

**A DESCRIPTIVE COMPENDIUM OF THE INTERNATIONAL
ACTIVITIES OF MAJOR U.S.-BASED
UTILITY HOLDING COMPANIES**

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of the
NARUC International Relations
Committee

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INTRODUCTION

Commissioner Luis J. Lauredo, Chair of the NARUC Ad Hoc Committee on International Relations asked the National Regulatory Research Institute (NRRI) to prepare a descriptive inventory of the international ventures of U.S.-based utility holding companies. The NRRI agreed and presented a preliminary report at the 1992 NARUC winter meeting. The purpose of the preliminary report was to determine if the proposed format and content met the needs of the International Committee.

Based upon the positive responses received at that meeting an extensive data gathering effort was begun. A mid-June date was identified for the completion and distribution of the report. Publication of this report is intended to fulfill the request of the International Committee for up-to-date information on the international activities of U.S.-based utility holding companies.

Methods Used in Study

This study is a descriptive compendium. By that definition we have attempted to provide information on international ventures by the subsidiaries of United States-based utility holding companies. The method for this report has significant limitations. To complete this report we first contacted all of the known regulatory, industry, and independent research organizations to assess whether a descriptive listing of this type already existed. The general consensus was that a listing was not available and that such a listing would be extremely valuable. In an effort to develop this compendium, we assessed various information sources. Each source had its benefits and weakness. After some study we chose to use the Lexis/Nexis computerized research service.

Lexis/Nexis has a computerized database of regulatory and company press releases and stories on company activities. We searched this database for each of the 135 companies listed in Appendix C. Based upon the information we received from the database, we created summary paragraphs for each venture that was listed. The limitations of opting to use the Lexis/Nexis databases lie mainly in the fact that if the company did not release the information we would not pick it up in our searches. It is our understanding, however, that Lexis/Nexis includes all international activities of companies required to file information about their international activities with the Securities and Exchange Commission. To compile this brief compendium we reviewed just over 38,000 pages of information. It must be emphasized that it is virtually impossible to compile a comprehensive listing of a company's international ventures as some may simply go unreported. Consequently, this report should be considered to be a representative and fairly thorough listing of international ventures -- but not a fully comprehensive listing.

Exhibit Format

The following pages are exhibits which provide a chronologically based listing of international ventures by company. Companies are separated by industry sector -- telecommunications and energy.¹ In these exhibits the type of venture is stated. In most cases ventures can be classified as either a consortium or a joint venture. It should be noted that discrete classifications of venture types is often not possible from the information at our command. In some instances, general information on a company was included because of its perceived value in understanding the nature of other ventures within the company. Therefore, the venture classifications are meant to be broad categorizations based upon the information we had access to.

The announcement date listed in the exhibits is the date the information was released into the database. The country identification

¹ Water utility holding companies reportedly have engaged in international activities, but our Lexis/Nexis-based search did not reveal any information on these ventures. Also, our search focused on the nine largest holding companies of local exchange companies and does not identify international activities of interexchange or other telecommunications providers (e.g., AT&T).

typically lists the foreign country in which the venture took place. If the country specification is "international" there is not a specific country to which the venture can be limited. Under the "comments" column we made an attempt to provide as much information as needed to understand the nature of the ventures. When financial information was available, it was also included. Start dates and amounts listed are those shown in the documentation we examined and may be subject to change by the parties.

In addition to the exhibits, there are four appendices to this report. Appendix A is a glossary of some terms which are commonly used in the international telecommunications industry. Appendix B is a selected listing of international information sources. Specifically, these information sources have been cited as having some level of expertise in the international utility area. Appendix C is an alphabetical listing by industry sector of all the companies on which searches for international ventures were conducted. For most of these companies there were no international ventures listed, consequently there is not an exhibit for these companies. Appendix D is a compilation of four tables which compare the size of international utility companies.

Parting Observations

A wide variety of firms, utilities, and government agencies have combined in numerous ways to form joint ventures to develop, expand, or improve the telecommunications and energy infrastructure around the world. Some of these efforts have been bilateral with one U.S.-based utility working with one company or governmental agency, but most have been complex multilateral ventures involving several firms or several countries. As most of these ventures deal with building infrastructures, their impact can not be assessed immediately. It will likely be several years before the medium-term impact of such ventures can begin to be assessed. For the present, however, it seems reasonable to expect that the privatization and market liberalization trends are likely to continue and that U.S.-based utility holding companies are equally likely to remain in the forefront due to their superior technological, managerial, and financial resources.

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PART 1
TELECOMMUNICATIONS SECTOR

EXHIBIT 1-1
TELECOMMUNICATIONS SECTOR

Ameritech Corporation Ameritech International	Organizational Summary		
	Ameritech provides full-service communications and advanced information services to about 12 million customers in the Midwest. It also has operations in New Zealand, Poland, and other international markets. In 1992 revenues were \$11.2 billion, and assets exceeded \$22 billion.		
Type of Venture	Announcement Date	Country	Comments
Joint venture	May 26, 1993	Korea	Ameritech International agreed with Korea Telecom to develop joint ventures in various areas.
Joint venture	June 26, 1992 May 3, 1993 December 21, 1992	Norway	Ameritech International in a joint venture with Singapore Telecom received approval from the Norwegian government to acquire 49.9% of Netcom GSM, a Norwegian cellular communications firm. The system is expected to be operational by July 1, 1993.
Joint venture	May 8, 1992 June 7, 1991 April 30, 1991 November 9, 1990	Poland	Polska Telefonia Komorkowa (PTK), was formed under a joint venture agreement to build and operate a cellular phone network in Poland. Finland's Oy Nokia Ab will supply exchanges, base station equipment, and mobile phones to the consortium. Members of the joint venture include Ameritech, France Telecom Mobiles, and PTT, the Polish state telecommunications company

Ameritech Corporation

Type of Venture	Announcement Date	Country	Comments
Consortium	April 20, 1992	Brazil	A consortium was formed between Ameritech, Motorola, and two Brazilian firms, Unibanco and Odebrecht. The consortium will propose and build a cellular system in Sao Paulo, a market of approximately 34 million people.
Consortium	March 23, 1992	Hong Kong	Ameritech joined two Hong Kong firms, New World Development and INFA Telecom, to form New World Telecom. The consortium will seek Hong Kong's first digital from-the-start cellular license.
Consortium	August 28, 1991	Australia	Ameritech is part of a consortium which is positioned to bid on various aspects of the deregulating Australian telecommunications market. The consortium, called Kalori, is a partnership between Ameritech, Bell Atlantic, Hutchison Whampoa, and France Telecom.
Initial public offering (IPO)	June 10, 1991	New Zealand	Ameritech and Bell Atlantic filed with the U.S. Securities and Exchange Commission for a proposed initial public offering of 420 million ordinary shares to be sold by Ameritech and Bell Atlantic. This sale represents a dilution of approximately 19 percent of Ameritech's and Bell Atlantic's ownership position in New Zealand Telecom.

Ameritech Corporation

Type of Venture	Announcement Date	Country	Comments
Joint venture	May 2, 1991	New Zealand	Ameritech and Bell Atlantic entered a joint venture with TeleCommunications, Inc. and Time Warner's American Television and Communications unit to purchase 51% of Sky Network Television Limited, of New Zealand. Sky Network provides multi-channel pay television services in New Zealand.
Joint venture	June 7, 1990	Italy	Ameritech and Italcable will cooperate to provide consulting services and certain telecommunications products and services to support each other's marketing efforts and pursue possible future joint activities.
Joint venture	April 6, 1990	Denmark	Ameritech and Kjoebenavns Telefon, a Danish telecommunications firm, signed an agreement which could enable Danish-developed systems to be sold in the American market. In addition, the agreement offers Ameritech a foothold in the European Market.
Joint venture	September 12, 1990	New Zealand	Ameritech and Bell Atlantic formed a joint venture to purchase Telecom Corporation of New Zealand Limited, New Zealand's state-owned telecommunications company. The purchase price was approximately \$2.5 billion (US). To comply with government requirements, Ameritech and Bell Atlantic will reduce their combined ownership of NZ Telecom to

Ameritech Corporation

Type of Venture	Announcement Date	Country	Comments
			49.9% over the next three years through stock offerings.
Consortium	April 4, 1990	Japan	<p>Ameritech joined the OSI/Network Management Forum, which announced the approval of the Forum Object Specification, which defines the logical and physical components of networks. The library includes definitions of 33 managed objects, and represents the first endeavor in which object-oriented techniques have been applied to the management of existing networks.</p> <p>The next step for the Forum is to establish an international registry, so that Forum implementors' groups can register a much larger family of objects in a common way.</p>
Joint venture	May 16, 1989	Germany	Ameritech is a member of a consortium with Bell Atlantic and two German firms, MAN and Ruhrgas, which bid for a license to operate a digital cellular mobile telephone network in the Federal Republic of Germany.

EXHIBIT 1-2
TELECOMMUNICATIONS SECTOR

Bell Atlantic Corporation Bell Atlantic International	Organizational Summary		
	<p>Bell Atlantic Corporation is based in Philadelphia and is the parent corporation of New Jersey Bell, Bell of Pennsylvania, Diamond State Telephone (Delaware), and the Chesapeake and Potomac Telephone companies of Maryland, Virginia, West Virginia, and Washington, D.C. Bell Atlantic International offers network services and consulting to telephone authorities throughout the world and, in conjunction with Ameritech, owns Telecom Corporation of New Zealand.</p>		
Type of Venture	Announcement Date	Country	Comments
Joint venture	May 19, 1993	Canada	<p>AGT Limited, as a member of the Stentor alliance, has signed an agreement with Bell Atlantic to jointly research, plan, and develop advanced intelligent network (AIN) services. AGT launched Canada's first AIN service through a trial of origin-based routing early this month and has trial plans for two additional AIN services later this summer. AIN services enable customization of telecommunications services, providing telephone companies and their customers with the opportunity to conceive, create, test, and introduce new services quickly and cost effectively.</p>
Joint venture	April 14, 1993	Australia	<p>Bell Atlantic Business Systems International formed a partnership with Fujitsu Australia. Bell Atlantic will provide independent computer service and support for the companies' operations in Australia and other locations.</p>

Bell Atlantic Corporation

Type of Venture	Announcement Date	Country	Comments
Divestiture	March 11, 1993	New Zealand	Bell Atlantic Holdings Ltd. entered into an agreement to sell approximately 109 million ordinary shares of Telecom Corporation of New Zealand. This reduction in the level of ownership in Telecom New Zealand is consistent with the agreement entered into by Bell Atlantic and Ameritech when Telecom New Zealand was acquired.
Information	December 13, 1992	Uruguay	A majority of Uruguayans rejected in a referendum their government's plans to privatize parts of the ANTEL telephone company. Uruguay had already picked seven firms for a tender to find a foreign partner to run ANTEL. These firms included GTE, Southwestern Bell, Bell Atlantic, Cal and Wireless, BCE, Deutsche Telekom, and France Telecom.
Joint venture	July 27, 1992	Czech and Slovak Republics	The European Bank for Reconstruction and Development (EBRD) approved two loans for \$19 million to finance construction of cellular networks in the Czech and Slovak republics. The loans were made to Eurotel Prague and Eurotel Bratislava, which are joint ventures between the post and telecom authorities of each republic and Atlantic West which is owned by US WEST International and Bell Atlantic International.

Bell Atlantic Corporation

Type of Venture	Announcement Date	Country	Comments
Consortium	June 26, 1992	Korea	Six consortia have submitted tenders to operate the country's second mobile telecommunications firm. One consortium included the Dongbu Group and Bell Atlantic, and 22 other local firms.
Joint venture	June 5, 1992	Australia	Bell Atlantic's joint venture company, Pacific Star Communications, won a five year contract to manage the Queensland state government communications network. Pacific Star is a joint venture between Bell Atlantic and Telecom Corporation of New Zealand.
Joint venture	March 31, 1992	Canada	Cellular Data Inc., whose major investors include Bell Atlantic Mobile Systems, announced the formation of a joint venture with Canadian conglomerate Telesystems Enterprises Ltd., a subsidiary of National Telesysteme. The purpose of the joint venture is to effect the deployment of a country-wide packet cellular data network.
Joint venture	December 9, 1991	Italy	Bell Atlantic and STET entered into a joint venture agreement to develop advanced strategic software. STET is a holding company of the IRI Group, the Italian state-owned industrial conglomerate, with responsibility over telecommunications.

Bell Atlantic Corporation

Type of Venture	Announcement Date	Country	Comments
Consortium	November 15, 1991	Venezuela	Bell Atlantic and Bell Canada bid \$1.407 billion for the Venezuelan phone company, CANTV. However, another consortium led by GTE bid \$1.885 billion. AT&T was a member of the GTE consortium. The winning bid by GTE's consortium was more than double the floor price for offers set by the Venezuelan privatization agency Fondo de Inversiones de Venezuela FIV.
Joint venture	September 12, 1991	Czech and Slovak Republics	Eurotel Cellular Service, a joint venture of US WEST, Bell Atlantic, and the Czech and Slovak Posts and Telecommunication Administrations, began offering cellular service.
Consortium	August 28, 1991	Australia	France Telecom joined the Kalori consortium whose existing members included Ameritech, Bell Atlantic, International Telecommunications Japan, and Hutchison Whampoa of Hong Kong. The Consortium is preparing a bid for Australia's cellular license. Kalori's main rival in the bidding is the Optus consortium which is led by BellSouth and Cable and Wireless. Entry into the Australian market is seen as a springboard to the Asian market.

