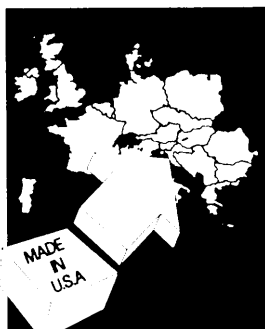


European Activities and Strategies of U.S. Telecommunications Firms

4

CHAPTER



U.S. telecommunications firms think their future growth increasingly depends on foreign markets.

AT&T CHAIRMAN ROBERT ALLEN'S BOLD GOAL of drawing 50 percent of the company revenues from overseas by 2000 reflects the strong trend for U.S. telecommunications service providers to expand their international activities (see table 4-1). The seven regional Bell holding companies (RBHCs)¹ have in the last few years also aggressively pursued international investments. It is estimated that they have invested nearly \$12 billion overseas since the divestiture of the Bell System, most of these investments since 1989.²

This trend extends to major carriers outside the United States as well. BT (formerly British Telecom) is catering to the communications needs of large multinational firms through its Project Cyclone. Just as Sprint dropped the 'U. S.' from its original name, BT's name change doubtless is intended to blur the explicit association with the United Kingdom. Telefonica, the Spanish national carrier, has embarked on a series of overseas investments in South and Central America, and in Eastern Europe.³

U.S. firms are looking abroad because of new opportunities and because their future depends increasingly on growth in foreign markets. Increased spending on telephone services in the United States is expected to remain relatively small compared with in-

creased spending on telephone service in other countries, which as described in the preceding chapter is expected to range from 30 to 80 percent.

In contrast with the European market, the U.S. telecommunications market is saturated. There are, in the United States, several layers of providers and within each layer there are many firms. The two largest groups are the interexchange carriers (commonly referred to as 'IXCS' and more commonly known as long-distance carriers) and the local exchange carriers (LECs). AT&T, MCI, and Sprint dominate the long-distance business, so much so that it is easy to assume mistakenly that they are the only three providers. In fact there are nearly 500 other firms offering long-distance services in the United States.⁴ Similarly, the seven regional Bell holding companies and General Telephone and Electronics (GTE) are by far the largest local exchange companies, accounting for 118 million access lines, nearly 85 percent of the 140 million telephone lines in the United States. GTE, unlike the 'Baby Bells' is not a regional company and does not operate under the Modified Final Judgment (MFJ), the court order codifying the divestiture agreement. In addition to these eight large firms, however, there are some 1,300 other local "independent" telephone

¹ The seven regional Bell holding companies (Ameritech, Bell Atlantic, Bell South, NYNEX, Pacific Telesis, Southwestern Bell, and US West) are the parent companies for the 21 Bell operating companies (BOCs). NYNEX, for example, consists of two operating companies, New York Telephone and New England Telephone. While the operating companies are by far the most significant component of the holding companies' assets, NYNEX, like the six other RBHCs, also controls other nonregulated businesses such as cellular properties and a publishing arm.. (Due to several reorganizations since divestiture, the number of BOCs has fluctuated. At the time of the divestiture, there were 22 BOCs; currently there are 21).

² Charles Mason, "Study Calls for Divestiture II," *Telephony*, Aug. 3, 1992, p. 9.

³ Maria Bird Pico, "Telefonica Pursues Overseas Opportunities," *Telephony*, Aug. 3, 1992, p. 9.

⁴ U.S. Department of Commerce, 1992 *U.S. Industrial Outlook*, January 1992.

Table 4-1.
Crossborder
Acquisitions by
Telephone Companies
Worldwide

a Only 2.8 percent (\$463million) of the value of cross-border transactions in 1990 are for foreign companies investing in the United States. *Financial Times*, "World Telecommunications Survey," Oct. 7, 1991, p. xxi.

	Number	Value (\$millions)
1985	5	\$ 399
1986	7	132
1987	7	63
1988	11	117
1989	50	2,694
1990	67	16,539a

SOURCE: BOOZ, ALLEN & HAMILTON, AS CITED IN THE *FINANCIAL TIMES*, WORLD TELECOMMUNICATIONS SURVEY, OCT. 7, 1991, P. XXI.

companies, typically serving rural communities.⁵

Since the major long-distance companies and LECs account for most of the telecommunications revenue in the United States, these firms are also those in the best position to exploit foreign opportunities, and will be the focus of the analysis in this chapter. However, the U.S. telecommunications industry consists of many other niche players, in cellular and paging services, data net-

working, satellite services, and value-added information services. Many of these companies, such as Millicom and EDS, have extensive international operations.⁶ There are also several telecommunications equipment manufacturers with experience in foreign markets that are using their strengths for entry into services. The two most notable cases are Motorola, with its ambitious Iridium project,⁷ and IBM, which is offering data networking and value-added services in Europe. IBM recently announced its intention to add voice capability to its European Information Network through the installation of asynchronous transfer mode (ATM) switches.⁸

U.S. regulations and overseas expansion

RBHCs argue that they are prohibited from entering some of the most promising domestic markets due to the MFJ,⁹ which

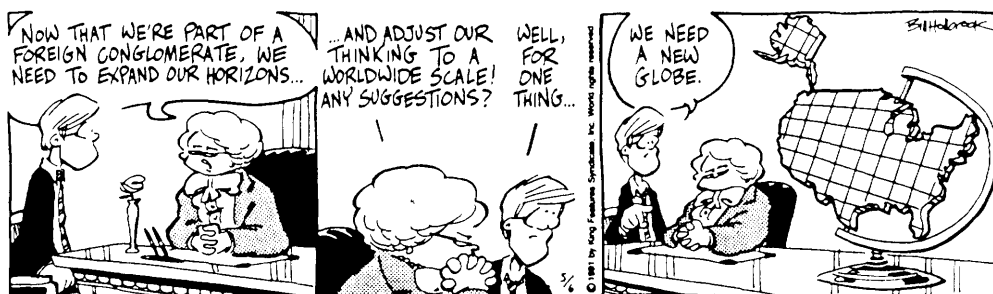
⁵ These were not spawned from the former Bell System. AT&T looked first to larger, lucrative markets when consolidating its nationwide operations. Smaller communities were left to build their own telephone networks. With the help of funding from the Rural Electrification Administration of the Department of Agriculture, these independents have survived and even thrived.

⁶ For example, Millicom was recently awarded one of four licenses by the United Kingdom's Department of Trade and Industry to offer telecommunications services in competition with BT and Mercury. "Telecom Sector Opens to More Competition," *Financial Times*, Aug. 12, 1992, p. 5.

⁷ Motorola, a U.S. manufacturer of radio communications equipment, plans to build a constellation of 66 (originally 77) low-Earth-orbit satellites (LEOS) to relay communications to and from anywhere in the world. This project, called Iridium, is one among several competing designs for a LEOS-based communications system. Countries or communities with inadequate telephone service could benefit from global communications but be spared the cost of installing such a network. A massive project, Iridium is still in the design phase and there are many technical and regulatory issues still to be resolved. For a more complete discussion, see U.S. Congress, Office of Technology Assessment, *The 1992 World Administrative Radio Conference: Issues for U.S. International Spectrum Policy*, OTA-BP-TCT-76 (Washington, DC: U.S. Government Printing Office, November 1991); and U.S. Congress, Office of Technology Assessment, *The 1992 World Administrative Radio Conference: Technology and Policy Implications*, OTA-TCT-549 (Washington, DC: U.S. Government Printing Office, May 1993).

⁸ John Blau, "IBM Plans Voice," *CommunicationsWeek International*, Feb. 1, 1993, p. 1.

⁹ *United States v. AT&T*, 552 F. Supp. at 228.



