Oct. 1, 1999) ("TAT-14 License").

¹¹⁰ IDG News Service, Mary L. D'Amico, "Telecom Carriers Invest \$1.5 Billion in Transatlantic Cable" at 1 (Sept. 3, 1998) <thestandard.com/articles/article_print/0,1454,1578,00.html>.

¹¹¹ Application for a License to Land and Operate A Private Fiber Optic Submarine Cable System, File No. SCL-LIC-19990301-00005, Cable Landing License (TD, IB Oct. 1, 1999) ("FLAG A-1 License").

awarded the construction contract for the FLAG Atlantic-1 system.¹¹² Neither Sprint nor MCI WorldCom has an ownership interest in FLAG Atlantic-1.

In addition to these trans-Atlantic cables, plans for additional cables have since been announced. For example,

- Global Crossing plans to construct a "new 2.5 Terabit-Per-Second Atlantic Cable with capacity coming on stream in the first quarter of 2001." OECD Report at 14. Global Crossing indicates that the cable "features the world's highest undersea capacity and adds 25 times the capacity of all existing transatlantic cables." *Id.* For comparison purposes, one terabit per second is "enough capacity to carry more than 70 million simultaneous telephone calls."¹¹³ Neither Sprint nor MCI WorldCom has an ownership interest in this system.
- Last year, Alcatel and Tyco Submarine Systems Ltd. were awarded a \$150 million supply contract for the MAYA 1, a new submarine cable connecting the U.S., Mexico, the Cayman Islands, Honduras, Costa Rica, Colombia, and Panama. With an initial capacity of 15 Gbps, the cable system is upgradeable to 40 Gbps.¹¹⁴ MCI WorldCom has a 7.5% ownership interest in MAYA 1; Sprint has a 17% ownership interest.
- In July of this year, Worldwide Fiber Inc. executed a \$630 million contract with Tyco Submarine Systems Ltd. to supply the Hibernia undersea cable system, which will link the U.S., Canada, Ireland, and England.¹¹⁵ Neither company has an ownership interest in Hibernia.

Similarly, several trans-Pacific cable systems are also in the late stages of development:

¹¹² Fiber Optics Online, "FLAG Telecom, GTS Increase FA-1 Capacity" at 1 (Oct. 27, 1999) <news.fiberopticonline.com/content/news/article.asp>.

¹¹³ TeleGeography 1999, "Global Telecommunications Traffic Statistics and Commentary" at 92, Figure 1 (1998) ("TeleGeography").

¹¹⁴ Alcatel Press, "Alcatel to Supply Major Part of More Than US\$150 Million Undersea Network in Caribbean" at 1 (Sept. 22, 1998) <www.alcatel.com/telecom/snd/refs/cibles/atln/maya1.htm>.

¹¹⁵ "Worldwide Fiber Inc. Signs 630 Million Dollar Contract with Tyco Submarine Systems Ltd. as Supplier for Undersea Cable System Network" at 1 (July 14, 1999) <www.wwfiber.com/html/news_14july1999.html>.

- On February 11, 1998, the FCC granted MFS International, Inc.'s application for a U.S. cable landing license for the Southern Cross cable system.¹¹⁶ The system will connect the U.S. mainland and Hawaii to Australia and New Zealand. SC License ¶ 1. Southern Cross has a minimum design capacity of 2.5 Gbps per fiber pair and is also WDM-capable. *Id.* ¶ 4. In October 1998, Alcatel and Fujitsu were awarded an \$800 million contract to supply equipment to build the undersea cable.¹¹⁷ The cable segment from New Zealand to Hawaii was completed at the end of October 1999, with the final segment, from Hawaii to California scheduled for service in June 2000.¹¹⁸ MCI WorldCom is a 10% shareholder in the consortium that is developing Southern Cross; Sprint has an insignificant ownership interest in the cable.
- Last year, the FCC also awarded a cable landing license to PC Landing Corp., indirectly owned by Global Crossing, for the Pacific Crossing -- or PC-1 -- cable system.¹¹⁹ PC-1 will connect the states of Washington and California with Japan. PC-1 License ¶ 3. "PC-1 will be a state-of-the-art, optically amplified fiber system, consisting of four optical fiber pairs, two for service and two for protection, employing [WDM]." *Id.* Ultimately, the system is designed to support 80 Gbps, upgradeable to a minimum of 160 Mbps using DWDM. *Id.* Initial capacity is 512 MIUs and operation is set for March 2000. *Id.* ¶ 4. The construction contract, worth \$1.2 billion, was awarded to Tyco Submarine Systems Ltd.¹²⁰ Neither Sprint nor MCI WorldCom has an ownership interest in this system.
- This summer, the FCC also granted a cable landing license to some 32 owners, including AT&T, Com Tech, Frontier, GTE, Level 3, MCI WorldCom, PGE, PRIMUS, PSINet, Qwest, RSL, SBC, Sprint, Teleglobe, and Viatel, for the Japan-

¹¹⁶ Application for a License to Land and Operate A Common Carrier Fiber Optic Submarine Cable, File No. SCL-97-005, Cable Landing License (TD, IB Feb. 11, 1998) ("SC License").