Bell Atlantic Corporation

Type of Venture	Announcement Date	Country	Comments
Divestiture	August 5, 1991	France	General Datacomm Industries purchased Eurotech France, a Paris-based unit of Bell Atlantic Corporation. Eurotech was a prominent systems integrator in the French marketplace for more than 15 years.
Joint venture	July 25, 1991	International	International Computers Limited and Bell Atlantic Business Systems entered into a joint venture to provide computer maintenance services in western Europe. The joint venture will be based in London. The joint venture, Bell Atlantic Customer Services International, will provide computer services for large and intermediate systems, workstations, and microsystems for IBM, DEC, and many other makes and models of computer equipment.
Initial public offering (IPO)	July 24, 1991	New Zealand	Bell Atlantic expected a one-time accounting gain of approximately \$75 million from the initial public offering on Telecom Corporation of New Zealand. In all, 724.5 million shares, including options for 94.5 million shares to cover over-allotments, were sold by Bell Atlantic and Ameritech. The shares represent approximately 31 percent of Telecom of New Zealand's outstanding share capital.

Bell Atlantic Corporation

Type of Venture	Announcement Date	Country	Comments
Consortium	July 15, 1991	Australia	The Kalori Communications Group, a consortium in which Bell Atlantic and Ameritech are members, bid on Australia's state-owned satellite operating service Aussat as the Australian market embraces deregulation in much of its telecommunications market. Optus Communications, led by BellSouth, also bid for Aussat.
Joint venture	April 8, 1991	Russia	Bell Atlantic entered into a joint venture agreement with the Russian Ministry of Communication and the local international telephone companies in Leningrad in order to develop a cellular system, an international gateway, and a modernized telecommunications infrastructure in Leningrad.
Joint venture	February 7, 1991	Russia	Bell Atlantic entered into a joint venture agreement with Belle Mead International Telephone to develop and operate a mobile cellular system in Moscow.
Joint venture	November 16, 1990	Czech and Slovak Republics	Bell Atlantic International and US WEST International Holdings entered into an agreement with the Post and Telecommunications Administration of the Czech and Slovak Republics to create a joint venture to build and operate cellular mobile and packet data networks in both republics.

Bell Atlantic Corporation

Type of Venture	Announcement Date	Country	Comments
Consortium	November 8, 1990	Argentina	Argentina's privatization program moves forward after a group headed by Bell Atlantic and Manufacturers Hanover failed to obtain the two billion dollars of Argentine foreign debt paper needed to complete the purchase. Due to this failure, STET and France Cable stepped in to obtain one part of the Argentine telephone system. The other part of the telephone system will be operated by Telefonica de Espana, Spain's state telephone company, in partnership with Citibank and other industrial partners.
Joint venture	November 1, 1990	Taiwan	Bell Atlantic International and the Directorate General of Telecommunications (DGT) of the Republic of China entered into a joint venture agreement to explore specific marketing opportunities and research programs as well as personnel and information exchanges in areas of mutual interest. They will also explore other business activities worldwide to identify joint investment and development opportunities.
Joint venture	September 12, 1990	New Zealand	Ameritech and Bell Atlantic formed a joint venture to purchase Telecom Corporation of New Zealand, the New Zealand state-owned telecommunications company. The purchase price was \$2.5 billion. Ameritech and Bell Atlantic must reduce their ownership to 49.9% over the next three years.

Bell Atlantic Corporation

Type of Venture	Announcement Date	Country	Comments
Joint venture	June 20, 1990	Czech and Slovak Republics	US WEST and Bell Atlantic entered into a joint venture agreement with the Ministry of Posts and Telecommunications of the Czech and Slovak Federated Republics to build a public switched packet data network
Joint venture	June 15, 1990	Czech and Slovak Republics	US WEST and Bell Atlantic entered into a joint venture with the Ministry of Posts and Telecommunications of the Czech and Slovak Federated Republics to modernize the country's telecommunications system by constructing and operating a cellular mobile network. The joint venture company will also assist in the development of a program for modernization of the telecommunications infrastructure in both republics.
Participation	May 18, 1990	International	Bell Atlantic participated in a recent visit to Poland on behalf of the Overseas Private Investment Company (OPIC). The role of the mission was to ascertain the amount of progress being made in Poland's move toward a more market based economy.
Joint venture	May 14, 1990	Korea	Bell Atlantic and the Korean Telecommunications Authority entered into a joint venture agreement to work on a broad range of cooperative activities. These activities include exploring specific marketing and research opportunities.

Bell Atlantic Corporation

Type of Venture	Announcement Date	Country	Comments
Organizational change	September 18, 1989	Germany	Bell Atlantic created a German subsidiary called Bell Atlantic GmbH. Bell Atlantic's Sorbus GmbH managing director, John von Simson, was announced as the president of the new subsidiary. Bell Atlantic GmbH will be located in Dusseldorf in the same office block as Sorbus GmbH.
Organizational change	July 25, 1989	Belgium	Bell Atlantic selected Brussels as the location for its European headquarters. The headquarters will provide corporate oversight and management services for all Bell Atlantic European business units.
Joint venture	May 16, 1989	Germany	Bell Atlantic and Ameritech participated in a consortium with two German firms, MAN and Ruhrgas, to bid for a license to operate a digital cellular mobile telephone network in the Federal Republic of Germany.
Joint venture	April 12, 1989	Japan	Bell Atlantic and Global VAN Japan, an international value-added network operator, formed a joint venture to link their telecommunications networks. The link will enable Global VAN to offer services like electronic mail and packet switching over Bell Atlantic's local networks in the eastern United States.

Bell Atlantic Corporation

Type of Venture	Announcement Date	Country	Comments
Organizational change	March 10, 1989	Germany	Bell Atlantic's CONNECT Inc. established a new company, CONNECT GmbH, in Germany. The company is now a division of Bell Atlantic's Sorbus Inc. CONNECT GmbH was formed to provide a new level of technology and service to international businesses and organizations. Specifically, CONNECT's service accomodates both Macintosh and MS-DOS platforms as well as gateways to other networks, and includes on-line information services, product support, newsfeeds, and securities updates.
Joint venture	February 7, 1989	Italy	Bell Atlantic International and Eurotech Italia agreed to work with Compagnia Internazionale di Tecniche di Elaborazione e Computers (CITEC) on the practicality of joint marketing/venture activities.
Joint venture	December 14, 1988	New Zealand	Bell Atlantic International entered into a systems integration agreement with IBM New Zealand, to work to implement a computerized directly assistance system for Telecom Corporation of New Zealand.
Joint venture	December 14, 1988	Spain	Bell Atlantic International entered into an agreement with Telefonica De Espana, Spain's national telephone company, to jointly work on a broad range of cooperative activities including joint technical and marketing studies.

Bell Atlantic Corporation

Type of Venture	Announcement Date	Country	Comments
Joint venture	October 5, 1988	Netherlands	Bell Atlantic and Staatsbedrijf Der Posterijen Telegrafie en Telefonie, the Netherlands telephone company, entered into a joint agreement to implement a network trunk forecasting and surveillance system in the Dutch telephone system. This agreement is the first step in the PTT's plan to modernize its network management systems. It also is part of the PTT's efforts to build a planning process for the development of the telecommunications infrastructure in the Netherlands.
Joint venture	February 17, 1988	Spain	Bell Atlantic International entered into a joint venture with IBM Espana and Compania Telefonica Nacional de Espana (Telefonica), Spain's national telephone company, to implement an integrated database and software system for the management of telephone network facilities in Spain.
Acquisition	February 2, 1988	International	Bell Atlantic acquired BCE Incorporated's European companies engaged in computer maintenance, product distribution, and customized data applications. BCE is located in Montreal, Canada. The purchase expands Bell Atlantic's computer maintenance operations into the United Kingdom, France, Italy, West Germany, Switzerland, and Austria. The European companies will be part of Sorbus.

Bell Atlantic Corporation

Type of Venture	Announcement Date	Country	Comments
Joint venture	October 23, 1987	Italy	Bell Atlantic entered into a joint agreement with Italtel to evaluate the possible use of equipment manufactured by Italtel to satisfy the business communications needs of Bell Atlantic customers. Italtel has significant technological advancements in voice and data networking.
Joint venture	October 22, 1987	Germany	Bell Atlantic International and Siemens AG entered into a joint venture to evaluate product opportunities for intelligent network services in the international marketplace. This study will assess the marketplace requirements outside the United States for a series of intelligent network voice, data, and image applications based on an architecture developed for use in the United States by Bell Communications Research.
Consultancy	November 25, 1986	United Kingdom	Bell Atlantic agreed to provide a range of consulting services to support British Telecommunication PLC's introduction of Centrex in London's financial community. Under the agreement, Bell Atlantic International will provide consulting in all phases of the design, operation, and marketing of British Telecom's first Centrex system.

Bell Atlantic Corporation

Type of Venture	Announcement Date	Country	Comments
Joint venture	December 9, 1985	United Kingdom	Bell Atlantic Mobile Systems and Cellnet of London entered into a joint venture enabling international travelers to prearrange for cellular phone rental service. The program, called Service Link, proposes to allow travelers to use cellular service wherever they go, as easily as "roaming" within their own country.
Acquisition	January 30, 1985	U.S.A.	Bell Atlantic acquired Sorbus, a third party computer maintenance concern.

EXHIBIT 1-3
TELECOMMUNICATIONS SECTOR

BellSouth Corporation BellSouth International	Organizational Summary		
	BellSouth Telecommunications, with headquarters in Atlanta, provides telecommunications services in the BellSouth region which includes North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, and Louisiana. These companies serve a combined 18.6 million local telephone lines. BellSouth Cellular has operations in more than 50 markets. BellSouth has current cellular operations in Denmark, France, the United Kingdom, New Zealand, Venezuela, Argentina, Mexico, Chile, and Uruguay.		
Type of Venture	Announcement Date	Country	Comments
Assistance	March 24, 1993	Germany	The first Germany to the United States demonstration of high-speed data service took place with the assistance of BellSouth Telecommunications. MCI, BellSouth, and Germany's Deutsche Bundespost Telefon provided the demonstration for a worldwide telecommunications trade show and conference in Hannover, Germany.
Consortium	February 8, 1993	Germany	The E-Plus consortium of which BellSouth Corporation is a member, was awarded a second private cellular license by the German Federal Minister of Post and Telecommunications. The other partners of the E-Plus consortium are Thyssen AG, Veba AG, Vodafone, and Caisse des Depots. This deal is part of the German government's commitment to liberalizing the telecommunications sector.

BellSouth Corporation

Type of Venture	Announcement Date	Country	Comments
Joint venture	October 13, 1992	India	<p>India, in an effort to liberalize its telecommunications sector, has used licenses to joint venture companies to operate cellular telephone systems and paging services in its four largest cities. Eight companies have been licensed to operate cellular telephones in Delhi, Bombay, Calcutta, and Madras. BellSouth was one of the firms included in the license awards.</p>
Consortium	August 14, 1992	China	<p>Optus Communications, an international consortium in which BellSouth is a member, successfully launched its first satellite, the Optus B1, from China. The satellite will allow Optus to provide a greater mix of telecommunications services to its customers. It will also be used to provide supplementary and backup coverage to Optus' fiber optic network, enhance in-country and international long distance, and furnish auxiliary voice, data, and video business services.</p> <p>In 1991, the Australian government awarded Optus the license to become the nation's second telecommunications provider. Other equity holders in the Optus consortium include Cable and Wireless and four Australian companies and institutions that own the remaining 51 percent.</p>

BellSouth Corporation

Type of Venture	Announcement Date	Country	Comments
Cellular license	August 4, 1992	Australia	<p>Nine international countries registered with the Australian government to bid for the country's third mobile telephone license. The winner of the bid will compete with the state-owned Mobilnet and Optus Communications, which currently provide cellular service in Australia. Opus is an international consortium in which BellSouth is a member.</p>
Cellular license	July 1, 1992	Denmark	<p>Dansk MobilTelefon, a Danish company partially owned by BellSouth Enterprises, has inaugurated commercial GSM digital cellular service in Denmark under the trade name "Sonofon." GSM, which stands for Groupe Speciale Mobile, is a digital cellular standard that was created in Europe. Its main advantage is that, once implemented in all European countries, it will allow Europe to become a seamless cellular market, allowing users to use their cellular sets to make and receive calls automatically across country lines. BellSouth has a 29 percent interest in Dansk MobilTelefon. The other partners are GN Great Nordic (36%), NordicTel (20%), and Kryolitselskabet Oresund (15%). Sonofon plans to invest an estimated \$120 million over the next ten years to build and operate the cellular network.</p>

BellSouth Corporation

Type of Venture	Announcement Date	Country	Comments
Joint venture	May 14, 1992	Canada	An international paging service that allows people to send and receive full text messages between Canada and the United States was completed. MobileComm, a BellSouth company, and Mobile Canada, a new corporation of Canadian communications companies, formed a joint venture to launch the new paging service.
Cellular roaming	April 10, 1992	International	BellSouth International announced, at Americas Telecom, that it will offer cellular roaming between its five Latin American cellular properties and its cellular operations in the United States. Roaming service lets cellular customers use their cellular phones in other markets (i.e., Latin American subscribers visiting the United States). BellSouth International already provides cellular roaming between its Argentinian and Uruguayan affiliates.
Joint venture	March 31, 1992	Greece	BellSouth Europe entered into a joint venture with Telefonica de Espana, Spain's state-owned telecommunications company, and Rain Hellas of Greece.
Consortium	March 18, 1992	Italy	BellSouth International entered into a consortium with Ente Nazionale Idrocarburi and Millicom International, to compete for the license to operate Italy's second cellular telephone system.