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settled the antitrust case against AT&T (see box 4-A), and certain laws, primarily the Cable Communications Policy Act of 1984. Under the MFJ, the seven RBHCs were restricted from three lines of business: inter-LATA¹⁰ long-distance service, the manufacture of telecommunications network and customer equipment, and the provision of information services. Additionally, the consent decree originally barred RBHCs from any service that was not "a natural monopoly service actually regulated by tariff."¹¹ The prohibition on information services has been lifted by the court, and several commit-

tees of the 103d Congress are working on legislation related to provisions of the MFJ.

Many analysts believe that the present regulatory structure and philosophy no longer suit the communications marketplace because advances in communications technologies are forcing a reexamination of what services are competitive. Cable television and telephone service, for example, could with some significant modifications be provided over a single network.¹³ RBHCs argue that: 1) the prohibitions preventing them from designing and manufacturing equipment unduly stifle or discourage their ability

¹⁰ "In the divestiture, the country was divided into 161 "local access and transport areas" (LATAs). All calls that cross a LATA boundary must be handled by one of the competitive long-distance carriers, while calls within the LATA bounds (often referred to as "medium-distance calls") do not.

¹¹ "Modification of Final Judgment, Section II(D)(3), *United States v. AT&T*, 552 F. Supp. at 228. This restriction, which effectively prevented the companies from non-telecommunications businesses, was subsequently removed at the triennial review in 1987.

¹² For one of the most provocative discussions of the increasing incompatibility between the organization of the industry and the technologies, see *The Geodesic Network* // and its antecedent report, *The Geodesic Network*. Peter W. Huber, Michael K. Kellogg, and John Thorne, *The Geodesic Network //: 1993 Report on Competition in the Telephone Industry* (Washington, DC: The Geodesic Company, 1992). Peter W. Huber, *The Geodesic Network: 1987 Report on Competition in the Telephone Industry* (Washington, DC: U.S. Department of Commerce, January 1987).

¹³ In filings with the National Telecommunications and Information Administration (NTIA) for its study on Infrastructure, Dale Hatfield argued that significant variations in the transmission characteristics of voice, data, and video signals could, however, make the integration of these services over a single network inefficient and uneconomical. National Telecommunications and Information Administration, *The NTIA /Infrastructure Report: Telecommunications in the Age of Information*, U.S. Department of Commerce, October 1991, p. 229.

Box 4-A. THE MODIFIED FINAL JUDGMENT

A consent decree entered into by the American Telephone & Telegraph company and the Justice Department in 1982 settled a decade-long antitrust suit. AT&T was broken up into eight companies: the reorganized AT&T and seven regional holding companies. Local service was assigned to the newly formed holding companies under certain restrictions, developed and administered by Federal District Court Judge Harold Greene. The basic premise of this divestiture settlement was that the Bell System's competitive markets should be separated from their noncompetitive monopoly markets in order to prevent unfair monopoly abuses, such as AT&T forcing captive local ratepayers to bear the burden of subsidizing equipment and long-distance service against emerging rivals. The competitive markets had begun with MCI's challenge to AT&T's monopoly on long-distance service, starting in 1968, and the entrance of competing manufacturers of customer premise equipment.

A Modified Final Judgment (MFJ) went into effect at the beginning of 1982, clarifying and expanding the terms of the 1982 consent decree. The Bell System's 22 local telephone operating companies (BOCs) were separated from the parent company (AT&T) and grouped into seven regional Bell holding companies (RBHCs), which were entrusted with providing local services. The seven regional Bell holding companies (Ameritech, Bell Atlantic, BellSouth, NYNEX, Pacific Telesis, Southwestern Bell, and U.S. West) were specifically prohibited under the MFJ from entering the three lines of business deemed competitive and therefore assigned to AT&T: 1) designing and manufacturing telecommunications network and customer premises equipment, 2) providing information services (such as electronic yellow pages), and 3) providing long-distance service.

The information-services ban was to prevent RBHCs from using their control of the local loop "bottleneck" to engage in anticompetitive conduct toward other information-services providers. The prohibition was subsequently amended at the triennial review in 1987, and later reversed and remanded by the U.S. Court of Appeals for the District of Columbia. The other two provisions of the MFJ are the subject of intensifying congressional activity.

SOURCE: OFFICE OF TECHNOLOGY ASSESSMENT, 1993.

AT&T hopes to get 50 percent of its revenue from international activities by the end of this decade.

to properly upgrade their domestic networks, and 2) domestic line-of-business restrictions limit their options in overseas activities because foreign government ministries are wary of permitting them into areas that the foreign ministries are forbidden to enter in the U.S. market.¹⁴

U.S. telecommunications firms' European activities

Interexchange carriers

International telecommunications is an extension of long-distance service. AT&T delivers direct dial service to over 250 countries and territories, while MCI and Sprint connect to nearly 200 foreign destina-

¹⁴NYNEX, however, in discussions with the Office of Technology Assessment, noted its ability to offer cable services in the United Kingdom as a counterexample.

¹⁵Under Section 214 of the Communications Act, international carriers must file with the Federal Communications Commission for authorization for each connection to a foreign point.

tions (though many of these are through AT&T facilities). Each of these carriers owns a share of the capacity on the various cables traversing the Atlantic and Pacific Oceans to carry their outbound traffic, and leases Intelsat satellite capacity through ComSat.

International traffic is a lucrative market, and it is experiencing high growth as commerce becomes increasingly global in nature. International traffic grew by 13 percent to 35 billion total minutes in 1991, the latest figures available.¹⁶ Though most foreign governments continue to reserve basic voice services to a national monopoly, U.S. long-distance carriers are making inroads into the European market for nonbasic services, such as value-added data networking.⁷

Change in the telecommunications market is often rapid, so the description that follows of the activities of the major U.S. telecommunications firms is a snapshot as of the beginning of 1993.

AT&T. AT&T is one of the few operators in the world that is vertically integrated to offer both equipment and services. No other company operates on the scale of AT&T in both segments. AT&T Chairman Robert Allen's target of 50 percent of revenues coming from international activities by the end of the decade is nevertheless ambitious.

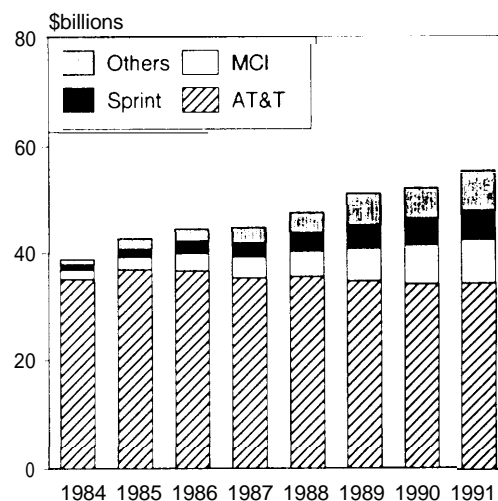


Figure 4-1.
U.S. Toll Service
Revenues, 1984-91

SOURCE: FEDERAL COMMUNICATIONS COMMISSION, 1993.

It means increasing the company's revenues for international equipment and services from about \$12 to \$90 billion and for domestic telecommunications services from \$48 to \$90 billion.¹⁸ The company purchased NCR in 1991 and Istel, a British information technology firm, in 1989. Both additions solidify its European presence: with the acquisition of NCR, which also strengthens its computer business, AT&T more than doubled its foreign workforce, most of which is in Europe.¹⁹ Before the takeover, NCR derived approximately 62 percent of its \$6 billion in annual revenues from abroad. AT&T has also expanded its stake in the

¹⁶"International Telephone Traffic Up 13 Percent Last Year," *Telcom Highlights International*, Sept. 30, 1992, p. 2. AT&T's traffic increased 7.8 percent to 6.6 billion minutes; MCI grew 35.1 percent to 1.6 billion minutes, while Sprint grew 25.3 percent to 723 million minutes.