¹¹⁷ The Industry Standard, Rob Guth, "Alcatel, Fujitsu Win \$800 Million Cable Contract" at 1 (Oct. 6, 1998) <thestandard.net/articles/article_print/0,1454,1932,00.html>.

¹¹⁸ ComputerWorld News, Gillian Law, "Southern Cross Reaches Hawaii" (Oct. 26, 1999) <www.idg.co.na/nzweb/nzweb.shtml>.

¹¹⁹ Application for a License to Land and Operate A Private Fiber Optic Submarine Cable, File No. SCL-98-006, Cable Landing License (TD, IB Nov. 23, 1998) ("PC-1 License").

¹²⁰ The BSX, "Tyco International's Submarine Systems Unit Receives \$1.2 Billion Award for Pacific Cable" at 1 (May 11, 1998) <www.bsx.com/bsx-shorts/may98/tycosub.htm>.

U.S. cable network ("JUS CN").¹²¹ The JUS CN "will consist of four fiber pairs equipped to operate at 40 Gbps. The [total] capacity of each fiber is . . . 16,128 MIUs." JUS License ¶ 6. The "network is planned for expansion to operate at 640 gigabits per second . . . using 10 gigabits per second technology, which will accommodate eight million simultaneous voice calls or equivalent data capacity."¹²² The network, which should be operational no later than June 30, 2000, will link the mainland United States to Hawaii, Japan, and points beyond. JUS License ¶ 6. Supply contracts have been signed with Alcatel Submarine Networks, Fujitsu, NEC and KDD-SCS.¹²³ MCI WorldCom has a 17% ownership interest in JUS CN; Sprint has a 6% interest.

- As discussed above, Project OXYGEN will also deploy trans-Pacific cables to connect some 76 countries, including cities in Australia, China, Guam, Indonesia, Japan, South Korea, and Taiwan. Oxygen License, Appendix (landing points). As noted, neither party has an ownership interest in OXYGEN.

Also, for the Caribbean/Latin American corridor, the following cable systems have landing licenses and executed construction contracts:

- On November 10, 1998, the Commission granted a cable landing license to several carriers, including AT&T, MCI, Embratel, PGE, Sprint, Teleglobe, GTE, WorldCom, Star, and WorldXChange, for the operation of a cable connecting Florida, Puerto Rico, the U.S. Virgin Islands, Martinique, Curacao, Trinidad, Venezuela, French Guyana, and Brazil, the so-called Americas-II cable.¹²⁴ Americas-II "will consist of three interconnected rings . . . , each operating at 2.5 [Gbps] per wavelength" as well as a "dedicated link between Curacao and Venezuela." Americas-II License ¶ 5. Each fiber pair in each of the three rings will be equipped initially for a capacity of 1,008 MIUs. *Id.* It is expected that the cable will be operational by year end. Tyco Submarine Systems Ltd. and Alcatel Submarine Networks were jointly awarded the

¹²¹ Joint Application for a License to Land and Operate A Submarine Cable Network, File No. SCL-LIC-19981117-00025, Cable Landing License (TD, IB Nov. 23, 1998) ("JUS License").

¹²² Japan-U.S. Cable Network, "Japan-US Cable Network Continues To Break New Ground" at 1 <www.japan-us.org/mainpage.html>.

¹²³ Japan-U.S. Cable Network, "Japan-US Cable Network Owners Sign Construction Agreement" at 1 <www.japan-us.org/press1.html>.

¹²⁴ Joint Application for a License to Land and Operate A Digital Submarine Cable System, File No. SCL-98-003, Cable Landing License (TD, IB Nov. 10, 1998) ("Americas-II License").

\$310 million supply contract last year.¹²⁵ MCI WorldCom has an 11% ownership interest; Sprint, 14%.