BellSouth Corporation

Type of Venture	Announcement Date	Country	Comments
Consortium	February 4, 1992	Australia	Optus Communications, a consortium in which BellSouth holds a 24.5 percent equity, finalized the purchase of Aussat Pty, an Australian satellite communications concern. Optus will offer a full range of network services, including domestic and international long distance services, mobile, personal communications services, as well as private line and advanced business communications.
Consortium	December 2, 1991	Venezuela	Telcel, a consotrtium headed by BellSouth Corporation, began cellular mobile telephone service in Caracas, Venezuela. More than 8,000 subscribers signed up for the service before the first call was placed. With this venture, BellSouth brought to five the number of cellular networks it now operates in Latin America. Other ventures are located in Mexico, Chile, Uruguay, and Argentina.
Consortium	November 21, 1991	Australia	Optus Communications, a consortium in which BellSouth Enterprises holds a 24.5 percent equity interest, has the tender to purchase aussat, a satellite communications concern and become the second telecommunications carrier in Australia. Optus plans to rapidly deploy a fiber optic backbone network extending around Australia.

BellSouth Corporation

Type of Venture	Announcement Date	Country	Comments
International ISDN service	November 14, 1991	Japan	BellSouth announced an international ISDN service connecting Japanese electronic giant Fujitsu's Atlanta and Tokyo offices.
Joint venture	October 10, 1991	International	BellSouth Enterprises expanded its wireless product line with an agreement with RAM Broadcasting Corporation to jointly own and operate certain mobile data paging and cellular networks worldwide.
Acquisition	September 11, 1991	International	BellSouth acquired Pacific Telecom's equity interest in T.U. International. T.U. International provides, through its wholly owned subsidiary, CIDCOM S.A., mobile radio telephone service in Santiago and other parts of Chile and cellular telephone service in the Santiago and Valparaiso areas that have a population of more than six million.
Consortium	December 17, 1990	Uruguay	A consortium of companies led by BellSouth Corporation, finalized a contract for the development and operation of a cellular mobile telecommunications network in Uruguay. The consortium will invest more than \$10 million to construct a state-of-the-art cellular system. Other members of the consortium include Motorola, SOCMA and BGH of Argentina, as well as other unlisted private investors.

BellSouth Corporation

Type of Venture	Announcement Date	Country	Comments
Cellular license	August 17, 1990	New Zealand	BellSouth will design and build an advanced digital wireless system, based on the newly emerging Group Special Mobile (GSM) pan-European standard. Final approval for the system was provided by New Zealand Commerce Commission.
Consortium	August 16, 1990	Mexico	Comcel, a multinational consortium of companies led by BellSouth began providing cellular telephone service in Guadalajara and the western region of Mexico. Comcel's service represents the first time cellular service has been offered in the area. Comcel expects to spend more than \$100 million to develop the system and anticipates having more than 265,000 customers by the end of the 20-year license.
Acquisition	January 18, 1990	France	BellSouth signed an agreement to take an equity position in Communication-Development (Com-Dev), the communications branch of Caisse Des Depots-Development (C3D), a holding company that coordinates and manages the consulting and engineering subsidiaries of CaisseDes Depots et Consignation (CDC). The agreement allows BellSouth to take a minority stake Com-Dev's cable networks.

BellSouth Corporation

Type of Venture	Announcement Date	Country	Comments
Cable license	April 19, 1989	Ireland	BellSouth International entered a bid for all of Cablelink, an Irish cable television network serving 260,000 customers. Cablelink is 80 percent owned by the Irish government through its RTE broadcasting organization, with the remaining 20 percent belonging to Allied Irish Banks. Cablelink is the ninth largest cable network in the world in terms of subscribers. Other firms to put in offers include United Cable Television, Pacific Telesis Group, and Time-Life.
Cellular license	February 27, 1989	United Kingdom	BellSouth Corporation signed an agreement to purchase Air Call Holdings' shares in Air Call Communications, providers of cellular, paging, and telephone answering, and tele-marketing services in the United Kingdom, Ireland, and continental Europe.
Consortium	February 20, 1989	Germany	BellSouth Enterprises is a member of a consortium to apply for a private mobile telephone license in West Germany. Other members of the consortium include Bayerische Motoren Werke AG (BMW), VEBA AG, Racal Electronics, and Compagnie Financiere pour le Radiotelephone SA.

BellSouth Corporation

Type of Venture	Announcement Date	Country	Comments
Consortium	October 6, 1988	Argentina	BellSouth Corporation placed Robert J. Marina as chief executive officer of Compania de Radiocomunicaciones Moviles S.A., a consortium of companies including BellSouth, which will install and operate a new cellular mobile communications network in Argentina.
Acquisition	August 31, 1988	Australia	BellSouth Corporation's Australian subsidiary, Link Telecommunications, acquired Instapage Pty. Ltd. and the business operations of Voicecall's affiliate, Page Alert Pty. Ltd. Instapage is an Australian paging company with operations in Melbourne and Sydney. It has 16,500 pagers in service. Voicecall Communications provides paging and telephone answering services in Melbourne, Sydney, and Brisbane while Page Alert operates a satellite paging network throughout Australia. The combined Voicecall/Page Alert operations serve about 27,000 pagers.
Consortium	July 22, 1988	Argentina	The Argentine Secretary of Communications recommended that Compania de Radiocomunicaciones Moviles S.A. (CRM), a consortium formed by BellSouth, Motorola, and Citibank, and Argentina companies Socma and BGH, be given a new cellular license. CRM will invest \$220 million over a 15-year period, and expects to serve approximately 320,000 subscribers.

BellSouth Corporation

Type of Venture	Announcement Date	Country	Comments
Acquisition	July 5, 1988	International	BellSouth Corporation invested \$25 million in Raynet International. Raynet was formed to commercialize the fiber optic technologies of Raychem's Raynet Corporation in overseas areas.
Joint venture	July 1, 1988	Thailand	BellSouth International entered into a joint venture agreement with the Telephone Organization of Thailand (TOT) to assist them with the development of a 10-year computer applications plan. BellSouth will work with Systomat, a Thailand computer company, to study the needs and applications of computer software and hardware within the TOT's organization.
Organizational change	July 1, 1988	Germany	BellSouth International opened a regional office in Bonn, West Germany.
Consultancy	November 26, 1987	Italy	BellSouth International entered into an agreement to perform an implementation analysis of selected software systems with Societa Italiana per l'Esercizio delle Telecomunicazioni (SIP), the telephone operating company in Italy. The agreement calls for the assessment of the network application capabilities of Flexcom and Telegate. Flexcom enables telephone companies to automatically and remotely provide electronic transmission equipment.

BellSouth Corporation

Type of Venture	Announcement Date	Country	Comments
Joint venture	October 22, 1987	Switzerland	TDF Radio Services, a subsidiary of TeleDiffusion de France, and BellSouth International entered into a joint venture agreement in which BellSouth International will establish a French subsidiary to provide a range of customer services for TDF Radio Services' new national paging services called "Operator." Under the agreement, BellSouth International will provide billing and customer services for the TDF Radio Services paging system. The French subsidiary will be located in Metz, France.
Agreement	April 7, 1987	India	BellSouth International entered into an agreement with Telecommunications Consultants India Ltd. (TCIL) of India's Department of Telecommunications, to provide training and technical support on computer communications technology. The one-year project will include on-site training, technology orientation, and pilot network studies. TCIL and BellSouth International will jointly conduct feasibility studies on establishing communication links between computers throughout India.
Agreement	March 31, 1987	Guatemala	BellSouth International entered into an agreement with Empresa Guatemalteca de Telecomunicaciones (GUATEL) to provide digital network technical services while GUATEL installs digital equipment.

BellSouth Corporation

Type of Venture	Announcement Date	Country	Comments
Agreement	January 13, 1987	China	BellSouth International entered into an agreement to provide a wide range of voice and data communications equipment and services to the Shanghai Centre. BellSouth International will provide tenants of Shanghai Centre with a single source for all of their telecommunications and ancillary service needs, including telecommunications system design, installation, and on-site marketing, management, and maintenance.
Organizational change	December 19, 1985	International	BellSouth Corporation created a new holding company, BellSouth Enterprises, for the unregulated enterprises of the company. Under this structure, BellSouth Enterprises will supervise the functions of BellSouth International.
Conference	August 6, 1985	China	BellSouth Corporation and the U.S. Department of Commerce solidified plans for a conference in China to discuss the latest in telecommunications technology

EXHIBIT 1-4
TELECOMMUNICATIONS SECTOR

GTE Corporation	Organizational Summary		
	<p>GTE is a large U.S.-based holding company with local-exchange companies and domestic and international operations serving 21.6 million access lines in 40 states, Canada, and Latin America. GTE has many telecommunications related interests in countries throughout the world.</p>		
Type of Venture	Announcement Date	Country	Comments
Privatization	June 2, 1993	Greece	<p>GTE was one of six multinational firms which bid for a 35 percent equity interest in OTE, the Greek state telecommunications organization. Other bidders included Nippon Telegraph and Telephone, Spain's Telefonica de Espana, Italy's STET, France Telecom, and South Korea's Telefon.</p>
Information	April 20, 1993	Venezuela	<p>Revenues at CANTV, the Venezuelan telephone company in which GTE acquired a 20.4 percent equity interest in 1991, rose 70 percent to over \$1 billion in 1992. In 1992, CANTV installed more than 320,000 digital lines, added 200,000 new customers, expanded international circuits by 20 percent, and increased the number of public telephones by over 40 percent to 45,000.</p>

GTE Corporation

Type of Venture	Announcement Date	Country	Comments
Consortium	January 20, 1993	Korea	A consortium led by South Korea's Sunkyong Group and GTE won a bid to provide a national mobile phone network in South Korea. After receiving the contract, the Sunkyong Group unilaterally withdrew the consortium's bid. GTE entered negotiations with Sunkyong and the Korean Ministry to reopen the contract.
Divestiture	December 2, 1992	China	China bought an orbiting U.S. telecommunications satellite from GTE Corporation's GTE Spacenet. The new satellite will provide 10,000 telecommunications lines to ease the bottlenecks in China's existing telecommunications network. Satellites handle over 85 percent of China's international telecommunications services.
Joint venture	October 19, 1992	Russia	The European Bank for Reconstruction and Development (EBRD) lent \$6.5 million to EDN SOVINTEL, a telecommunications joint venture between the Russian Ministry of Communications and a U.S. consortium of which GTE is a member. The money will fund the expansion of an international telecommunications system in Moscow and is a non-recourse loan.

GTE Corporation

Type of Venture	Announcement Date	Country	Comments
Consortium	October 13, 1992	Germany	The E-Star consortium, of which GTE is a member, bid for a license to operate Germany's second private mobile phone network.
Consortium	August 21, 1992	Korea	The South Korean Ministry of Communications awarded an operating license to a consortium led by the Korean Sunkyong Group and GTE. The consortium will develop and operate a second mobile cellular system in South Korea.
Joint venture	May 12, 1992	International	GTE Airfone entered a joint venture with Northwest Airlines and COMSAT Aeronautical Services to test a satellite communications system that allows passengers to make telephone calls from virtually anywhere in the world.
Information	February 27, 1992	Canada	Canada passed new telecommunications legislation which unifies regulation of the major carriers under the jurisdiction of the Canadian Radio and Telecommunications Commission. Under the new rules, carriers must be 80 percent owned by Canadians. However, rights of existing foreign carriers such as GTE will be protected. GTE owns about 50 percent of British Columbia Telephone and Quebec Telephone.