¹⁷The term "basic service" in Europe encompasses more than it does in the United States, where long-distance services competitively provided. The European connotation includes the notion of ensuring network integrity. This becomes a contentious issue in services trade negotiations (see ch. 7).

¹⁸Information provided by AT&T.

¹⁹Prior to the purchase of NCR, AT&T employed 22,000 people outside the United States; about half of NCR's 54,000 employees are overseas. John J. Keller, "AT&T Plans to Name Tobias to Direct Overseas Lines in Bid to Speed Growth," *Wall Street Journal*, June 25, 1991.

European market for value-added services with purchases, through Istel, of service providers in other countries, such as DATAID in France.

AT&T is extending to Europe its managed data network services developed for the U.S. market, such as Clearchannel, Accunet Spectrum of Digital Services, and Accumaster Management Services. The company offers these services through separate subsidiaries in countries where competitive entry is permitted. AT&T currently has nodes in eight countries, but has plans to locate in seven others.²⁰ Its International Network Systems, originally started by Phillips but later bought by AT&T, is located in the Netherlands.

AT&T has a strategic alliance with the Italian local carrier, Italtel, involving equipment sales and consulting to develop Italy's infrastructure. It has an equipment manufacturing facility in Spain, and is involved in a strategic relationship with Telefonica. The company is participating in joint ventures with the Ukraine State Committee of Communications and the Netherlands' Postal, Telephone, and Telegraph (administration) (PTT) Telecom to build and operate a modern telecommunications network in the Ukraine. The Ukraine State Committee will retain a controlling interest (51 percent), while AT&T's share in the project is 39 percent and the Netherlands PTT has the remaining 10 Percent.²¹ This is the first major effort by AT&T to build an overseas network (though it has been involved with

operating a cable network, CANTV, in Venezuela). The Ukraine State Committee expects to increase the penetration of phones from 7 to 22 million lines by 2000. In November 1992, AT&T purchased for \$28 million an 80 percent stake in a Polish telecommunications equipment manufacturing plant, Telfa.

In May 1993, AT&T spearheaded the formation of WorldSource, a joint venture with five other operators, including Kokusai Denshin Denwa of Japan and Singapore Telecom—at the outset, the venture lacks a European partner. WorldSource will provide global voice and data communications to multinational firms.

MCI. A relative newcomer to international communications (1983), MCI has been one of the fastest growing international carriers. MCI expanded its outgoing traffic from 103 million minutes in 1986 to 2.2 billion minutes in 1992²² and has become the 6th-largest international carrier (see table 4-2), carrying 18 percent of U.S. international voice traffic. MCI international communications grew by 35 percent in 1991 and again in 1992.

In recent years, the company has made several key international acquisitions, including two international record carriers, Western Union International and RCA Global Communications. In addition, it bought Overseas Telecommunications Inc., a company involved in long-distance services in New Zealand and Australia. MCI also owns part

AT&T's longdistance competitors are also among the world's fastest growing international carriers.

²⁰ Information provided by AT&T; see also, Robin Gareiss, "AT&T Takes on European Data Nets; Expands Outsourcing," *CommunicationsWeek*, Mar. 16, 1992, p. 5.

²¹ "AT&T, PTT Telecom-Netherlands in Joint Venture With State Committee of Ukraine; Plan Includes Expanded International, Long Distance, Local Access Networks, Manufacturing," *Telecommunications Reports*, Jan. 20, 1992, p. 21.

²² Information provided by MCI'S Business Analysis Group, May 1993.

of Clear Communications, a competitive long-distance carrier in New Zealand.²³

Ambitious to form global partnerships, MCI spearheaded the formation of the Financial Network Association, an association that includes 11 other European carriers targeting communications services for international financial firms (potentially in competition with the Society for Worldwide Interbank Financial Telecommunications, SWIFT). MCI is also in a loose partnership with 23 other operators in Global Communications Services, which intends to provide "global one-stop shopping or a full range of services to multinationals."²⁴

Canada has been the most recent battleground for MCI and AT&T competition as they build their global networks. When MCI negotiated an operating agreement with Stentor, the consortium of Bell Canada and the provincial phone companies. AT&T responded by purchasing 20 percent of Unitel Communications, a competitive long-distance company in Canada. and filing a patent-infringement case against MCI.

In June 1993, MCI reached an agreement with BT for an alliance between the two telecommunications firms that includes the purchase by BT of 20 percent of MCI for \$4.3 billion and the creation of a joint venture firm to offer global voice and data services to multinational users. BT will name three directors to MCI's board. while MCI chairman will join BT's board. MCI will invest 24.9 percent of the \$1 billion to form the new venture (yet to be named). and will be responsible for marketing these global

	Outgoing MITT ^a (millions)	Growth in MITT (1990-91)
AT&T (U. S.)	6,557	7.8%.
DBP Telekom (Germany)	3,557	13.1
France Telecom (France)	2,295	7.9
BT (UK)	2,213	1.9
Cable & Wireless (UK)	1,660	28.6
MCI (U. S.)	1,600	35.1
Swiss PTT (Switzerland)	1,429	12.5
Stentor (Canada)	1,425	6.0
Netherlands PTT (Netherlands)	1,018	12.5
ASST (Italy)	980	17.1
KDD (Japan)	850	11.3
Belgacom (Belgium)	823	12.6
Sprint (U. S.)	723	25.3
Telefonica (Spain)	719	17.7
Swedish Telecom (Sweden)	659	7.2

a Minutes of international telecommunications traffic.

SOURCE *COMMUNICATIONS WEEK INTERNATIONAL*, SEPT. 21, 1992, P. 8.

network services in North America and the Caribbean.

SPRINT. Like MCI, Sprint has experienced explosive growth in its share of international telephone traffic: its share of outgoing traffic increased from 43 million minutes in 1986 to 728 million minutes in 1991 (the last figures Sprint has released), having doubled its international outgoing traffic from 1990 to 1991.²⁵ Sprint wants to penetrate the market for intra-European long-distance service; it is involved in a project (Hermes) to build a pan-European network for voice and data. This company is the leader in international videoconferencing, with 1,200 video facilities in 30 countries. Sprint International accounts for approximately \$2 billion in revenues compared with \$8.8 billion for the parent company.

*Table 4-2.
Traffic Base
of Leading
International
Carriers*

²³ "MCI Steers Global IN," *CommunicationsWeekInternational*, Sept. 21, 1992, p. 1.

²⁴ "MCI Pulling Together Global Alliances," *Communications Week International*, Sept. 21, 1992, p. 7.

²⁵ Telephone conversation with Sprint representatives, May 1993.

Sprint has applied for a license from the Department of Trade and Industry to offer long-distance and international service in the United Kingdom. If this is approved, Sprint will team with British Waterways, which controls canal rights-of-way throughout the country, to build a fiber-optic backbone net work.

In February 1993, Sprint joined with Alcatel NV, the French manufacturer of telecommunications equipment, to form Alcatel Data Networks. The new company, of which Sprint will own 49 percent, will be headquartered in Paris with a unit in Reston, Virginia. It will develop and market products based on ATM technology (see chapter 2), for the data networking needs of large international business customers.²⁶

Sprint has a close operating arrangement with Unisource, which is a joint venture between PTT Netherlands BV, Televerket in Sweden, and Swiss Telecom PTT that offers global network services. This arrangement, which increases Sprint's European presence, includes collaboration on global data networking and on very small aperture terminal satellite communications services, Unisource

uses Sprint's European packet network and Sprintnet, its international data network.²⁷

In 1988, Sprint bought Private Telecommunications Services, Inc., which owned the U.S. end of the first private transatlantic fiber-optic cable, PTAT- 1. Cable & Wireless owns the foreign portion of PTAT- 1, which connects the United States and the United Kingdom (and also lands in Ireland and Bermuda).