- On March 18, 1999, the Commission granted cable landing licenses for the Mid-Atlantic Crossing ("MAC") cable system, indirectly owned by Global Crossing, which will extend from the U.S. to St. Croix, U.S. Virgin Islands.¹²⁶ The MAC will initially use four wavelengths operating at 2.5 Gbps, and will be capable of expanding to a minimum capacity of 40 Gbps using DWDM. MAC License ¶ 3. The MAC cable is expected to be operational by December 1999. *Id.* ¶ 4. Alcatel was awarded the supply contract to build the cable.¹²⁷ Neither applicant has an ownership interest in this cable system.
- On March 18, 1999, the FCC issued cable landing licenses for the Pan-American Crossing ("PAC") cable, indirectly owned by Global Crossing Ltd., to extend among the U.S., Mexico, Panama, and the U.S. Virgin Islands.¹²⁸ Transmission capacity will be 20 Gbps, upgradeable to 40 Mbps using DWDM. PAC License ¶ 3. The PAC cable is expected to be operational by February 2000. *Id.* ¶ 4. Tyco Submarine Systems Ltd. won the \$365 million construction contract in July 1998.¹²⁹ Neither Sprint nor MCI WorldCom has an ownership interest in PAC.
- On July 2, 1999, the FCC granted a cable landing license for the privately owned Americas Region Caribbean Ring System (or "ARCOS-1"), extending between the U.S., the Caribbean, Puerto Rico, Central and South America and Mexico.¹³⁰ The ARCOS-1 cable will be a state-of-the-art WDM optically amplified fiber system with a

¹²⁵ "Tyco International Ltd. -- Lead Supplier in US\$310 Million Americas II Supply Contract" at 1 (Mar. 2, 1998) <investors.tycointl.com/news/19980302-5261.htm>.

¹²⁶ Application for a License to Land and Operate A Private Fiber Optic Submarine Cable System, File No. SCL-LIC-19981030-00023, Cable Landing License (TD, IB Mar. 18, 1999) ("MAC License").

¹²⁷ Press, "Alcatel Wins US\$200 Million Undersea Network in the Atlantic" at 1 (June 9, 1998) <www.alcatel.com/telecom/snd/refs/cibles/atlh/mac.htm>.

¹²⁸ Application for a License to Land and Operate A Private Fiber Optic Submarine Cable System, File No. SCL-LIC-19981103-00022, Cable Landing License (TD, IB March 18, 1999) ("PAC License").

¹²⁹ The BSX, "Tyco to Commence Construction of New US\$365 Million Undersea Fibre Optic Cable System" at 1 (July 22, 1998) <www.bsx.com/bsx-shorts/jul98/tycosubs.htm>.

¹³⁰ (Application for a License to Land and Operate A Private Fiber Optic Submarine Cable System, File No. SCL-LIC-19981222-00032, Cable Landing License (TD, IB July 2, 1999).

capacity of close to 1 Tbps. A consortium led by a Siemens subsidiary and Tyco Submarine Systems Ltd. will supply and install the 9000 kilometer submarine cable. The network is expected to be operational by the middle of 2000.¹³¹ MCI WorldCom and Sprint own minimal interests in ARCOS.

- As discussed above, Project OXYGEN will also deploy trans-Caribbean/Latin American cables to connect some 76 countries, including cities in Antigua & Barbuda, Argentina, Bahamas, Barbados, Brazil, Chile, Colombia, Dominican Republic, Ecuador, Guatemala, Panama, Peru, Puerto Rico, Trinidad & Tobago, Uruguay, and Venezuela. Oxygen License, Appendix (landing points). Neither Sprint nor MCI WorldCom has an ownership interest in this system.

At least one additional cable system is also currently planned for the Caribbean/Latin

America route:

- In July 1999, GlobeNet Communications Group Ltd. awarded Alcatel a supply contract to construct Atlantica-1, a 1.28 Tbps network connecting North and South America.¹³² Neither Sprint nor MCI WorldCom has an ownership interest in this system.

In September 1998, when the Commission issued the WorldCom/MCI Order, the FCC estimated the following market shares for international transport:¹³³

<i>Trans-Atlantic:</i>	Global Crossing	40%
	MCI WorldCom	23.3%
	AT&T	7.8%
	Sprint	1.6%
<i>Trans-Pacific:</i>	AT&T	12.1
	MCI WorldCom	9.6%
	Sprint	6.7%

¹³¹ Fiber Optics Online, "Siemens-Led Consortium Wins \$285 Million Supply Contract for Caribbean Network" at 1 (Aug. 25, 1999).