GTE Corporation

Type of Venture	Announcement Date	Country	Comments
Contract	February 26, 1992	Swaziland	GTE Spacenet signed a \$2.5 million contract to upgrade an existing earth station in Swaziland, Africa. The upgrade will allow the Swaziland Posts and Telecommunications Corporation to provide international, direct-dial, digital service for its public-switched telephone network.
Joint venture	February 14, 1992	Japan	GTE became a partner in TU-KA Cellular Tokai, a Japan-based cellular communications company formed by Nissan Motor Company and DDI Corporation. In 1994 the joint venture will begin operating a high-capacity digital cellular system expected to serve 200,000 customers by the year 2000.
Consortium	November 1, 1991	Venezuela	A consortium including GTE and AT&T took a 40 percent stake in Cia Anonima de Telefonos de Venezuela (CANTV). GTE holds a 20.4 percent share in CANTV.
Joint venture	November 1, 1991	Japan	GTE Telecommunications Products and Services International became a joint venture partner with Nissan Motor Company in TU-KA Phone Kansai, a Japan-based cellular communications company formed to provide cellular communications in the Kansai region of Japan. The company expects to have 350,000 customers by the year 2000.

GTE Corporation

Type of Venture	Announcement Date	Country	Comments
Joint venture	August 27, 1991	Russia	Sovintel, the newly formed joint venture company of GTE and a branch of the Soviet Ministry of Communications, entered into a licensing agreement which allows it to use NYNEX DPI's "Telco Friendly" system to automate its commercial functions.
Contract	July 29, 1991	Holland	GTE Data Services and Tandem Computers signed a contract to provide computer systems and application software for a new itemized billing service to PTT Telecom Netherlands BV.
Joint venture	July 10, 1991	Russia	GTE entered into a joint venture to create Sovintel. Other joint venture members include San Francisco/Moscow Teleport and the Main Trunk Lines Control Centre (MTLCC) of the Soviet Ministry of Communications. Sovintel will operate an enhanced digital network service linking, via microwave and satellite communications, select international hotels and major business centers in Moscow with public switched telephone networks in the rest of the world.
Privatization	February 7, 1991	Australia	GTE withdrew its bid for Aussat, the operator of Australia's three communications satellites. British Telecommunications and NYNEX also withdrew their bids.

GTE Corporation

Type of Venture	Announcement Date	Country	Comments
Service agreement	October 30, 1990	Dominican Republic	The Compania Dominicana de Telefonos (CODETEL), a subsidiary of GTE International, signed an agreement with Infonet to provide local telecommunications service and support for its customers in the Dominican Republic.
Consortium	October 6, 1989	Germany	GTE Mobile Communications Group joined an international consortium to compete for the license to construct and operate a private digital mobile telecommunications system in West Germany. The proposed system will span Germany and have the potential to serve more than 60 million people.
Consortium	September 15, 1989	United Kingdom	GTE Mobile Communications is a member of a consortium which applied for a license to run a Personal Communications Network in the United Kingdom.
Contract	September 8, 1989	Costa Rica	GTE Directories won an eight year contract to continue providing telephone directory sales, publishing, and printing services for Instituto Costarricense de Electricidad (ICE), the official telephone and electric company of Costa Rica.
Contract	December 6, 1988	New Zealand	GTE subsidiary British Columbia Telephone won an \$8.9 million contract to provide a network management system to Telecom Corporation of New Zealand.

GTE Corporation

Type of Venture	Announcement Date	Country	Comments
Joint venture	July 17, 1986	International	GTE and Siemens reached an accord to establish a new company. The company is 80 percent owned by Siemens and involves GTE's U.S. and international transmission systems; and its public switching and business systems principally in Taiwan, Italy, and Belgium.
Information	July 9, 1986	International	GTE became one of the first international companies to join the Corporation for Open Systems (COS). COS is a non-profit organization organized to provide a vehicle for the acceleration of the introduction of interoperable, multivendor products and services in the world telecommunications markets.
Joint venture	May 5, 1986	Sweden	GTE Telenet and Sweden's Elektrisk Bureau were jointly awarded a contract to build a Swedish electronic messaging system based on GTE Telenet's Telemail Message Handling System.
Contract	May 1, 1985	Taiwan	GTE received a \$13 million contract from Taiwan to supply fiber optic systems and installation support services to expand the digital transmission capability of Taiwan's national telecommunications network.

**EXHIBIT 1-5
TELECOMMUNICATIONS SECTOR**

NYNEX Corporation NYNEX Network Systems NYNEX DPI NYNEX Information Res. NYNEX International BIS Group	Organizational Summary		
	NYNEX helps people communicate using information networks and services. It provides network and mobile communications in the northeastern United States and in selected countries around the world. The NYNEX family of companies also provides directory database and publishing services, and information and operations management consultancy.		
Type of Venture	Announcement Date	Country	Comments
Cable license	February 12, 1993	Hong Kong	Hong Kong's Executive Council agreed in principle to award a subscription television license to Warf Cable Limited. Warf's strategic partners in the bid are NYNEX Network Systems and United International Holdings.
Joint venture	January 20, 1993	International	FLAG's (Fiberoptic Link Around the Globe) \$1 billion undersea fiberoptic telecommunications cable secured its project-critical Japan terminal point. The FLAG project is privately financed by NYNEX Systems, the Dallah Al Baraka Group, Gulf Associates, and Marubeni. Gabriel Yackanich, formerly of New York Telephone has accepted the position as president of the FLAG project.

NYNEX Corporation

Type of Venture	Announcement Date	Country	Comments
Joint venture	January 20, 1993	International	NYNEX and Philips Home Services International will jointly develop and test a system that integrates text and voice information services with the intelligent telephone network using a visual display telephone. The technology will offer electronic white pages and home banking among its many possible services.
Acquisition	November 23, 1992	International	NYNEX announced that it has become sole owner of NYNEX DPI Company, which serves more than 100 telephone companies around the world, and is playing an increasing role in NYNEX's international networks, including NYNEX Gibraltar Communications and NYNEX Cable Communications in the United Kingdom.
Agreement	October 8, 1992	Czech Republic	NYNEX Information Resources, publisher of NYNEX Yellow Pages, signed a 13-year contract to publish seven Yellow and White Pages directories in the Czech Republic. NYNEX, through its MEDIATEL subsidiary, is now the official directory publisher for SPT-Praha, the Czech national telephone company.

NYNEX Corporation

Type of Venture	Announcement Date	Country	Comments
Joint venture	June 23, 1992	Thailand	<p>NYNEX Network Systems and Telecom Asia have finished their agreement to form a strategic partnership for a two million line expansion in Bangkok. Under the terms of the agreement, NYNEX will appoint the chief operating officer and many other key executive positions.</p>
Consortium	June 23, 1992	Japan	<p>NYNEX Network Systems joined TU-KA Cellular Tokai, a new company led by Daini Denden and Nissan Motor. TU-KA Cellular will provide mobile communication services by 1994 in central Japan.</p> <p>In September of 1991, NYNEX entered a similar agreement with the same parties to provide cellular services in the Kansai region of Japan, and in July of 1991 in the Kanto area of Japan. All systems are expected to be operational by 1994.</p>
Contract	June 23, 1992	Indonesia	<p>NYNEX Network Systems was selected by Perumtel, the Indonesian local telephone company, as the winner in a bid to expand the Indonesian phone system. The project was funded by the World Bank and is valued at approximately \$80 million.</p>

NYNEX Corporation

Type of Venture	Announcement Date	Country	Comments
Organizational change	November 21, 1991	International	NYNEX reorganized its international business to reflect its expanded overseas presence. NYNEX International ceased operations as a separate entity as of December 1, 1991.
Agreement	October 29, 1991	Czech Republic	NYNEX Information Resources will publish the official Yellow Pages telephone directory for Prague, Czechoslovakia beginning May 1992.
Agreement	October 2, 1991	Israel	NYNEX ALLINK entered into an agreement to utilize NYNEX ALLINK as the foundation for the design of TADRIAN's Network Management System. TADRIAN Telecommunications Group is one of five major operating groups of TADRIAN, Ltd., Israel's leading manufacturer of electronic systems and equipment for defense and commercial markets.
Consortium	October 1, 1991	United Kingdom	Phonepoint, the consortium comprising British Telecom, France Telecom, Deutsche Bundespost Telekom, Northern Telecom, and NYNEX International, suspended its telepoint operations.
Joint venture	August 27, 1991	U.S.S.R.	Sovintel, a venture with GTE and the Soviet Ministry of Communications, entered into a licensing agreement to use NYNEX DPI's "Telco Friendly" system to automate its commercial functions.

NYNEX Corporation

Type of Venture	Announcement Date	Country	Comments
Joint venture	July 24, 1991	Ireland	Telecom PhoneWatch, Ltd., a joint venture between NYNEX and Telecom Eireann of Ireland, is offering an advanced security and home management service to residential customers in Ireland. The PhoneWatch system, developed by NYNEX, uses the telephone network to communicate with a centralized monitoring bureau.
Consultancy	April 11, 1991	Hungary	A group of telecom experts, including NYNEX, met with Hungarian telecommunications officials to discuss privatization, competition, and Hungarian telecommunications.
Agreement	February 5, 1991	Gibraltar	NYNEX Information Resources will publish the official Yellow Pages for Gibraltar NYNEX Communications, Ltd. Publishing date is set for May 1991.
Foreign study	January 1991	Malaysia	NYNEX was contracted by the United States government to study the operations of Telekom Malaysia. The intent was to develop a plan for modernizing the nation's telecom system.
Joint venture	December 17, 1990	International	NYNEX formed a joint venture with SLT Communications, called NYNEX DPI. The newly formed company will develop, market, and maintain operations support solutions in communications markets worldwide.

NYNEX Corporation

Type of Venture	Announcement Date	Country	Comments
Introduction	October 29, 1990	France	NYNEX announced the introduction of NYNEX US Access, a videotex service, on the French Minitel system.
Agreement	October 23, 1990	United Kingdom	NYNEX Information Resources announced a reciprocal Yellow Pages agreement with the United Kingdom's British Telecom. The agreement allows NYNEX to sell advertising into British Telecom's directories and sets itself as British Telecom's authorized sales agent for United States Yellow Pages directories.
Organizational change	September 28, 1990	International	NYNEX created NYNEX Network Systems to focus on opportunities to provide communications networks outside the United States.
Cable franchise	September 28, 1990 June 26, 1990 May 21, 1990 April 6, 1990	United Kingdom	NYNEX and its cable partners were awarded 11 cable television franchises in the United Kingdom, making it the top telecommunications investor in the United Kingdom.
Software license	September 13, 1990	Europe	Vista Concepts, a NYNEX company, licensed its securities processing software to the International Stock Exchange.
Consultancy	June 26, 1990	Philippines	NYNEX was awarded two contracts by Phillipines Long Distance Telephone to develop project management and network expansion plans.

NYNEX Corporation

Type of Venture	Announcement Date	Country	Comments
Organizational change	April 19, 1990	International	NYNEX announced the creation of the Worldwide Information and Cellular Services Group which includes the NYNEX Business Information Solutions Group, NYNEX Business Information Systems, NYNEX Mobile Communications, and NYNEX International.
Contract	March 8, 1990	France	France Telecom awarded CAP SECA Telecom, in association with NYNEX International, a contract to develop a control system for the national telephone network.
Joint venture	March 1990	Hong Kong	NYNEX entered into an agreement with Hong Kong's largest television broadcaster, Television Broadcasts, Ltd., to conduct a joint market research project to analyze the direct marketing industry in Hong Kong.
Consortium	February 1990	Hong Kong	BIS headed an international consortium to help Hong Kong retain a predominant position in the world information technology league.
Joint venture	September 25, 1989	Gibraltar	NYNEX and the government of Gibraltar entered into a joint venture to own, operate, and modernize the domestic telecommunications system in Gibraltar.

NYNEX Corporation

Type of Venture	Announcement Date	Country	Comments
Joint venture	September 25, 1989	Scandinavia	NYNEX entered into a joint venture with Scandinavian Telecommunications Services to provide INFOPATHR packet switched services at the New York City end of an international communications link.
Consultancy	June 19, 1989	Australia	NYNEX International acted as a consultant to Telecom Australia's Intelligent Network Marketing Division to plan for the introduction of Centrex and virtual private network services in selected Australian cities.
Joint venture	July 19, 1989	Korea	NYNEX and DACOM of Korea entered into an agreement to explore joint studies on marketing and technology issues as well as exchanging information and personnel.
Financial	April 1989	Japan	NYNEX received clearance to issue yen-denominated commercial paper in the Japanese market in cooperation with Mitsui Bank Ltd.
Joint venture	March 3, 1989	Germany	NYNEX formed an international partnership with British Telecom, Daimler-Benz, and Rheinisch-Westfalisches Elektrizitaetswerk to bid on the West German non-wire cellular license.

NYNEX Corporation

Type of Venture	Announcement Date	Country	Comments
Joint venture	November 9, 1988	Italy	NYNEX International entered into an agreement with STET, the Italian Telecommunications Authority, to explore project alliances, including joint marketing and technical studies and personnel exchanges.
Internship	September 1988	Singapore	Scientists with Singapore National Communications Board participated in a one-year internship with the Artificial Intelligence Laboratory at NYNEX Science and Technology Center.
Organizational change	August 10, 1988	International	NYNEX International created the division of Global Network Services.
Contract	July 27, 1988	China	NYNEX agreed to provide Shanghai Telecommunications with a network monitoring system for the Postal and Telecommunications Administration of Shanghai.
Contract	July 1988	China	NYNEX secured a contract to provide hardware, software, and training for a central office monitoring system for the Postal and Telecommunications Administration of Shanghai.
Joint venture	June 9, 1988	Hong Kong	NYNEX International entered into a joint marketing agreement with Computasia to cooperate in marketing their software products in southeast Asia.