The long-distance carriers' strategy of expansion

The three major U.S. carriers have been actively pursuing partnerships with public telephone operators (PTOs)²⁸ in major European and Asian countries to handle the communications requirements of large corporate customers, who need to network with and between several countries. These consortia enable carriers to spread large capital requirements and to offer comprehensive communications packages, including consolidated billing and equipment, instead of users needing to piece together international networks. BT, with its Syncordia project,²⁹ has been at the forefront of this trend. More recently, BT announced its intention to

²⁶ *International Herald Tribune*, "Sprint and Alcatel Set Venture," Feb. 4, 1993.

²⁷ Jennifer L. Schenker, "Unisource Adds Swiss," *Communications Week International*, Feb. 1, 1993, p. 24. Donne Pinsky, "Sprint Targeting VSATS," *Communications Week International*, Nov. 23, 1992, p. 3.

²⁸ The traditional term, Postal, Telephone, and Telegraph (Authorities) or PTTs, is in most cases no longer accurate, since the functions have been separated.

²⁹ At the outset, Syncordia has received more attention from the press than from users or potential partners. BT originally envisioned that Syncordia (formerly called Pathfinder) would be a collaboration with NTT and Deutsches Bundespost Telekom (DBT). However, NTT and DBT balked at their respective shares in the project—BT wanted to retain 48 percent while the other partners would each have 26 percent. In addition, BT alienated Telekom by rebuffing the German carrier's attempt to include France Telecom. Telekom and France Telecom then formed their own venture, Eunetcom. BT more recently launched Project Cyclone, an attempt to coordinate BT's various international operations, including: Syncordia for network outsourcing, Global Network Services for managed data networking, International Featurenet for international virtual net works, and Primex for international private circuit management. "BT Bolts Forward," *Communications Week International*, Sept. 7, 1992, p. 2.

purchase 20 percent of MCI and to form a joint venture with the second-largest American carrier (and the sixth largest global telecommunications firm), The acquisition and the venture, which will strengthen BT's presence in North America, follow directly on the heels of AT&T unveiling its Worldsource partnership with Kokusai Den-shin Denwa of Japan and Singapore Telecom. MCI's Financial Network Association and Sprint's Unisource consortium are other examples.

The growing leverage of the user community in telecommunications policymaking is at the center of this turbulence in the organization of international telecommunications. The rise of multinational or global companies is threatening to the national monopolies, since a single carrier will have trouble handling the communications needs of a company with headquarters or main offices in several countries. A U.S. carrier can, for example, handle a firm international needs only so long as one end of the traffic originates or terminates in the United States. Given current restrictions on network access in most countries, an American carrier is not permitted to carry the traffic of a company between, for example, Tokyo and Amsterdam. Large users are pressing for harmonious international equipment standards and service offerings; they are also demanding that levels of service that they have come to expect at home be available

abroad. They want a single firm to be able to provide for all their networking needs.

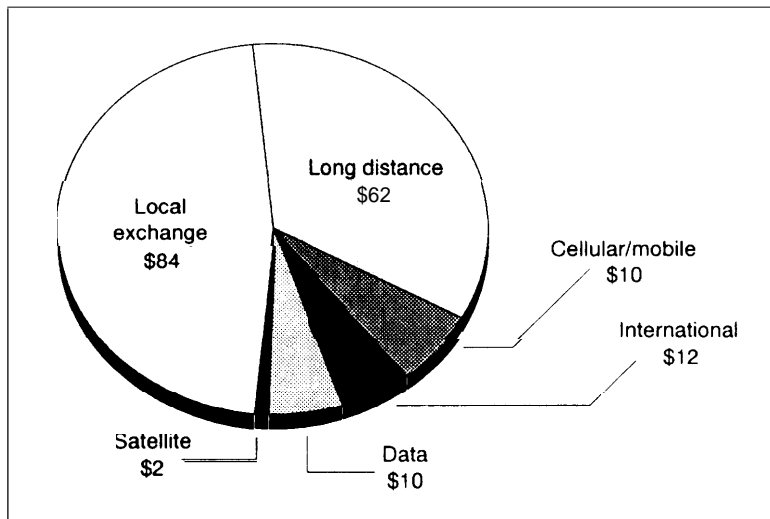
The desires of large users are often in direct conflict with the modus operandi of European PTOs, which have earned a reputation for being more responsive to politics than to customers.³⁰ Large corporations are accumulating the political power, both individually and collectively through groups such as the International Telecommunications Users Group (INTUG) and the International Communications Associations (ICA), to challenge the PTOs when they are dissatisfied with the quality, the variety, or the cost of services.

A second general strategy for the world's major carriers is the development of international data networks. Again the target audience is a limited set of customers with multicountry, high-data requirements. Data communications traffic is still small relative to voice communications, but its growth is impressive. PTOs are clinging tightly to their bread and butter, voice traffic, which may account for as much as 90 percent of the carrier's revenue and 100 percent of its profits. Data networking, therefore, appears to be a U.S. carrier's best opportunity to enter foreign markets, and each of the major U.S. carriers has a data networking subsidiary. AT&T owns Accunet and Sprint, Telnet; MCI owns 25 percent of Infonct.

Foreign carriers are following similar strategies in an effort to make headway into the U.S. market. BT purchased San Jose-

The rise of multinational companies threatens national telecommunications monopolies, since single carriers will have trouble operating in several countries.

30 In particular, high international tariffs, which are important to telecommunications managers of firms with substantial international traffic, are typically used by governments to subsidize other areas, including nontelephone sectors. The international telecommunications regime, pejoratively referred to as "the Club," manipulates this subsidy through the international accounting rates procedure, whereby the carrier in the country originating a call remunerates the carrier in the foreign country for terminating the call. The accounting rates, which in theory are intended to relate to cost, are artificially large in many cases so that the country terminating the call receives a large windfall for doing very little. (See ch. 3.)



SOURCE: 1993 INDUSTRIAL OUTLOOK, U.S. DEPARTMENT OF COMMERCE.

Figure 4-2.
Estimated 1993 U.S.
Telecommunications
Services (\$billions)

based Tymnet from McDonnell-Douglas in 1989.³¹ Infonet, based in California, is jointly owned by 11 European PITs, in conjunction with MCI.

Carriers are also developing virtual private networks that behave to the client like a private network. That is, the user does not pay retail rates for long-distance or international calling, benefits from abbreviated numbers, and is assured of bandwidth when needed; this is accomplished through the software in the switch rather than through discrete physical facilities. Virtual private networks relieve the user of the necessity of running, monitoring, repairing, and upgrading networks. Each of the U.S. carriers offers a virtual private network service under a

trade name: MCI offers Vnet, AT&T offers GSDN (Global Switched Digital Network), and Sprint offers GVPN (Global Virtual Private Network). Foreign national carriers have similar products: BT has FeatureNet; France Telecom, Colisee; PTT Netherlands, GLOBAL; and KDD, Virnet. On an international level these require close collaboration between national carriers.

RBHCs overseas

In the last few years, the seven RBHCs have also turned their attention outward, beyond their domestic networks. The RBHCs' overseas activities have mainly taken three forms:

- The construction and/or operation of cellular networks;
- Experimentation with other infrastructure, especially cable television; and
- Investments in the privatization of state telephone companies.

U.S. companies' involvement in cellular communications has mainly occurred in Europe. In Eastern Europe RBHCs have helped construct networks that will serve as alternate infrastructure; in Western Europe, they are involved in cellular franchises competing with the incumbent carriers' operations. Their solid expertise in cellular communications in the United States³² is valued by countries building facilities to complement or in some cases replace the existing "wireline" infrastructure. In parts

31 Under the agreement recently announced between BT and MCI, the ownership of the Tymnet data network will transfer to MCI, which will purchase Tymnet's parent, BT North America.