¹³² Alcatel Press, "GlobeNet Awards Alcatel Contract as Part of Atlantica-1 Undersea Cable Project" at 1 (June 24, 1999).

¹³³ The FCC used these same market shares in its October 1999 analysis of the AT&T/BT joint venture. AT&T/BT Order ¶¶ 48-49.

Caribbean Latin American:

U.S. -	AT&T	45.1%
Virgin Islands/ Puerto Rico	MCI WorldCom Sprint	21.1% 8.5%
Virgin Islands/ Puerto Rico - Latin America	MCI WorldCom AT&T Sprint	29.7% (including Embratel) 21.5% 10.9%
Virgin Islands/ Puerto Rico - other Caribbean	AT&T MCI WorldCom Sprint	36.9% 12.1% 5.2%

WorldCom/MCI Order ¶¶ 92, 94, 97-99.¹³⁴ Even though it found concentration would increase in each region, the FCC nonetheless concluded that it was unlikely that anticompetitive effects would result from the merger, in light of the ease of entry and the substantial amount of non-MCI WorldCom capacity scheduled to become operational within a year. Id. ¶ 100; see also AT&T/BT Order ¶¶ 48-49.¹³⁵ Given the continued trends in capacity growth, the same conclusion is warranted here. Such a finding is consistent with the Commission's conclusion that the market for international transport is "highly competitive . . . [and that] there are thousands of routes to the 240 countries of the world." AT&T/BT Order ¶ 75.

¹³⁴ Because Sprint operates long distance facilities in Brazil, the transaction is also subject to review under Brazilian law.

¹³⁵ The Commission discussed several factors, including recent rapid deployment of cables, an increase in capacity demand, and an increase in the number of cables to conclude that barriers to entry are low. WorldCom/MCI Order ¶ 100 n.288. In addition, the Commission noted the effect of DWDM upgrades and the fact that pure ownership figures did not account for control of existing capacity held by long-term leaseholders. Id. ¶¶ 101, 104. These factors continue to accurately describe the state of the market today.

a. *Mass market*

The market for international mass market today requires consumers to presubscribe to the same carrier for both domestic and international long distance. WorldCom/MCI Order ¶ 128. Thus, the analysis provided earlier for the domestic long distance mass market segment a priori holds true for its international counterpart. In examining the effect of a merger on this market, the Commission has looked to whether one of the merging entities "possess[es] any special retail assets or capabilities that would make it more likely than other carriers to become a major participant in the mass market." Id. ¶ 129.

As with domestic long distance, consumers today have demonstrated a willingness to switch international providers when presented with more desirable terms. See id. ¶ 41. Switching is quick and may be accomplished over the telephone. See PIC Change Order ¶ 4. Moreover, regardless of pre-subscription to a primary carrier, customers can easily use dial-around and Internet telephony services to obtain service on a transactional basis. Some carriers have also specifically targeted ethnic or national groups with affinities for particular international routes.¹³⁶

There are numerous competitors in this market, and entry barriers are low, making the loss of a single competitor inconsequential. Virtually all the companies offering domestic long distance services to the mass markets also offer international services. Similarly, because sufficient excess capacity exists, the potential anticompetitive effects of increased concentration are eliminated. See WorldCom/MCI Order ¶ 78.¹³⁷

¹³⁶ See, e.g., CNET News.com, "Telmex Aims to Create 'Hispanic Internet'" at 1 (June 14, 1999) <news.cnet.com/news/0-1005-200-343593.html?tag=st.cn.1> (stating intentions to "tackle the Hispanic market in the U.S.>").

¹³⁷ The Commission also rejected any claims regarding the availability of wholesale international transport and the merged entity's incentives to provide such services. See

Entrants. In addition to AT&T, GTE, and the looming entry of the BOCs, "[t]here are hundreds of other carriers, including some facilities-based and many resale carriers, that offer [international] services used primarily by mass market customers." Id. ¶ 125. Indeed, each of the carriers that is identified in the domestic mass market discussion is an equally viable competitor in this market, due, inter alia, to the fact that end users select a single carrier for both domestic and international service. Moreover, with the implementation of market access commitments made by countries as part of the World Trade Organization's Basic Telecom Agreement, any remaining barriers to international entry have disappeared. AT&T/BT Order ¶ 50 ("U.S. carriers will be able to obtain operating agreements from new entrants as well as incumbents in these countries."). Moreover, numerous foreign carriers, including Cable & Wireless, Inc., Interice Ltd., and Swisscom North America, Inc., have been authorized as United States international service providers since the February 1998 implementation of the WTO Agreement.