NYNEX Corporation

Type of Venture	Announcement Date	Country	Comments
Acquisition	April 4, 1988	United Kingdom	CAP International joined the BIS Group through an acquisition. BIS Group is a London-based NYNEX subsidiary and is part of the NYNEX Information Solutions Group.
Project completion	March 16, 1988	Taiwan	NYNEX concluded a cellular mobile communications project with Taiwan in which NYNEX consulted with Taiwan's telecommunications officials on the particulars of the market and technological attributes of cellular mobile communications.
Joint venture	October 29, 1987	United Kingdom	NYNEX International participated in a joint venture with British Telecom to develop an integrated network systems management plan.
Joint venture	October 21, 1987	Holland	NYNEX Enterprises entered an agreement with Straatsbedrijf PTT, the Dutch Telecommunications Authority, to explore project alliances, including joint marketing and technology studies.
Consultancy	September 1987	Taiwan	NYNEX secured a contract with Taiwan DGT to complete a consultancy on marketing and technology in cellular markets.
Joint venture	July 28, 1987	France	NYNEX entered an agreement with a French telecommunications company to cooperate in an exchange of information on various subjects.

NYNEX Corporation

Type of Venture	Announcement Date	Country	Comments
Acquisition	February 25, 1987	United Kingdom	NYNEX acquired Business Intelligence Services, Limited (the BIS Group). The BIS Group offers software, professional services, and other business services. The company was acquired through a NYNEX stock exchange of approximately \$1.65 million common shares.
Organizational change	May 23, 1986	Switzerland	NYNEX International opened its headquarters in Geneva, Switzerland.

EXHIBIT 1-6
TELECOMMUNICATIONS SECTOR

Pacific Telesis Group Pacific Telesis International	Organizational Summary		
	Pacific Telesis Group has annual revenues of approximately \$9 billion. PacTel operates Pacific Bell, Nevada Bell, Pacific Bell Directory and several smaller holdings. Under pending reorganization plans, PacTel Corp will oversee cellular, paging, and international operations. PacTel Corp has revenues of \$829 million in the 1992 fiscal year. Reorganization may change some of these relationships.		
Type of Venture	Announcement Date	Country	Comments
Proposed spin-off	April 7, 1993 February 17, 1993 December 14, 1992	U.S.A.	Pacific Telesis Group's plan to spin off its unregulated businesses is under study. The plan raises many questions for regulators, investors, and the telecom industry as a whole.
Joint venture	January 27, 1993	Spain	Sistlecom-Telemensaje, a joint venture in which Pacific Telesis owns an indirect 17.5 percent stake, began commercial paging service in 14 cities. Pacific Telesis owns 25 percent of Sistelcom which in turn owns 70 percent of Sistlecom-Telemensaje. Telemensaje, a paging company, owns the other 30 percent.
Joint venture	December 9, 1992	Japan	The Japanese government awarded a cellular license to Central Japan Digital Phone, of which PacTel Corporation has a 13 percent interest. The venture will build and operate a cellular system in the Tokai region of Japan. Service will begin by December 1994.

Pacific Telesis Group

Type of Venture	Announcement Date	Country	Comments
Consortium	October 28, 1992	Holland	Pacific Teleis International is a member of a consortium with Cable & Wireless and other Dutch partners. The Consortium will investigate prospects for seeking new licenses to be issued for mobile telecoms (GSM) in the Netherlands.
Joint venture	October 19, 1992	Portugal	Telecel, the Portugese cellular company in which Pactel International owns a 23 percent interest has begun nationwide cellular service in Portugal. Telecel is Portugal's first private cellular operator and its first privately-owned telecommunications company.
Consortium	August 20, 1992	Spain	The Spanish government has awarded a national paging license to the Sistlecom-Telemendaje consortium of which PacTel Corporation owns an indirect 17.5 percent share.
Joint venture	August 4, 1992	Japan	<p>Kansai Digital Phone will build and operate a digital cellular system in the Kansai area of Japan. Pacific Telesis International owns a 13 percent interest in Kansai Digital Phone.</p> <p>Pacific Telesis International also owns a 15 percent interest in Tokyo Digital Phone, which received a cellular license in Tokyo and a 13 percent share in Tokai Digital Phone in Tokai.</p>

Pacific Telesis Group

Type of Venture	Announcement Date	Country	Comments
Divestiture	April 23, 1992	United Kingdom	PacTel Cable and BCE Telecom entered into an agreement where BCE Telecom would purchase PacTel's interest in East London Telecommunications which owns six contiguous cable television franchises in London.
Acquisition	April 13, 1992	France	<p>PacTel Corporation entered an agreement to acquire an interest in a French mobile radio operation. PacTel and Bouygues, one of the largest French publicly held companies, will cooperate in operating Public Access Mobile Radio (PAMR) networks in the Paris and Centre regions of France. PacTel will acquire a 20 percent interest in the company.</p> <p>PAMR uses a trunked radio technology which allows a large number of users to share a pool of channels by monitoring and automatically switching customers to available channels. Compared with traditional private mobile radio, PAMR enhances capacity, service quality, and system efficiency.</p>
Consortium	March 19, 1992	Portugal	The Portugese government has awarded a national paging license to the Telechamada consortium, in which Pacific Telesis International is a 23 percent partner. Telechamada will construct a nationwide paging system to cover 60 percent of the population by 1993.

Pacific Telesis Group

Type of Venture	Announcement Date	Country	Comments
Cellular licence bid	August 4, 1992	Australia	Pacific Telesis Group was invited to apply for Australia's third mobile telephone licence.
Joint venture	July 7, 1992	Germany	<p>Pacific Telesis owns a 26 percent interest in Mannesmann Mobilfunk cellular system, Germany's first private telephone network and the world's largest digital cellular network. Mannesmann Mobilfunk is the first cellular operator to launch commercial service using the pan-European Global Standard for Mobile Communications (GSM).</p> <p>The Mannesmann Mobilfunk network, commonly called "D2 Privat," began commercial service on June 16, 1992. By the end of 1992 the system covered approximately 60 percent of Western Germany, reaching more than 80 percent of the West German Population.</p>
Organizational change	June 12, 1992	International	PacTel Corporation announced plans to restructure its cable TV operation so it can focus solely on its wireless telecommunications business. PacTel, through its PacTel Cable unit, entered preliminary talks with prospective buyers and considered other options for restructuring.

Pacific Telesis Group

Type of Venture	Announcement Date	Country	Comments
Joint venture	April 12, 1990	United Kingdom	<p>Microtel Communications Limited, a joint venture firm, was created to establish and operate a personal communication network (PCN) in the United Kingdom. Microtel is a joint venture of Pacific Telesis International, British Aerospace, Millicom, and Matre Communications.</p>
Paging license	March 29, 1990	Thailand	<p>PerCom Service Ltd., was awarded a national paging license from the Cable Authority of Thailand. Pacific Telesis International holds a 49 percent equity interest in PerCom.</p>
Paging license	February 15, 1990	United Kingdom	<p>The Cable Authority of Great Britain awarded the Derby cable license to Derbyshire Cablevision. Pacific Telesis and Masada UK Cable Partners jointly own Derbyshire Cablevision. The franchise covers approximately 90,000 homes in the city of Derby and brings to nearly 830,000 the number of U.K. homes Pacific Telesis has a cable license to service.</p> <p>In addition to multichannel television, Derbyshire Cablevision plans to offer basic telephone service to its customers. Masada Corporation provides cable service in the United States in areas such as Los Angeles, Phoenix, Atlanta, St. Louis, and Birmingham.</p>

Pacific Telesis Group

Type of Venture	Announcement Date	Country	Comments
Consortium	August 16, 1991	Portugal	Portugal awarded a second national cellular license to the Telecel consortium of which Pacific Telesis is a 23 percent partner. Under this license, Telecel will construct a nationwide digital cellular system based upon pan-European (GSM) standards.
Joint venture	May 7, 1991	U.S.A.	Pacific Bell's Data Communications Group (DCG) will offer Ungermann-Bass' Access/One series of hardware and software networking products under a joint marketing agreement that greatly expands the telecommunications company's data connectivity product offerings. These products are customer premises equipment to be purchased by the end-user customers.
SMDS trial	October 10, 1990	U.S.A.	Ungermann-Bass will participate with Pacific Bell in a trial of the Switched Multimegabit Data Service (SMDS). SMDS is a high-speed communication service that can be used, among other things, for the interconnection of local area networks.
Consortium	August 8, 1990	Germany	Mannesmann Mobilfunk, a consortium in which Pacific Telesis Group holds a 26 percent interest, was invited by the East German government to submit a proposal for the extension of its D2 cellular service.

Pacific Telesis Group

Type of Venture	Announcement Date	Country	Comments
Acquisition	June 23, 1989	Japan	Pacific Telesis International acquired an 8.9 percent share in the Japanese international telecommunications firm, International Digital Communications.
Cable franchise bid	April 19, 1989	United Kingdom	Pacific Telesis bid for all of Cablelink, an Irish cable television network serving 260,000 customers.
Paging license	January 22, 1987 May 15, 1986	Thailand	Pacific Telesis Engineering, Ltd., a subsidiary of Pacific Telesis International, officially inaugurated its digital paging service called PacLink.
Joint venture	June 11, 1986	Kuwait	Pacific Telesis International entered into a \$3 million contract with NEC Tokyo to assist with the installation of a cellular mobile telephone system in Kuwait.
Joint venture	April 29, 1986	China	Pacific Telesis International entered a joint venture with Kaiser Engineers and Constructors to pursue and implement joint design, construction, and other services for international projects of mutual interest. The first project of the joint venture is to study the feasibility of modernizing a telephone equipment plant in Sichuan Province. The project is funded by the U.S. International Development Cooperation Agency.

Pacific Telesis Group

Type of Venture	Announcement Date	Country	Comments
Cellular license	December 7, 1989 March 6, 1989	Germany	The Mannesmann Mobilfunk consortium, of which Pacific Telesis is a 26 percent equity partner, was awarded its second national cellular license in Germany. Other consortium members include Mannesmann, DG Bank Deutsche Genossenschaftsbank, Cable and Wireless, and Lyonnaise des Eaux.
Cable franchise	October 17, 1989	United Kingdom	Pacific Telesis International received two new cable television franchises in the United Kingdom. PTI acquired 100 percent of Bolton Telecable, Ltd. In the second venture, East London Telecommunications, owned by PTI and Jones Intercable, was granted the Waltham Forest cable franchise.
Consortium	September 14, 1989	United Kingdom	A consortium comprised of Pacific Telesis International, Matra Communications, British Airways, and Millicom Ltd., applied for a license to provide personal communication service within the United Kingdom.
Cable franchise	July 24, 1989 December 21, 1988	United Kingdom	The Cable Authority of Great Britain awarded two cable television franchises to East London Telecommunications (ELT) owned by Pacific Telesis International and Masada UK Cable Partners. ELT will provide cable television and basic telecommunications services.

Pacific Telesis Group

Type of Venture	Announcement Date	Country	Comments
Personnel exchange	November 5, 1985 January 24, 1985	Japan	Pacific Telesis Group engaged in a personnel and information exchange with Nippon Telegraph and Telephone. The agreement lays the foundation for future business relations between the two companies. Pacific Telesis International also inaugurated a new subsidiary, Pacific Telesis Japan, to deal with its Japanese ventures.
Acquisition	January 31, 1985	United Kingdom	Pacific Telesis International acquired Kensington Datacom, a British telecommunications company and owner of a private value-added network.
Contract	January 3, 1985	China	Pacific Telesis International, entered into an agreement with the Yunnan Provincial Post and Telecommunications Bureau of the People's Republic of China. Pacific Telesis International will perform analysis and design of the network of Yunnan Province in preparation for modernization.

Pacific Telesis Group

Type of Venture	Announcement Date	Country	Comments
Joint venture	February 26, 1986	India	Pacific Telesis International in a joint effort with Telecommunications Consultants India, Ltd., will market approximately \$3 million in Incomnet telecommunications equipment.
Consulting	February 25, 1986	Korea	Pacific Telesis International entered into an agreement with the Office of Supply of the Government of the Republic of Korea. The agreement establishes Pacific Telesis International as the sole consultant for the 1986 Asian Games and 1988 Olympic Games in Seoul.
Merger	January 15, 1986	International	Pacific Telesis International merged with Teleconsult Inc., an international telecommunications engineering and consulting firm. Teleconsult has been involved in planning, design, and construction of telecommunications systems in more than 40 countries. Teleconsult continues to operate under its own name.
Contract	January 13, 1986 April 30, 1985	Spain	Pacific Telesis Iberica, the Spanish subsidiary of Pacific Telesis International entered into a contract with Telefonica, the national telephone company of Spain, to design, construct, and participate in a telecommunications research and development laboratory in Madrid. The contract is worth approximately \$41 million. The facility will house the research staff of Telefonica.