32 The United States accounts for roughly half of the worldwide subscribers for cellular services. After McCaw and GTE, the independent telephone giant, the seven RBHCs have the next largest cellular franchises. The Federal Communications Commission, in 1983, automatically awarded the local telephone provider one of the two franchises in each metropolitan service area. See Cellular Telecommunications Industry Association, *State of the Cellular Industry*, Washington, DC, 1992.

of Eastern Europe, the existing communications network cannot accommodate the burgeoning commerce. A cellular network, though requiring large upfront capital costs, is faster than repairing or modernizing the existing network. Because the demand for reliable communications is so critical, cellular operators are commanding high installation, equipment, and usage charges to cover this high investment.

RBHCs are also joining in consortia for the second or third licenses for cellular service in Western Europe, typically in competition with the PTO. Differences in the technologies of mobile communications potentially permit the survival of several competing providers. GSM, the European standard for digital cellular communications, is replacing analog cellular: some providers are betting that personal communications networks (PCN) or personal communications services (PCS) represent the next evolution.

The second large area of activity that several RBHCs are pursuing is franchises for cable television.³³ These are expected to be highly profitable ventures that also represent opportunities for RBHCs to build infrastructure and establish a local presence in anticipation of EC-mandated liberalization of telecommunications markets. The United

Kingdom's competition strategy permits a fertile testbed for RBHCs to experiment with video (i.e., TV) and voice over the same network. RBHCs also are gaining experience in a market they are vigorously trying to enter in the United States; the ventures abroad provide technical experience and potentially political leverage. NYNEX and U.S. West in particular are pursuing this opportunity aggressively.³⁴

Investments in the privatization of telephone companies have mostly taken place outside Europe, in Central and Latin America and in the Pacific Rim (notably Australia and New Zealand). The European telecommunications operators are generally financially and technically secure enough that they do not require large infusions of foreign capital and operating expertise.

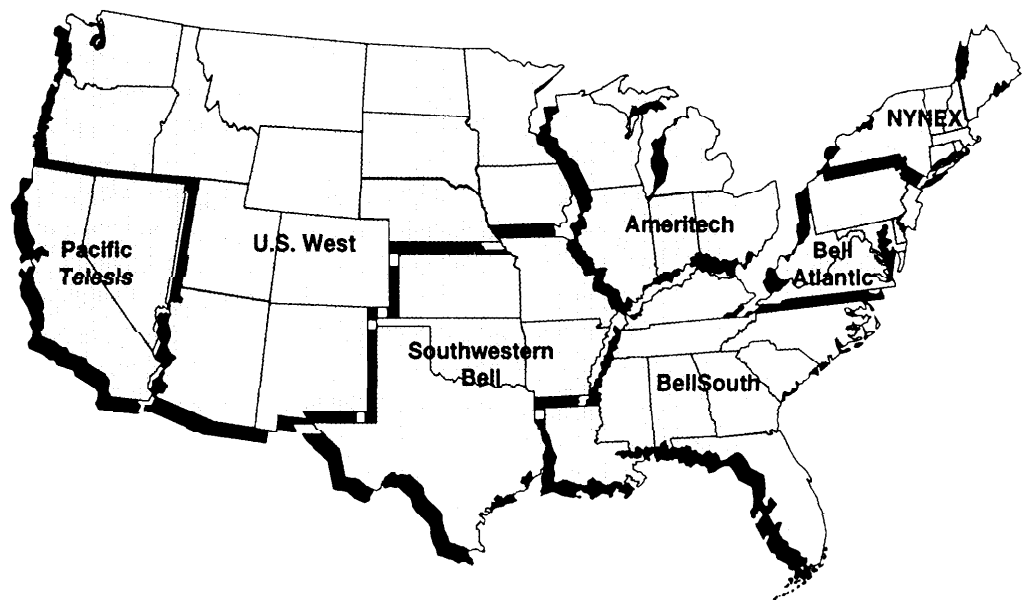
There are strong similarities in the activities of RBHCs abroad, but their intentions and strategies are not always identical. They are referred to as one group here for the sake of convenience and because they are often allies in support of major legislative actions—they all have an interest in removal of the MFJ restrictions that limit their business activities. Since they were split from AT&T, however, they have formed markedly independent corporate strategies.

The opportunity to build cable television systems abroad offers a testbed for U.S. carriers eager to enter that market at home.

³³ Meanwhile, foreign ownership of cable franchises in the United States is a sensitive political issue. In the 102d Congress, a House version of the cable (re)regulation bill included a provision to limit foreign ownership of these systems, similar (in theory and in degree) to the foreign ownership limitations on telephone companies and broadcasters. (Section 310 of the Communications Act limits foreign ownership of radio licenses—as may be used in microwave communications or radio and TV broadcasting—to 20 percent.) Though this section of the bill was eventually dropped, Rep. Edward Markey, chair of the Subcommittee on Telecommunications and Finance of the House Committee on Energy and Commerce, argued for the provision on national security grounds—noting the cable industry's connection to the country's "telecommunications nervous system." "Regulation Foes Plan Barrage as Conferees Approve Bill," *Congressional Quarterly*, Sept. 12, 1992, pp. 2706-2707.

³⁴ The great success of cable television in the United States may not necessarily be duplicated in other countries. Several European PTOs have staked their future on other technologies, such as direct broadcast satellite (DBS).

Figure 4-3.
Regions of the
Seven RBHCs



SOURCE: OFFICE OF TECHNOLOGY ASSESSMENT, 1993.

BELLSOUTH CORPORATION. Bell South is one of the most aggressive RBHCs in pursuing international ventures. It is heavily targeting Latin America, but it also is creating a substantial presence in Europe, mainly in cellular and paging operations. A subsidiary, BellSouth Enterprises, Inc., controls all nonregulated activities, including the company's international ventures, while BellSouth Telecommunications, Inc. deals with the regulated core businesses—the provision of basic telephone service within its nine-state region. BellSouth Enterprises is comprised of Bell South Cellular, BellSouth Publishing, and BellSouth International (BSI), which handles international operations and opportunities. BSI has a corporate office in Brussels for business development and technical expertise, but the strategy for its global activities is established in the Atlanta head-

quarters. The parent company expects that BellSouth Enterprises will quickly increase its percentage of revenues within the company to 25 percent.

The company's main emphasis in Europe is on cellular communications. It is prohibited in almost every country except the United Kingdom from offering alternative local service, which would draw on its great networking expertise. BellSouth owns 29 percent of a consortium to build and operate a mobile phone network in Denmark. In Germany, a consortium that includes BellSouth was awarded a license for the country's third cellular network; the cellular network will operate at 1800 MHz (as opposed to the more traditional 900 MHz) and will compete against cellular networks operated by Deutsche Telekom and Mannesmann (of which PacTel is a partner).³⁵ In

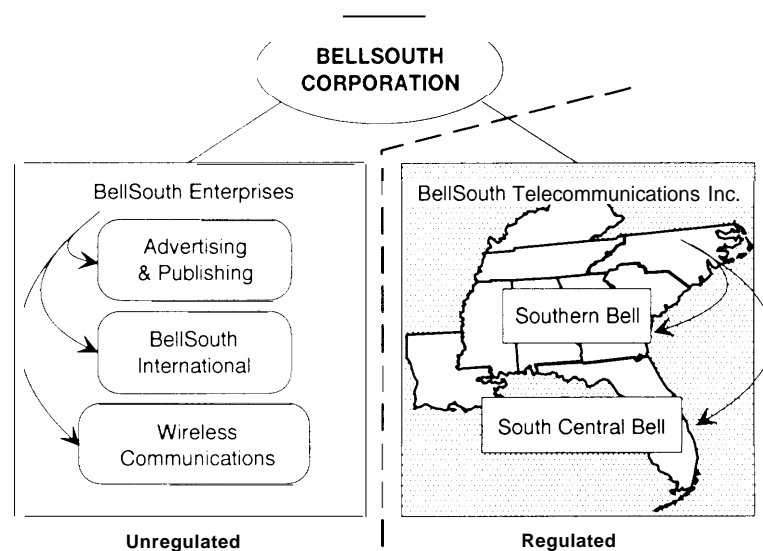
35 "German Mobile Phone Network Won by Thyssen and Veba Consortium," *Telcom Highlights International*, Feb. 10, 1993, pp. 2-3.