In addition, the effect of RBOC entry on the market shares for international mass market long distance should be at least as strong as that for domestic long distance. Thus, Bell Atlantic and other RBOCs are expected to gain a substantial share of the market -- up to 30% by some estimates -- within two years of entry. AT&T International Non-Dominant Order ¶ 6 & n.5. Such a showing is consistent with the Commission's expectation that the RBOCs -- "large, well-financed competitors with significant customer bases to the U.S. international market" -- would be "well-positioned to obtain substantial shares in that market." Id.; see also WorldCom/MCI Order ¶ 129 (identifying BOCs as likely major international service providers within their regions). Finally, the increasing ubiquity of dial-around services, pre-paid calling cards and Internet

WorldCom/MCI Order ¶ 108 (the merged entity's rational response would be to continue

telephony, which are already exerting downward pressure on international rates, will also be available to combat any attempted anticompetitive pricing practices.

b. *Larger business market*

As noted, larger business customers typically purchase many different types of services, including specialized business services, at greater volumes. WorldCom/MCI Order ¶ 122. The Commission has repeatedly indicated that "[t]he provision of services to larger business customers depends in large part on the ability to obtain critical inputs such as international transport capacity and operating agreements with carriers on the foreign end, as well as the technical ability to provide the services demanded by larger business customers." Id. ¶ 131. Moreover, as with domestic long distance, the international long distance large user market segment is characterized by recent increases of supply coupled with sophisticated buyers. See id. ¶¶ 41 n.115, 130-32.

Recent Industry Trends. The Commission recently reconfirmed its analysis of the larger business market in its approval of the AT&T/British Telecom ("BT") joint venture. See AT&T/BT Order ¶ 47. The Commission clarified that global seamless services are "a combination of voice, data, video, and other telecommunications services that are offered by a single source or multiple sources over an integrated global or regional international network of owned or leased facilities." Id. ¶ 28. These offerings include advanced telecommunications offerings such as virtual private network and bandwidth management products. Id. ¶¶ 23-24.

While larger, multinational corporations may rely on one or multiple providers, they typically have "in-house communications experts or hire consultants to advise them about their multi-million dollar telecommunications purchases, and are often willing to change their suppliers

supplying wholesale transport rather than cede the revenue to a competitor).

when they can obtain better terms or to ensure they get the services that best meet their needs." Id. ¶ 25. They also have the option of self-provisioning or relying on "major telecoms equipment vendors [that] are taking decisive steps towards becoming principal operators of global networks." Id. ¶ 37 n.60. Regional providers are increasing their presence in this market as well. Id. ¶ 38.

Despite the fact that the joint venture was likely to increase concentration, the Commission nonetheless concluded that "the joint venture [would] not have an anticompetitive effect because there are no significant barriers to entry." Id. ¶¶ 44-45. In so finding, the Commission went so far as to clarify that, while BT was not a significant competitor in the U.S. market for global seamless services, even if BT had been, no harm would result because of the lack of entry barriers. Id. ¶ 45. Accordingly, although MCI WorldCom and Sprint are competitors in this segment of the market, the exit of one will not have an anticompetitive effect because there are low barriers to entry. See id. ¶ 47. As the Commission observed, even though concentration was increased in the AT&T/BT joint venture, where "competitors can freely obtain the necessary inputs and they have the technical assets and capabilities to provide global seamless services," it is unlikely that a carrier will be able to act anticompetitively. Id.

Entrants. The Commission identified multiple significant competitors in this market, including AT&T, BT, Global One,¹³⁸ C&W, and Equant. Id. ¶¶ 31-36. In addition to these

¹³⁸ Sprint, Deutsche Telecom, and France Telecom are discussing changes in ownership of Global One, and hope its status will be resolved in the near future. The Applicants will promptly notify the Commission of the outcome of those discussions as soon as practicable. In the meantime, Deutsche Telecom and France Telecom has each stated that it does not intend to remain a long-term shareholder in either Sprint or the new WorldCom.

existing providers, potential emerging competitors -- many of which are "building massive pipelines to transmit voice and data traffic across the United States and the world" -- include Teleglobe, KPNQwest,¹³⁹ Global Crossing/Frontier, GTS/Esprit, Level 3, Viatel, and several regional providers. Id. ¶¶ 37-38 & n.60. For example, Teleglobe, which is the "largest Canadian international services carrier, [has] announced plans to build an IP-based network that will reach 400,000 route miles on several continents."¹⁴⁰ Id. ¶ 37. GTS, Global Crossing, and Level 3 are also building expansive, super-fast global IP-based networks. Id. (GTS's network will carry traffic at speeds of up to 1.28 Tbps). Other regional providers, including IDT, Primus, Star, Pacific Gateway Exchange, and COLT, also have the ability to expand their existing offerings and quickly enter this market. Id. ¶ 38.