Southwestern Bell

Type of Venture	Announcement Date	Country	Comments
			opening of it's celular phone and international serves to competition.
Information	June 25, 1992	Mexico	Mexico's Grupo Carso, which with Southwestern Bell International Holdings Corp and France Cable and Radio has controlling interest in Telefonos de Mexico repurchased roughly \$50 million of its shares.
Purchase	June 1, 1992	Canada	Southwestern Bell Telephone Company signed a contract with Newbridge Networks for the purchase of the Newbridge MainStreet line of digital networking equipment. This contract allows Southwestern Bell Telephone as well as any SWBT affiliate to purchase the Newbridge family of channel bands, multiplexers, local area networking equipment and network management systems.
Agreement	May 14, 1992	Mexico	The Secretary of Communications and Transportation, Mexico's regulatory agency for telecommunications, and the Federal Communications Commission approved a roaming agreement by Southwestern Bell Corporation and Telcel of Mexico whereby American and Mexican cellular phone users can keep using their phones when they cross the border.

EXHIBIT 1-7
TELECOMMUNICATIONS SECTOR

Southwestern Bell	Organizational Summary		
	<p>Southwestern Bell is an international communications corporation with more than one million shareowners. It provides a variety of products and services through its subsidiaries, including Southwestern Bell Telephone Company, Southwestern Bell Yellow Pages, Southwestern Bell Mobile Systems, Southwestern Bell Telecom and Southwestern Bell International Holdings.</p>		
Type of Venture	Announcement Date	Country	Comments
Memorandum	March 2, 1993	United Kingdom	<p>Southwestern Bell Corporation and Cox Cable Communications signed a memorandum of understanding calling for the creation of a partnership in both the cable television and telephony businesses in the U.K. Southwestern Bell International Holdings (SBIH) operates eight franchises with 1.2 million homes in central and northern England.</p>
Interest	March 2, 1993	Israel	<p>Southwestern Bell has a minority interest in Golden Channels, a cable TV company in Israel.</p>
Aquisition	February 2, 1993	Israel	<p>The bid by Southwestern Bell International Development, a unit of Southwestern Bell Corp. and Israel's Clal Industries Ltd to gain control of Bezeq, the Israel Telecommunications Corp. has been put on hold pending the</p>

Southwestern Bell

Type of Venture	Announcement Date	Country	Comments
Joint venture bid	January 27, 1992	Korea	The Sangyong Group, a Korean firm is seeking a partnership with Southwestern Bell Corp. in which to form a consortium to bid for a spot in the newly opened Korean telecommunication market.
Share acquisition	September 9, 1991	Mexico	Southwestern Bell Corp. through its wholly owned subsidiary Southwestern Bell International Holdings Corp. (SBIH) exercised its option to double its stake in Telefonos de Mexico, Mexico's national telecommunications company. SBIH acquired more than 530 million L shares from the Mexican government, or an equivalent of 5 percent of the total equity capitalization of Telmex.
Membership	July 3, 1991	International	Southwestern Bell Technology Resources became a member of Object Management Group Inc. (OMG), an international organization of systems vendors, software developers and users founded to promote the theory and practice of object management technology in the development of software.
Joint venture	March 22, 1991	Australia	SBHI owns a 12.25 percent interest in a joint venture with Telecom Australia (51%), YP Publishing Australia Pty Ltd. (12.25%), Edward H. O'Brien Industries (12.25%) Pty Ltd, and Volt Australi Limited (12.25%).

United Telecom

Type of Venture	Announcement Date	Country	Comments
Joint venture	May 2, 1989	United Kingdom	U.S. Sprint and Cable and Wireless announced that their international marketing alliance, GLOBAL FON, will introduce the first all-digital international virtual private network between the United Kingdom and the United States.
Agreement	April 10, 1989	Japan	U.S. Sprint and Japan Credit Bureau (JCB) announced that JCB credit cards will be able to be used on the U.S. Sprint network. This reportedly represents the first acceptance of overseas credit cards by a domestic telecommunications service.
Acquisition and joint venture	March 9, 1989	United Kingdom	U.S. Sprint and Cable and Wireless announced that U.S. Sprint will acquire the U.S. end of the PTAT transatlantic fiber-optic cable system and that the two companies have formed an alliance to jointly develop and provide advanced global telecommunications services.
Divestiture	February 1, 1989	China	U.S. Sprint announced that it will sell part of its surplus analog microwave transmission equipment to China. The deal is worth approximately \$15 million.

EXHIBIT 1-8
TELECOMMUNICATIONS SECTOR

United Telecom U.S. Sprint Sprint International Telenet Communications	Organizational Summary		
	United Telecom is a diversified telecommunications company which provides local and long distance telephone service and a variety of related products and services.		
Type of Venture	Announcement Date	Country	Comments
Joint venture	August 22, 1990	International	Sprint International and Portugal's CPRM agreed to jointly explore the use of existing cables to provide service between Portugal, the United States, and Africa. The joint venture will also evaluate the possibility of developing a new transatlantic fiber-optic submarine cable.
Consortium	August 22, 1990	Portugal	Sprint International and CPRM agreed to establish a consortium that would seek to obtain cellular telephone franchises in certain markets and provide other services in Portugal, such as electronic mail.
Acquisition	June 28, 1989	International	Telenet Communications acquired the remaining 34 percent of the shares of Consortium Communications International. Consortium is an international telex and data communications company which specializes in the integration of modern office terminal equipment.

US WEST Communications

Type of Venture	Announcement Date	Country	Comments
Joint venture	November 12, 1992	United Kingdom	US WEST entered into a joint venture with Tele-Communications Inc. (TCI) as owners of more than 16 cable television franchises in the United Kingdom. Most of the franchises already offer integrated cable television and telephone services, the remaining franchises will soon follow. The joint venture is called TeleWest.
Consortium	October 22, 1992	Germany	US WEST was partner in a 14 member consortium to bid for the German government's E-1 mobile phone license. The total investment required for such a license would be approximately 3 billion marks.
Joint venture	August 26, 1992	Lithuania	Alcatel, a unit of France's Alcatel Alsthom will supply a telephone exchange to Lintel a joint venture owned by Lithuania PTT (51%) and US WEST (49%).
Joint venture	July 27, 1992	Czech and Slovak Republics	The European Bank for Reconstruction and Development approved loans totalling \$19 million to finance construction of cellular networks and public switched packet data networks in the Czech and Slovak republics. The loans were made to Eurotel Prague and Eurotel Bratislava, which are joint ventures between the post and telecom authorities of each republic and Atlantic West BV, which is owned by US WEST International and Bell Atlantic International BV.

EXHIBIT 1-9
TELECOMMUNICATIONS SECTOR

U S WEST Communications U S WEST International	Organizational Summary		
	<p>US WEST Inc. owns US WEST Communications and other companies involved in communications and marketing services. In 1992, the company reported revenues of \$13.3 billion. US WEST is involved in telecommunications projects in Russia and Lithuania in addition to cable television and communications projects in the United Kingdom, Norway, Sweden, Hungary, and France. International cellular operations are in Hungary and the Czech and Slovak Republics.</p>		
Type of Venture	Announcement Date	Country	Comments
Organizational change	June 1, 1993	International	US WEST International and Business Development Group named Victor Pavlenko president of US WEST International-Russia.
Information	April 27, 1993	Russia	The Russian government expects as much as 83 billion roubles of telecommunications investments in Russia during 1993. This is up from 24 billion in 1992. Foreign investment is expected to increase to \$300 million in 1993 from \$126 million last year. One of the projects includes three international gateway switches in Moscow and St. Petersburg, backed by US WEST and the Great Northern Telegraph Company.
Consortium	January 15, 1993	Russia	US WEST International entered into a consortium with two Russian firms, Intertelecom and VART. The consortium will construct an integrated 900 GSM digital cellular telephone service in Russia

US WEST Communications

Type of Venture	Announcement Date	Country	Comments
Merge	March 19, 1992	United Kingdom	US WEST and Cable and Wireless agreed to merge their separate activities and interests in the development of a new generation of mobile telephone service in the United Kingdom (PCN).
Joint venture	March 12, 1992	Bulgaria	Bulgaria planned a joint venture with foreign investors to modernize its telephone network. US WEST expressed an interest in the project.
Information	February 28, 1992	Europe	Dick Callahan, executive vice president and president of US WEST's International and Business Development Group said he expects to have 20 percent of total capitalization represented by international projects by the year 2000.
Acquisition	February 12, 1992	Germany	US WEST International acquired the majority of Munich-based NeuTech Entwicklungsgesellschaft mbH (NTE) from publisher Axel Springer Verlag, strengthening its position in the German market for mobile telephone service. NTE was involved in telecommunications business development and research for the European market.
Joint venture	December 18, 1991	United Kingdom	US WEST and TCI combined their United Kingdom cable television and telephone operations. US WEST and TCI will each own 50 percent of the venture.

US WEST Communications

Type of Venture	Announcement Date	Country	Comments
Joint venture	July 15, 1992	International	TCI International, a cable operator and phone company, and US WEST entered into a joint venture covering the management of all their shared cable interests outside the United States. The two companies already have agreements covering cable operations in the United Kingdom as well as other operations in Norway, Sweden, and Hungary.
Consortium	June 26, 1992	Korea	US WEST was a member of one of six consortia vying to operate South Korea's second mobile telecommunications firm. US WEST teamed up with Korea's Tong Yang, and 302 other local firms.
Joint venture	April 27, 1992	United States	US WEST and France Telecom opened the Community Link Information Center to demonstrate information technologies. The center is located in Seattle.
Joint venture	April 1, 1992	Europe	US WEST Cable Communications and Telecommunications Inc. (TCI) formed a joint venture to explore European cable TV/telephony opportunities and to share US WEST's interest in United Communications International (UCI). Under the terms of the agreement, TCI and US WEST will each hold 50 percent of the UCI interest previously held by US WEST.

US WEST Communications

Type of Venture	Announcement Date	Country	Comments
Joint venture	July 19, 1991	Malta	<p>United Communication International (UCI), a partnership between of US West Cable Communications and United International Holdings was granted a cable television franchise in Malta. Other partners include Cleveland based North Coast Cable and two Maltese corporations. UCI will initially hold a 70 percent interest and act as the managing partner. Construction of the system, which will reach over 100,000 homes, began in Autumn 1991 and will be completed in 1994.</p>
Joint venture	July 16, 1991	Russia	<p>US West International Holdings Inc. (22%), Millicom Inc (20%), the Eye Microsurgery Science and Technology Complex of Moscow (8%) and the Soviet Union Ministry of Posts and Telecommunications ("MPT") agreed to form a joint venture to provide cellular telephone service in Moscow. Service began in late 1991 and cost \$7 million. The system will be used for mobile communications services and will benefit high-volume communications users such as businesses and government entities and facilitate emergency communications.</p> <p>US West International Holdings Inc. built a cellular network in Leningrad that was operational in late 1991 and is providing cellular service in Hungary and Czechoslovakia.</p>

US WEST Communications

Type of Venture	Announcement Date	Country	Comments
Introduction of service	October 28, 1991	Hungary	United Communications International, a partnership between United International Holdings and US WEST, entered into a joint venture to launch a new premium television service called HBO in Hungary.
Information	October 15, 1991	Canada	US WEST Cellular and British Columbia Cellular entered into an agreement which allows calls crossing the Canadian border to not be interrupted.
Consortium	September 19, 1991	Soviet Union	Two international consortia will compete for a trans-Soviet telecommunications project. US WEST is a member of one of the consortia which also includes British Telecommunications, Kokusai Denshin Denwa, OTC of Austria, KT of Korea, Great Nordic, France Telecom, Telefonica de Espana, Bundespost, Stet of Italy, Telecom of Denmark, and Turkey's PTT.
Joint venture	September 12, 1991	Czech and Slovak Republics	Eurotel, a joint venture of Bell Atlantic, US WEST and the Posts and Telecommunications Administrations of the Czech and Slovak Federated Republics, began cellular service. The service begins with six cell sites, including two in Prague, one in Brno, and three in Bratislava. Plans are in preparation to build a total of more than 25 cell sites.

US WEST Communications

Type of Venture	Announcement Date	Country	Comments
Consortium	July 1, 1991	Japan	US WEST Inc., joined with DDI Corp., Nissan Motor Co., and five other foreign companies and seventeen Japanese companies to form TU-KA Cellular, a company which will operate wireless communications. US WEST Inc. will have a 2 percent stake in the company with the principal stakeholders, DDI, and Nissan Motor Company holding 25.75 percent each of the venture.
Agreement	June 12, 1991	United Kingdom	US WEST Cable Communications and Mercury Communications signed a new distributorship and interconnection agreement which was ratified by the U.K. telecommunications regulator, Oftel. This agreement allows US WEST-affiliated cable operators to increase their share of revenues from telephone services.
Agreement	June 4, 1991	Japan	US WEST Inc., and DDI Corp. of Japan signed an agreement to jointly pursue global communications opportunities, including the provision of roaming service for their cellular telephone customers traveling to Japan and the United States.
Information	April 11, 1991	Hungary	US WEST took part in a visit to Hungary, sponsored by Volunteers in Technical Assistance (VISTA) to discuss privatization, competition, and Hungarian telecommunications.