France, it has shares in several diverse enterprises, including a small stake in Societe Francaise du Radiotelephone, which holds a license for GSM, and a partnership with France Telecom to offer cable TV.

Elsewhere, BellSouth owns 24.5 percent of the Australian consortium, Optus Communications, in conjunction with Cable & wireless and local investors, which will build and operate a competing carrier for all kinds of wireline and wireless services and international long-distance (for which BellSouth had to secure a U.S. regulatory waiver). The company is providing cellular service in New Zealand, and was awarded the cellular license in Argentina, along with Motorola, in February 1989. BellSouth also purchased Cidcom, Pacific Telecom's cellular operation in Chile, and operates cellular systems in five Latin American countries: Mexico (western), Argentina, Chile, Venezuela, and Uruguay.

NYNEX. New York-based NYNEX has vigorously pursued opportunities for foreign ventures. Its nonregulated activities, including its international ventures, are separated from its regulated local offerings (i.e., New York Telephone and New England Telephone), which are handled through its Telecommunications Group. NYNEX Worldwide Services Group is organized into branches covering cellular services in the United States, publishing (which involves some overseas activities), and its diversified operations, within which are two subsidiaries that deal explicitly with international ventures.

NYNEX Network Systems Company, with regional headquarters in Brussels and Hong



SOURCE OFFICE OF TECHNOLOGY ASSESSMENT, 1993, BELLSOUTH ANNUAL REPORT.

Kong and offices throughout Europe and Asia, is responsible for overseas communication networks and services, notably its 14 cable TV-telephony franchises in the United Kingdom. NYNEX CableComms was awarded franchises in July 1990 that make it the largest cable franchise owner in Britain, with an investment of \$1.1 billion.³⁶ NYNEX Network Systems also owns 50 percent of Gibraltar Tel and is helping the government to modernize the communications infrastructure. The company is in Indonesia to help manage network expansion, and in Japan it owns a minority share of two mobile communications firms. NYNEX is also involved in a consortium to install two million lines in Bangkok, Thailand.

Various other subsidiaries of the company have successfully marketed products around the world. For example, its publishing arm, NYNEX Information Resources Company,

Figure 4-4.
Organization of the
Bell/South
Corporation

³⁶ NYNEX Cablecomms Increased its presence in the U.K. cable TV/telephony market through its acquisition of three franchises from PacTel Cable in March 1993.

In Central and Eastern Europe, cellular systems are attractive alternatives to antiquated wirelines.

is responsible for telephone directories and Yellow Pages in Gibraltar and Prague and was recently awarded the franchise for the Czech Republic. NYNEX's AGS Computers, Inc. is licensing software in Russia, Mexico, Australia, and Spain. Finally, NYNEX is spearheading a consortium to construct a 25,000-km fiber-optic cable from the United Kingdom through the Middle East to Japan. The project, entitled FLAG (Fiberoptic Link Around the Globe), was initiated 2 years ago, will cost \$1 billion, and is expected to be operational by 1997. The company is in the process of negotiating landing agreements with national carriers. NYNEX's previous attempt to purchase a stake in a private transatlantic cable was rejected on the grounds that RBOCs are restricted, under the MFJ, from carrying traffic to or from the United States.

U.S. WEST. Like the other RBHCs, U.S. West is capitalizing on its experience with cellular communications, but unlike the others it is targeting the countries of Eastern and Central Europe. U.S. West expects that 10 to 20 percent of its revenues will come from international operations by 2000; currently, international operations contribute only a small percentage. U.S. West is involved in a venture along with Bell Atlantic and the state telephone company to build and operate a cellular network in Czechoslovakia. A cellular network, Westel Radiotelefon, Kft., jointly owned by U.S. West and the Hungarian Telecommunications Co., went on-line in

Budapest in October 1990. Though expensive, the cellular network, which is targeted at office communications, enables customers to circumvent the slow process for getting connected to the antiquated wireline network.³⁷

U.S. West International has established a strong presence in Russia for telecommunications services. In January 1993, the Russian Communications Ministry selected U.S. West and two domestic firms (Intertelcom and VART) to coordinate the development of digital cellular service (GSM) for Russia's 12 cellular regions; in addition, U.S. West and its partners won the rights to 8 of these 12 regions.³⁸ Previous ventures in Russia include operating a cellular telephone system in St. Petersburg (starting in September 1991), and outfitting the regular phone networks in Kiev, Moscow, and St. Petersburg with international long-distance switches.³⁹ The company also was involved in a venture to build a fiber optic line across Asia, eventually linking Europe and Japan, but this plan was delayed by U.S. security restrictions on fiber optic technology and high-speed processors,

U.S. West, allied with Tele-Communications, Inc. (TCI) in the United States to pursue joint cable TV-telephone options, is also actively mining similar opportunities in Europe. In the United Kingdom, TeleWest Communications Group Ltd., the joint venture between U.S. West Cable Communications and TCI, is the country's largest cable TV operator with 16 franchises and a poten-

37 The service has surpassed projected use so far; 4,000 subscribers in the first 6 months saturated the network, which was expecting 2,500 subscribers in the first year.

38 "U.S. West Group Chosen by Ministry to Coordinate Russian GSM Digital Cellular System," *Telecommunications Reports*, Jan. 25, 1993, p. 18.

39 Andrew Kupfer, "Ma Bell and Seven Babies Go Global," *Fortune*, Nov. 14, 1991, p. 124.

tial customer base of 3 million households. As of March 1993, TeleWest had enlisted 144,000 subscribers for cable TV services, of which 60 percent additionally receive telephone service.⁴⁰ Through United Communications International, it is building cable TV companies in Sweden (Swedish Cable & Dish) and Norway (Norkabel), and it is developing systems and programming in Hungary with Time Warner. In the United Kingdom, U.S. West and Cable & Wireless merged their respective operations developing Personal communication networks in March 1992. U.S. West headed the United partnership (which included Thorn EMI, Northern Telecom, and Deutsche Bundespost Telekom) that was awarded a license in 1989 to build a PCN system. U.S. West International has joined with BMW and GTE to bid on a German PCN license.⁴¹

BELL ATLANTIC. Bell Atlantic is one of the most aggressive at targeting foreign markets, but its European ventures are limited. Its chairman expects 10 percent of company revenue to come from international operations by 1994; it is currently, at \$1.5 billion, about 5 percent. Bell Atlantic, along with U.S. West and the state telephone company, owns and operates Eurotel, a cellular network in Czechoslovakia that began operation in September 1991. The venture will also build and operate cellular data networks and modernize the basic telephone network. Bell Atlantic is in partnership with Ameritech

acquired the Telecom Corporation of New Zealand for approximately \$2.5 billion. The company also acquired a controlling stake in a New Zealand pay-TV operator, Sky Network Television. It intends to form a software joint venture company with STET SPA, the Italian telecommunications group, to develop software systems that will be used by STET's telephone subsidiary Societa Italiana per L'Esercizio delle Telecomunicazioni and Bell companies.⁴²

PACIFIC TELESIS. Within the Pacific Telesis family,⁴³ two companies are primarily involved in international ventures. PacTel Cable deals with opportunities in the "home entertainment industry" (the management of cable television operations) in the United Kingdom, while Pacific Telesis International offers a variety of services, such as wireless communications, value-added networks, and international long-distance service, in Europe and Asia. The company's flagship European venture is a 26 percent share of Mannesmann Mobilfunk, a consortium that built and operates a digital cellular network in Germany. Based on the European standard for digital cellular service, GSM, D2 Privat is the second national cellular franchise and will compete with Deutsche Bundespost Telekom. Pacific Telesis International also owns 23 percent of a consortium that is licensed to build a GSM-based digital cellular network in Portugal.