This analysis is confirmed by the marketplace. For example, Qwest indicates that it "has invested heavily in broadband international facilities, and [that] its Internet and web hosting businesses are also global in scope." Qwest/U S West Reply at 13. Moreover, its "network extends 1,400 miles into Mexico, and includes undersea cables in the Atlantic Ocean. In addition, Qwest is part of a joint venture with KPN, the Dutch Telecommunications Company (KPNQwest), which is building an 18,100 miles European network that will connect 39 cities.

¹³⁹ Indeed, "KPNQwest won its first large user account [in February 1999] with a \$50 million, three-year deal to provide high-speed data connectivity to DANTE, the European research network, linking up to 16 locations." Communications Week International, "News in Brief" at 4 (Feb. 15, 1999).

¹⁴⁰ Teleglobe is reportedly "the owner and operator of the world's third most extensive overseas telecommunications network." Excel Communications Hot News, "Top European Research and Education Networks Turn to Teleglobe for Capacity Upgrades" at 2 (Apr. 26, 1999) <www.excel.com/publicpages/hotnews/nordunet042699.html>. Among other things, Excel plans to use this network to "cater[]" to an expanding international retail customer base." Id.

Qwest also is part of a consortium that is building undersea fiber links to Japan and in the Asia Pacific Region." Id. at 13 n.24. After its merger with U S West, the new entity avers that it will be better able to "become a regional, national and global leader." Id. at 12-13.

As with other long distance markets, similar claims are made by other BOCs. For example, SBC/Ameritech and Bell Atlantic/GTE have expressly averred that merging will better enable them to enter and successfully compete for business customers in the global market. See SBC/Ameritech Order ¶ 262; BA/GTE Application at 13-14. Moreover, the FCC has specifically identified the BOCs as "likely to be major participants" in this market. WorldCom/MCI Order ¶ 132.

Other potential competitors include major telecommunications equipment vendors "[who] are taking decisive steps towards becoming principal operators of global networks they have built for service providers," regional providers, and larger companies that self-provision services. AT&T/BT Order ¶¶ 37-39 & n.60. For example, "[a]s an alternative to purchasing a package of global corporate communications from a global seamless service provider, corporate customers can (and do) purchase and manage, through their own telecommunications departments, the component piece-parts of those services from various facilities-based providers. In-house provisioning continues to be a significant source of supply of global seamless services for MNCs. One study found that 80% of Fortune 500 companies, for instance, spent up to half their total telecommunications budgets for in-house provisioning . . ." Id. ¶ 39.¹⁴¹

¹⁴¹ Finally, the Commission recognized that, in light of its WTO implementing rules, numerous foreign carriers could be expected to enter this market in the short term. AT&T/BT Order ¶ 50.

The presence of numerous existing competitors as well as potential entrants, in combination with the commoditization of international transport,¹⁴² is more than sufficient to deter any competitive concerns in the international larger business market.

* * * *

In sum, long distance services, even when isolated and subdivided along market subsegments, exhibit robust competition, low entry barriers, significant new entry and vigorously competitive performance. This merger cannot and will not alter these facts.

III. The Merger Will Significantly Enhance the Availability of Packages that Include Additional Services, Including Advanced Broadband and Wireless Services.

The ability to offer integrated packages of all distance voice and data telecommunications services will form a central part of the new companies' efforts to bring an even broader array of services to customers. Wireless, broadband data, and Internet services are the most important additions to a full package capability. See Donoghue Aff. at 6-7. Consumers increasingly desire to purchase such services from a single source, as the Commission has observed. See, e.g., BA/NYNEX Order ¶ 112 n.222. In the companies' experience a substantial percentage of consumers are interested in purchasing wireless telecommunications and Internet/data services in addition to wireline all distance services. See Donoghue Aff. at 6-7. Moreover, as new technologies are deployed, the once-clear line between voice and data is blurring. See Kelley/Mercer Decl. ¶¶ 49-54. MCI WorldCom and Sprint therefore strongly believe that they must be able to fulfill all of their customers' telecommunications needs, from wireless to wireline to Internet access, and everything in between.

¹⁴² See OECD Report at 15.