US WEST Communications

Type of Venture	Announcement Date	Country	Comments
Joint venture	July 16, 1991	United Kingdom	<p>Unitel and Mercury PCN deployed and developed a new technique called Parallel Network Architecture (PNA) which allows for the design and construction of a physically co-existent Personal Communications Network (PCN) but logically separates transmission networks. This venture is significant in that PCN development will occur much faster because of development and maintenance cost-sharing, yet each partner will remain competitive with the other.</p>
Joint venture	July 16, 1991	Russia	<p>US WEST International Holdings Inc. and the Soviet Union Ministry of Posts and Telecommunications (MPT) signed an agreement regarding the participation, financing, and operational support of three international gateway telephone switching systems to be located in Moscow, Leningrad and Kiev. US WEST invested \$18 million over 2 years and will receive a portion of the revenues generated by calls switched through the system.</p>
Joint venture	July 2, 1991	Korea	<p>US West NewVector Group Inc. and AT&T Network Systems sold NewVector's Basic Operations System (BOS) to the Korea Mobile Telephone Co., the cellular division of Korea Telephone Co.</p>

US WEST Communications

Type of Venture	Announcement Date	Country	Comments
Joint venture	August 30, 1990	International	US WEST Cable Communications entered into a joint venture with United International Holdings to acquire, develop and operate overseas cable television systems and related businesses. The new venture will be called United Communications International.
Cable license	June 19, 1990	United Kingdom	The Cable Corporation and Cable London, two United Kingdom corporations in which US WEST is a shareholder, were awarded three cable and telephone service franchises in London.
Cable license	May 10, 1990	United Kingdom	US WEST and Comcast's Cable London was awarded a cable franchise in the Islington and Hackney boroughs of London.
Cellular license	February 1, 1990	Mexico	US WEST International submitted bids to provide cellular communications services in four regions of Mexico.
Cellular license	December 11, 1989	United Kingdom	Unitel Limited, a consortium including US WEST and three other international partners was awarded one of the operating licenses by the United Kingdom Department of Trade and Industry to provide personal communications networks (PCNs) in the United Kingdom.

US WEST Communications

Type of Venture	Announcement Date	Country	Comments
Joint venture	November 16, 1990	Czech and Slovak Republics	US WEST and Bell Atlantic entered into an agreement with the Post and Telecommunications Administrations of the Czech and Slovak Republics to create joint venture companies to build and operate cellular mobile and packet data networks in the republics.
Joint venture	October 22, 1990	Russia	US WEST International Holdings, the Leningrad City Telephone Network Production Association, and the Leningrad Station of Technical Radio Control entered into a joint venture agreement to build a cellular telephone network in Leningrad. US WEST will own 40% of the joint venture. US WEST Spectrum Enterprises will develop and manage US WEST's interests in the Leningrad cellular network.
Joint venture	October 15, 1990	Hungary	US WEST and its partner, the Hungarian Telecommunications Company, began operating the first cellular telephone system in eastern Europe. The system was operational three months ahead of schedule.
Joint venture	September 24, 1990	Hungary	United International Holdings, a joint venture with US WEST, entered a 50-50 joint venture with Time Warner to develop and operate cable television systems and provide cable programming services in Hungary.

US WEST Communications

Type of Venture	Announcement Date	Country	Comments
Acquisition	June 6, 1989	United Kingdom	US WEST entered into an agreement to acquire significant interest in The Cable Corporation and Birmingham Cable Corporation both United Kingdom cable television companies.
Organizational change	April 4, 1989	France	US WEST International opened its European office in Paris, France
Consortium	October 19, 1988	Britain	The Cable Corporation, a consortium of which US WEST is a member, received a cable television franchise to build and operate a cable system in Birmingham, England.
Acquisition	September 28, 1988	France	US WEST acquired ten percent of the French cable television company, Lyonnaise Communications.

US WEST Communications

Type of Venture	Announcement Date	Country	Comments
Organizational change	December 7, 1989	Russia	US WEST International, the Ministry of Posts and Telecommunications of the Soviet Union (MPT) and seven other international telecommunications companies will form a corporation to undertake development of a proposed fiber-optic telecommunications line linking Japan, the Soviet Union, and Europe. The company will be known as the Trans-Soviet Line Development Corporation.
Joint venture	December 4, 1989	Hungary	US WEST and Magyar Posta, the Hungarian Postal, Telegraph, and Telecommunications organization, entered into a joint venture agreement to own and operate a national cellular telephone system in Hungary.
Consortium	August 2, 1989	Hong Kong	US WEST's consortium received the cable television franchise for Hong Kong. The name of the consortium is Hong Kong Cable Communications.
Joint venture	July 11, 1989	United Kingdom	US WEST Cable Communications finalized agreements with two United States cable television companies to build and develop cable systems in the United Kingdom.
Organizational change	June 27, 1989	International	US WEST International opened an office in Hong Kong to oversee operations throughout the Asia Pacific region.

PART 2
ENERGY SECTOR

EXHIBIT 2-1
ENERGY SECTOR

American Electric Power	Organizational Summary		
	American Electric Power is the parent holding company for seven electric utility operating companies serving seven million people in seven East-Central States.		
Type of Venture	Announcement Date	Country	Comments
Joint venture	February 1, 1984	Pakistan	<p>A joint venture team including AEP Energy Services, Ebasco Overseas Corporation, and International Training and Education Company entered into an \$18.4 million contract to assist Pakistan's Water and Power Development Authority (WAPDA) in implementing its national rural electrification plan. The general scope of the contract included:</p> <ol style="list-style-type: none"> 1. Modernization of WAPDA's utility structure. 2. Training WAPDA's personnel in the latest utility operations and management procedures and practices. 3. Improving the Pakistani transmission and distribution system to reduce electricity losses. 4. Implement the national plan to provide power to rural villages of Pakistan.

Atlantic Energy

Type of Venture	Announcement Date	Country	Comments
Acquisition	November 22, 1985	Canada	Atlantic Energy purchased a Toronto, Canada office building. The company purchased the building for approximately \$5.3 million. The building is fully leased. However, Atlantic Energy plans to move some of its divisions to the site in the coming years.
Acquisition	September 24, 1985	Brazil	Atlantic Energy acquired a Brazilian firm which produces gasohol fuel for automobiles. The Brazilian firm, operated by Usina Dr. Passos Main Ltda, uses sugar cane to produce fuel alcohol. The firm also engages in the business of exporting Brazilian-made consumer and industrial products, including foodstuffs.

EXHIBIT 2-2
ENERGY SECTOR

Atlantic Energy	Organizational Summary		
<p style="text-align: center;">Type of Venture</p> <p>Acquisition</p>	<p style="text-align: center;">Announcement Date</p> <p>December 2, 1985</p>	<p style="text-align: center;">Country</p> <p>Brazil</p>	<p style="text-align: center;">Comments</p> <p>Atlantic Energy acquired TyTan Resources. This acquisition gives Atlantic Energy interests in timber land and citrus in Brazil, where it already refines sugar cane into fuel alcohol for automobiles through a subsidiary, Usina Dr. Passos Maia Ltda. The acquisition of timber land, coupled with Atlantic Energy's agricultural properties, makes the company one of the major agricultural land holders in Brazil. Atlantic Energy has received considerable attention since Petrobras, the Brazilian government petroleum company, and Shell Oil agreed to purchase Atlantic's entire fuel alcohol production for five years.</p> <p>TyTan's subsidiary, Wishton Energy, owns oil and gas leases in Kansas and Oklahoma. TyTan also has interests in British Columbia, Canada.</p>

CMS Energy Corporation

Type of Venture	Announcement Date	Country	Comments
Consortium	April 22, 1992 October 22, 1991	Ecuador	CMS Energy Corporation's NOMECO Ecuador Oil Company, with other members of its consortium, entered into an agreement with Petroecuador, Ecuador's national oil company, to develop oil fields on Block 16. NOMECO holds a 14 percent interest in the block.
Joint venture	April 7, 1992	New Zealand	NOMECO Oil and Gas's NOMECO Holdings Ltd., with other members of the Waihapa joint venture, purchased all of the New Zealand government's interests in the Tariki, Ahuroa, Waihapa, and Ngaere Petroleum Mining Licenses in onshore Taranaki, New Zealand. The total cost of the acquisition to the joint venture was approximately \$65 million of which NOMECO's share is approximately \$5.3 million.
Concession and divestiture	December 17, 1991 May 7, 1991	Thailand	NOMECO Oil and Gas's subsidiary, NOMECO Exploration Thailand Ltd., signed a petroleum concession with the Ministry of Industry for Oil and Gas Exploration for the Phu Khieo block covering 376,000 acres. Texaco agreed to acquire from NOMECO a 50 percent interest in the block subject to Thai government approval. A Texaco subsidiary will serve as operator of the NOMECO-Texaco joint venture. The block is located 210 miles northeast of Bangkok.

EXHIBIT 2-3
ENERGY SECTOR

CMS Energy Corporation NOMEKO Oil and Gas NOMEKO Holdings	Organizational Summary		
	CMS Energy Corporation is a \$3 billion (sales) diversified energy company with businesses engaged in the distribution of electricity and natural gas, interstate storage and transmission of natural gas, oil and gas exploration and production, independent power generation, and utility services. CMS Energy's principal subsidiary is Consumers Power Company, Michigan's largest utility and the nation's fourth-largest combination electric and gas utility.		
Type of Venture	Announcement Date	Country	Comments
Joint venture	April 6, 1993	India	<p>CMS Energy entered into a joint venture agreement with Asea Brown Boveri (ABB). ABB made a proposal to the Indian government to be involved in a number of power projects in that country.</p> <p>CMS Energy applied to build a 200 megawatt gas based plant on the east coast of India at a cost of five billion rupees in a joint venture with NTPC and Spectrum Technologies, a company owned by expatriate Indians.</p>
Production sharing contract	September 16, 1992 April 10, 1991 April 3, 1991	Guinea	<p>Noble Affiliates commenced production on a second well in its Alba field located offshore Equatorial Guinea. A CMS Energy unit, NOMEKO Equatorial Guinea Oil and Gas, owns a 16.67 percent interest in the production sharing contract which governs the field.</p>

CMS Energy Corporation

Type of Venture	Announcement Date	Country	Comments
Joint venture	April 22, 1988	Ecuador	NOMECA Ecuador Oil Company announced a third significant oil discovery in Ecuador. The Daimi Number One well is located approximately 165 miles southeast of the nation's capital, Quito.

CMS Energy Corporation

Type of Venture	Announcement Date	Country	Comments
Joint venture	December 13, 1990	China	NOMECCO Oil and Gas entered into a joint venture for petroleum exploration, development, and production in the Dongting Basin of Hunan Province, the People's Republic of China, with the China National Oil Development Corporation. The joint venture is composed of NOMECCO China Oil (15%), Petrocorp Exploration China Limited (60%), and Santa Fe Energy Resources of China (25 %)
Joint venture	March 29, 1989	Ecuador	NOMECCO announced a fifth oil discovery in the Oriente Region, Block 16, in Ecuador. NOMECCO's subsidiary, NOMECCO Latin America, is a 10 percent partner in the well, located 170 miles southeast of the nation's capital, Quito.
Joint venture	July 28, 1988	Ecuador	NOMECCO announced an oil discovery about 160 miles southeast of Quito, Ecuador. NOMECCO Ecuador Oil Company is a 10 percent partner in the well.
Joint venture	May 9, 1988	U.S.A.	NOMECCO entered a joint venture with Petrocorp Exploration Limited of New Zealand. The joint venture will fund a Gulf Coast drilling program through 1988 and 1989. Petrocorp Exploration Limited is the largest oil and natural gas producer in New Zealand and has exploration operations in four foreign countries.