⁴⁰ Donna Pinsky, "U.K. Cable TV Ups Telecoms Ante," *Communications Week International*, Mar. 8, 1993, p. 6. Significantly, TeleWest is investing \$70.2 million over 5 years to purchase its own switches to gain greater control of network services, rather than buy switching from Mercury Communications.

⁴¹ "U.S. West Third Quarter Earnings," *Telecom Highlights International*, Nov. 4, 1992, p. 12.

⁴² "Bell Atlantic in Italian Venture," *New Technology Week*, Dec. 16, 1991, p. 7.

⁴³ Pacific Telesis, pending regulatory and shareholder approval, is planning a major reorganization of its corporate operations to split off its unregulated business from its regulated operations.

PacTel Cable has recently lessened its involvement in cable TV services in the United Kingdom. In April 1992, PacTel Cable sold its interest in East London Telecommunications Ltd., which owned six franchises, to BCE Telecom International.⁴⁴ In March 1993, PacTel sold three of its original 14 cable TV franchises to NYNEX Cablecomms.⁴⁵ PacTel International sold its 25 percent stake in Microtel Communications Ltd., a venture with Matra, to develop a personal communications network in England.

In Asia, PacTel International is involved in consortia bidding for cellular franchises for Tokyo (through a 15 percent stake in Tokyo Digital Phone) and Osaka-Kansai (through a 13 percent stake in Kansai Digital Phone).⁴⁶ PacTel International also owns 10 percent of International Digital Communications (IDC), a new competitor to Kokusai Denshin Denwa offering long-distance and international services in Japan. IDC, which is the primary Japanese partner in an undersea fiber-optic cable connecting Japan and the United States, also will be the Japanese partner in the FLAG project, which NYNEX is spearheading to link Europe and Japan.

AMERITECH. Ameritech has been one of the most cautious of the Baby Bells in overseas investments, and its activities in Europe are small by comparison. Ameritech's most

visible venture has been its acquisition, along with Bell Atlantic and two local firms, of Telecom Corporation of New Zealand. As part of the stipulation to reduce the combined U.S. RBHC holding to 49.9 percent, 31 percent of New Zealand Telecom's stock was offered for sale, resulting in an aftertax profit for each RBHC of \$73.6 million.⁴⁷

In Europe, the company joined with France Telecom to help the Polish PIT build and operate a national cellular network. The PIT retains 51 percent of the venture, Polska Telefonica Komorkowa, while Ameritech and France Telecom split the remaining 49 percent. In Norway, Ameritech (along with Singapore Telecom) purchased a quarter stake in Netcom GSM, the country's second provider of digital cellular services.⁴⁸ Ameritech subsidiary Tigon offers voice-mail service in a number of countries throughout the world.⁴⁹

SOUTHWESTERN BELL. The jewel in Southwestern Bell's international crown is its acquisition of 20 percent of the Mexican telephone operator Telefonos de Mexico (TelMex), including 24.5 percent of the voting rights. Through Southwestern Bell International Holding Company, the company teamed with France Telecom and Grupo Carso, a local industrial group, to purchase a controlling 51 percent of the company from the government. The initial

⁴⁴ "BCE Unit Agrees to Buy PacTel, Jones Intercable Interests in U.K. Cable Franchises," *Telecommunications Reports*, Apr. 27, 1992, p. 34.

⁴⁵ "Business Briefs," *Wall Street Journal*, Mar. 23, 1993, p. B4.

⁴⁶ Pacific Telesis Group, 1991 Summary Annual Report.

⁴⁷ Andrew Kupfer, "Ma Bell and Seven Babies Go Global," *Fortune*, Nov. 14, 1991, pp. 118-128; Ameritech, 1992 Annual Report.

⁴⁸ Steven Tich, "Around the Loop: Norway Beckons," *Telephony*, Jan. 4, 1993, p. 10.

⁴⁹ Ameritech's 1991 Annual Report, p. 20.

investment after exercising options totaled \$950 million, though the value of the investment has increased significantly since then.

Like several other RBHCs, Southwestern Bell also has stakes in cable TV/telephony operations in the United Kingdom. The company controls eight franchises in Britain covering over a million households; it recently announced a plan to sell 25 percent of its U.K. cable holdings to Cox Cable, the second-largest U.S. cable operator.⁵⁰ Before the Israeli Government decided to postpone the sale of Bezeq, the Israeli telephone company, Southwestern Bell was rumored to be negotiating to bid for the company in alliance with a large Israeli industrial group, Clal Industries.⁵¹

The overseas strategies of RBHCs

U.S. RBHCs, along with Western European PTOs and U.S. interexchange carriers, are among the corporate leaders in pursuing investment options in foreign markets. It is difficult to track precisely the number and value of foreign investments that RBHCs have made since divestiture since many of these are small, unrelated to telecommunications, and often not newsworthy. The scale of these ventures and the fervor surrounding them increased with the privatization of

telephone operators and the opening of new markets in Central and Eastern Europe. Earlier international investments by telephone operators were typically more “opportunistic” than “strategic”; companies would seek deals primarily on the basis of an attractive rate of return, with little attention to whether the ventures reflected the companies’ characteristic strengths or coincided with any long-term strategies.⁵² More recently, the telephone companies are taking advantage of the niche strengths that separate them from other carriers and give them a competitive edge. These opportunities abroad permit U.S. telecommunications firms to extend the strengths from their domestic businesses in network, wireless, and business systems, profiting from their U.S. expertise in managing and operating local telecommunications⁵³ while forging strategic relations with other firms.

For an RBHC, the most important criterion for foreign ventures and investments is the ability to earn high returns. A second important criterion is the experience and political leverage that the RBHC can bring back to the United States. Overseas, RBHCs can experiment with services and businesses that they are barred from in the United States as monopoly carriers.

For an RBHC, the most important criterion for foreign ventures is the prospect of high returns.

50 “U.S. Cable-TV and Telephone Company Get Together for UK Cable,” *Telcom Highlights International*, Mar. 10, 1993, p. 5.

51 Tich, op. cit., footnote 48.

52 Ronald M. Serrano, P. William Bane, and W. Brooke Tunstall, “Reshaping the Global Telecom Industry,” *Telephony*, Oct. 7, 1991, pp. 38-42.

53 More than 93 percent of U.S. households have telephone service (Federal Communications Commission, *Statistics of Communications Common Carriers*, 1991/1 992 Edition). Many of the remaining 6.6 percent of households are thought to be without service by choice rather than necessity. The mandate for “universal service” has effectively been achieved. Sweden boasts a higher number of telephone main lines per capita than the United States, however; Sweden has approximately two telephone main lines for every three people compared with about one for two in the United States.

Encouraging foreign expansion

Should the U.S. Congress want to do more to support and encourage further exports of telecommunications services and additional foreign investment by U.S. telecommunications companies, it has several options:

- continue to promote the opening of foreign markets to U.S. entry;
- remove domestic restrictions or regulations that allegedly affect the pattern of investment by foreign telecommunications companies (this action is urged by some, however, as a way to de-emphasize foreign investment); and
- provide positive assistance, e.g., low-cost capital for overseas expansion.

United States' efforts to open European markets through trade negotiations are discussed in chapter 7. The complex pros and cons of the current investment patterns, and the effect of domestic regulations, are discussed in chapter 9; it does not appear that domestic restrictions are now determining factors in decisions to expand overseas.

Some telecommunications industry representatives have suggested that the U.S. Government should provide more support to U.S. firms for telecommunications services exports, in the form of financial assistance

and insurance.⁵⁴ The issue of whether U.S. firms are unduly handicapped in international ventures for lack of access to low-cost capital, which often foreign competitors often enjoy, usually arises regarding equipment exports rather than service exports. Yet, U.S. Government financing assistance is in fact biased toward manufactured goods because, compared with services, these appear more tangible and readily quantifiable. For example, the benefits of supporting the sale of several million-dollar switches abroad are politically more readily apparent than assisting a U.S. firm to purchase a portion of a foreign telephone operator, the value of which may not materialize for several years.

Some foreign governments actively support national champion manufacturers in securing foreign deals by low-interest loans or other means.⁵⁵ They may also permit an indirect subsidy in the form of over-priced procurement of equipment by the national network operator (paid for by high customer services charges), allowing the equipment provider to sell in foreign markets at artificially low prices. U.S. export subsidies are limited, and are intended to 'level the playing field' when U.S. firms are clearly

⁵⁴ These suggestions were made in response to questions from the Office of Technology Assessment as to whether government action was needed to enhance the competitiveness of U.S. telecommunications firms overseas.

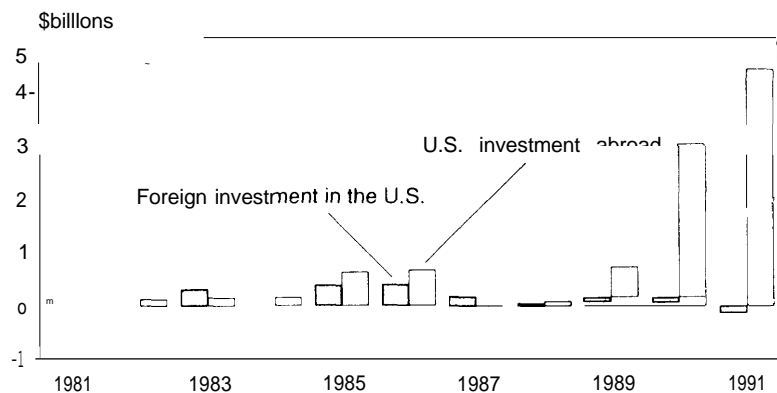
⁵⁵ Advisory Committee on International Communications and Information Policy, U.S. Department of State, "Study of International Financing of Telecommunications," Washington, DC, June 1992. This report is oriented toward the financing of export of telecommunications equipment sales rather than services. Where it analyzes services investment, it mentions as a major benefit from such investment the potential boost to U.S. equipment trade. However, the only U.S. operating companies that are also equipment makers are AT&T and GTE. The other carriers often cultivate relations with several key suppliers, including foreign manufacturers such as Siemens, Alcatel, and Northern Telecom. MCI, whose network relies on equipment from 75 vendors, touts its vendor-neutrality. ("MCI Pulling Together Global Alliances," *CommunicationsWeek International*, Sept. 21, 1992, p. 7.) Further, foreign governments can impose procurement criteria (e.g., the Utilities Directive).

losing out to foreign firms that rely on more aggressive or explicit subsidies.⁵⁶

U.S. Government mechanisms that could potentially assist foreign telecommunications services ventures include the Agency for International Development (AID), the Export-Import Bank, the Overseas Private Investment Corporation (OPIC), and the Trade and Development Program.⁵⁷ However, these programs when they include services providers—generally target developing countries rather than Europe (some Central and Eastern European countries may be covered). Such foreign services investments typically require financing insurance, since they generally target developing countries, which are potentially susceptible to political instability. Few commercial banks are willing to fund these ventures.

There is, however, little reason to believe that U.S. telecommunications companies are constrained in overseas ventures by lack of financing. Most such ventures are financed out of retained earnings.

Stockholders reportedly are uneasy that the RBHCs' capital is financing overseas ventures, the payoff for which is long term and, by comparison to their reliable monopoly service, uncertain. There is a growing tension between the expectations that stockholders have come to hold and the RBHCs' plans for overseas expansion. The Bell stocks have earned a solid reputation for steadily increasing value and for rising



SOURCE: SURVEY OF CURRENT BUSINESS, BUREAU OF ECONOMIC ANALYSIS, 1993

dividend payments. (RBHCs have had 56 opportunities to increase dividends in the 8 years since their inception in 1984, and they have in fact increased dividends 54 times.⁵⁸) The pressure to maintain this traditional performance for stockholders is increasingly at odds with the companies' desire to diversify into overseas ventures.⁵⁹ (See box 4-B.)

Conclusions

The increasing attention of RBHCs to European markets is largely a result of new opportunities there, compared with more nearly saturated and competitive markets here. RBHCs have had most of the tools to exploit foreign markets since their inception in the divestiture of AT&T: large cash reserves, unsurpassed management and network operating experience, and slow-growing domestic markets and the incentive

Figure 4-5.
Direct Foreign
Investments in
Communications,
1981-91

⁵⁶ Advisory Committee on International Communications and Information Policy, U.S. Department of State, "Study of International Financing of Telecommunications," Washington, DC, June 1992.

⁵⁷ The FCC also supports foreign activities of U.S. firms, but as an independent regulatory agency it has no direct influence over the Federal Government's lending agents, such as ExIm Bank, OPIC, or AID.

⁵⁸ Peter Coy, "Are High Dividends Stunting the Babies' Growth?" *Business Week*, Oct. 5, 1992, p. 134.

⁵⁹ A recent *Business Week* article reported, for example, that stockholders were "unhappy" that the RBHCs' "foreign ventures are consuming cash rather than generating it." "The Baby Bells' Painful Adolescence," *Business Week*, Oct. 5, 1992, p. 124.

Box 4-B. FOREIGN CARRIERS OPERATIONS IN THE UNITED STATES

The robustness of the U.S. telecommunications environment makes it attractive to foreign firms. Most major foreign telecommunications operators aspiring to an international market have opened offices in the United States, and several are pursuing more ambitious plans. BT, in particular, is establishing a strong presence. In June 1993, BT announced its intention to purchase 20 percent of MCI for \$4.3 billion and to form a joint venture company with the U.S. carrier. This major deal follows several other attempts by BT to gain access to the U.S. market, including its acquisition of the data network firm Tymnet from McDonnell Douglas in 1989 and its location of Syncordia, its consortium offering global network services, in Atlanta.¹ BT's alliance with MCI comes shortly after the company sold its 20-percent stake in McCaw to AT&T, the leading U.S. cellular firm. Telefonica, the Spanish telephone operator, is attempting to purchase 80 percent of the long-distance carrier in Puerto Rico, and France Telecom has indicated its interest in acquiring Westinghouse Communications, which offers a variety of switched, virtual, and private-line voice and data services to more than 100 companies, including its parent company, Westinghouse Electric.² Cable & Wireless operates a small interexchange carrier in the United States with approximately 1 percent share of the total international market.

¹ The joint venture company formed by MCI and BT will subsume Syncordia, and MCI will take control of BT's North American holdings, including Tymnet.

² Barton Crockett, "French, German Carriers to Buy Into BT's Syncordia," *Network World*, Feb. 17, 1992, p. 2.

SOURCE: OFFICE OF TECHNOLOGY ASSESSMENT, 1993.

to explore overseas. The critical element that has attracted them to Europe is the liberalization in telecommunications administrations

in the last 3 or 4 years and the promise of further access,