EXHIBIT 2-4
ENERGY SECTOR

Coastal Corporation	Organizational Summary		
	<p>The Coastal Corporation is a Houston-based energy holding company. It has consolidated assets of \$9 billion and subsidiary operations in natural gas transmission and storage, refining and marketing, oil and gas exploration and production, coal, chemicals, trucking, and independent power production.</p>		
Type of Venture	Announcement Date	Country	Comments
Organizational change	January 19, 1993	International	<p>The Coastal Corporation formed Coastal Gas Services Company. This organizational change is expected to provide better access to an increasingly deregulated global natural gas industry.</p>
Privatization	November 17, 1992	Argentina	<p>The Coastal Corporation expressed interest in bidding for Gas del Estado, the Argentinian natural gas monopoly. The government expects to net more than \$2 billion in cash and foreign debt paper through the sale of Gas del Estado.</p>
Organizational change	August 12, 1991	International	<p>The Coastal Corporation created a new division responsible for the development and coordination of a variety of international projects.</p>

EXHIBIT 2-5
ENERGY SECTOR

Dominion Resources Dominion Energy Dominion Capital	Organizational Summary		
	<p>Dominion Resources is a utility holding company with more than \$11 billion in assets. Dominion Resources owns Virginia Power which is one of America's largest investor owned utilities. Dominion Resources also has a financial services subsidiary called Dominion Capital.</p>		
Type of Venture	Announcement Date	Country	Comments
Strategic venture	October 6, 1992	Russia	<p>Dominion Capital took a strategic position in NWE. NWE acquired a 50 percent share in Russia's PeterStar Company Ltd., which was granted a license by the Russian Ministry of Telecommunications to provide international, national, and local telecommunications services in St. Petersburg and the surrounding region.</p>
Partnership	Not Available	Belize	<p>Dominion Energy successfully bid, as a member of a partnership, to build, own, and operate a 22 megawatt hydroelectric power station in Belize.</p>
Partnership	Not Available	Argentina	<p>Dominion Energy entered a bid as a member of a partnership for a 90 percent interest in Alto Valle's 98 megawatt gas fired power plant.</p>



EXHIBIT 2-6
ENERGY SECTOR

Duke Power	Organizational Summary		
	Duke Power generates, transmits, distributes and sells electricity and related services. Duke power also has a significant real estate portfolio		
Type of Venture	Announcement Date	Country	Comments
Consortium	November 16, 1992	Argentina	The Spanish Power company, Iberdrola, expressed its intent to invest 1.6 billion pesetas in an Argentine power station. A consortium which includes Iberdrola, Duke Power, and other international funds won their bid to buy a state-owned power station in Guemes, north-western Argentina. The sale was part of the Argentine government's electricity privatization.

NOTE: Duke Power has pending interests in Mexico and Argentina. Duke made an unsuccessful bid in Australia for a 40 percent interest in a Loy Yang B 1,000 megawatt coal fired plant. Duke is reportedly investigating opportunities in Australia, New Zealand, Malaysia, Indonesia, India, and China.

Enron Corporation

Type of Venture	Announcement Date	Country	Comments
Joint venture	February 22, 1993	International	Enron signed a joint consulting and investing agreement with former U.S. Secretary of State James Baker and former U.S. Secretary of Commerce Robert Mosbacher. They will assist Enron in development of natural gas projects around the world.
Development	February 4, 1993	India	The government of India approved a massive \$2.65 billion proposal by Enron to set up a gas fired power station in the western state of Maharashtra. This venture represents the largest investment proposal by a foreign company since economic reforms began in 1991. Enron will commit \$200 million to the project. In addition, General Electric and Bechtel Enterprises will each invest part of the total foreign equity amount of \$480 million.
Privatization	December 2, 1992	Argentina	A consortium led by Enron Pipeline Co. Argentina, a subsidiary of Enron Corporation, made the highest bid of \$356.19 million for the southern Argentine gas pipeline company, Transportadora de Gas del Sur. The bid comprised of \$100 million in cash and a \$256.19 million in debt paper swap at the reference price of 47.5 percent for foreign debt and 60 percent for 10-year government bonds. Partners in the deal include Cia Naviera Perez Companc, and Citicorp Equity Investments.

EXHIBIT 2-7
ENERGY SECTOR

Enron Corporation	Organizational Summary		
Enron Power	<p>Enron Corporation is one of America's largest natural gas companies with approximately \$11 billion in assets. It operates one of the largest natural gas transmission systems in the world totalling 43,000 miles on two continents. Enron owns 80 percent of Enron Oil and Gas Company, one of the largest independent natural gas exploration and production companies in the United States and is one of the largest independent developers and producers of electricity in the United States and the United Kingdom.</p>		
Type of Venture	Announcement Date	Country	Comments
Joint venture	April 6, 1993	India	<p>Enron and General Electric presented a proposal to build a 2,550 megawatt plant in western India. The cost of the proposal is expected to be approximately 60 billion rupees. The project has received preliminary approval.</p>
Joint venture	<p style="text-align: center;">April 1, 1993 November 5, 1990 September 11, 1990</p>	United Kingdom	<p>The 1,875 megawatt Teesside power station is in full operation. The plant, a joint venture, was completed in a record breaking 29 months. Enron transferred the station to Teesside Power Ltd. Enron is a 50 percent partner in the joint venture. The Teesside plant is the world's largest gas fired combined cycle heat and power station. The integrated project represents a total investment of approximately \$1.2 billion. This is the first major power plant venture by Enron in Europe. Teesside Gas Processing, an Enron subsidiary will own and operate the natural gas processing facility.</p>

Enron Corporation

Type of Venture	Announcement Date	Country	Comments
Production sharing contract	April 11, 1989	Malaysia	A production sharing contract was entered into by Petroliam Nasional Berhad (PETRONAS), the national oil company of Malaysia, Phoenix Exploration Resources, Enron Oil Malaysia, KUFPEC Limited, and Petronas Carigali Sdn Bhd, a subsidiary of PETRONAS. Under the terms of the agreement, Enron has a 50 percent share in all production.
Joint venture	August 30, 1988	Hong Kong	The Arbross Group of Hong Kong and Enron Corporation concluded an agreement whereby Enron Gas Liquids International will purchase 50 percent of the stock of Bannon International, a wholly owned subsidiary of the Arbross Group. Enron Gas Liquids International will be responsible for the commercial operation of the LPG vessels.
Joint venture	September 9, 1987	Ecuador	Enron was lead partner in a joint venture with Texas International, seeking reserves in various places in and around Ecuador.

NOTES: Enron has commissioned a power plant in Puerto Quetzal, Guatemala and has two power plants under construction in Batangas and Subic Bay in the Philippines. The company also reportedly has projects under development in western Europe, Turkey, the former Soviet Union, India, the Middle East, Asia and South, Central and North America as well as additional projects in the United Kingdom

Enron Corporation

Type of Venture	Announcement Date	Country	Comments
Protocol of intent	May 12, 1992	Turkey	Enron Europe Limited, the Wing-Merrill Group, and Rurkey's GAMA Group entered a Protocol of Intent to conduct feasibility studies to build, own, and operate a 1,700 megawatt natural gas fired combined cycle cogeneration plant in Turkey's Aegean region
Information	December 11, 1991	International	John B. Wing, former chairman of Enron Power Corporation, and John P. Merrill announced the formation of The Wing-Merrill Group, a new international multi-technology, independent power development organization.
Development	October 10, 1991	Indonesia	Union Pacific tested its first exploration well in south Sumatra, Indonesia. Union Pacific has a production sharing contract with the Indonesian national oil company, an Enron Corporation subsidiary.
Consortium	August 30, 1989	Argentina	A \$250 million methanol plant, Petroquimica Austral, to be built by Enron International with local partners will be supplied its natural gas by Yacimientos Petroliferos Fiscales, the Argentine state oil company. Petroquimica Austral plans to export all the methanol and expects sales to reach about \$120 million dollars each year. This plant was first announced in 1983, but plans were delayed until an agreement could be reached on gas prices.

EXHIBIT 2-8
ENERGY SECTOR

Type of Venture	Announcement Date	Country	Comments
<p>Entergy Corporation Entergy Services</p>	<p>Organizational Summary</p> <p>Entergy serves more than 1.7 million customers in portions of Arkansas, Louisiana, and Mississippi. Entergy's major subsidiaries include Arkansas P&L, Louisiana P&L, Mississippi P&L, New Orleans Public Services, Entergy Enterprises, Entergy Operations, Entergy Power, and Entergy Services.</p>		
Consortium	July 21, 1992	Argentina	<p>Entergy joined a consortium to bid on the electric distribution network of Argentina's Servicios Electricos del Gran Buenos Aires (SEGBA). In preparing its bid the New Orleans City Council asked Entergy to "wall off" its core business from any negative financial consequences of the firms diversification efforts. The Council was concerned that future non-utility ventures could result in downgrading of Entergy securities, increasing the cost of capital and leading to higher rates.</p>
Consortium	May 1992	Argentina	<p>Entergy and PSI Energy entered into a consortium arrangement. This consortium was awarded a 60 percent stake in a 1,200 megawatt gas and oil fired power station operated by (SEGBA). The consortium was also awarded a 51 percent interest in a transmission and distribution system of SEGBA.</p>

EXHIBIT 2-9
ENERGY SECTOR

FPL Group ESI Energy	Organizational Summary		
	<p>ESI Energy participates in 25 energy production projects in the United States and the Caribbean. The Company specializes in wind power, geothermal, solar, natural gas, and other environmentally sound energy production technologies. Florida Power & Light is the principal subsidiary of the FPL Group and is one of the largest Investor-owned electric utilities in the nation.</p>		
Type of Venture	Announcement Date	Country	Comments
Organizational change	February 25, 1993	International	<p>ESI Energy appointed John T. Foti as vice president of international markets. Foti will be responsible for international market development, focusing on Latin America and the Caribbean. Foti is the former president of CSI Resources Systems, a Boston-based solid waste management and independent power engineering firm.</p>
Privatization	April 20, 1992	Jamaica	<p>The Jamaican government solicited bids for three 20 megawatt slow speed diesel generators. The power generated would be sold to Jamaican Public Service (JPS). JPS generates 450-500 megawatts total, and current consumption growth will wipe out JPS's slim generating margin within two years. The 60 megawatts of added capacity should be on line by December of 1993. A bid by the FPL Group has been advanced to the short list of possible venture leaders.</p>

EXHIBIT 2-10
ENERGY SECTOR

HYDRA-CO	Organizational Summary		
	<p>HYDRA-CO was one of the first deregulated project development subsidiaries of a major electric utility in the United States, formed in 1981 by Niagara Mohawk. HYDRA-CO has developed and helped finance 24 projects to date, representing roughly \$1.2 billion of energy producing assets.</p>		
Type of Venture	Announcement Date	Country	Comments
Joint venture	January 7, 1993	Jamaica	<p>The Jamaica Public Service Company was selected to negotiate final contracts to build, own, and operate a 60 megawatt slow speed oil fired power station in Kingston, Jamaica. Jamaica Private Power Company is a joint venture of HYDRA-CO Enterprises, International Energy Finance, and U.S. Energy Corporation. Jamaica Private Power has been working in Jamaica for nearly two years, and has two other projects under development including a 35 megawatt biomass project and a 60 megawatt coal project. Jamaica Private Power was selected by the Jamaica Public Service Company as the result of a competitive bid process managed by the Jamaican Ministry of Public Utilities and Energy.</p>



EXHIBIT P-11
ENERGY SECTOR

Houston Industries	Organizational Summary		
	Houston Industries is a diversified multinational corporation with interests in many international markets.		
Type of Venture	Announcement Date	Country	Comments
Joint venture	June 3, 1993	Argentina	Houston Industries entered a joint venture agreement with Techint, an Argentine steel conglomerate, to bid for a 65 percent equity interest in Argentina's main power grid company, Transener. Duke Power and Entergy are also preparing bids for the privatization.
Consortium	Not Available	Argentina	<p>Houston Industries is a member of a consortium which won a successful bid for a 51 percent interest in the transmission and distribution system of La Plata.</p> <p>Houston Industries was unsuccessful in a bid for a 51 percent investment in the northern and southern halves of the transmission and distribution system of Servicios Electricos del Gran Buenos Aires.</p>

EXHIBIT 2-12
ENERGY SECTOR

New England Electric System New England Electric Resources	Organizational Summary		
Type of Venture	Announcement Date	Country	Comments
Organizational change	November 23, 1992	International	<p>The New England Electric System (NEES) company established a new subsidiary, New England Electric Resources (NEER). The new subsidiary is NEES's international component. NEER is engaged in an international partnership with several Hungarian utilities. The partnership, sponsored by the U.S. Energy Association and the U.S. Agency for International Development, involves exchanging engineering, finance, and management information with the Hungarian utilities over the next three years. This is the first USAID eastern European electric utility partnership. NEER will be expanding on this Hungarian partnership by providing consulting services that go beyond the present exchanges.</p>



EXHIBIT 2-13
ENERGY SECTOR

Northern States Power NRG Energy	Organizational Summary		
	Northern States Power is a Minneapolis-based electric and gas utility that serves 1.7 million customer accounts in five states		
Type of Venture	Announcement Date	Country	Comments
Consortium	January 22, 1993	Germany	The Treuhand privatization agency negotiated exclusively with an Anglo-American consortium for the sale of eastern Germany's Mitteldeutsche Braunkohle AG. The consortium is led by PowerGen of Britain and NRG Energy, a unit of Northern States Power.

NOTE: Northern States Power unsuccessfully bid to develop Pego's 500 megawatt coal fired units in Portugal.

PSI Resources

Type of Venture	Announcement Date	Country	Comments
			<p>NOTE: PSI was unsuccessful in two bids for power system investment. First was a bid for the northern half of the transmission and distribution system of Servicios Electricos del Gran Buenos Aires. Second was a bid as a partnership to develop a coal fired power plant in Indonesia. PSI is also investigating additional opportunities in Europe, Asia, and the New Independent States</p>

EXHIBIT 2.14
ENERGY SECTOR

PSI Resources PSI Energy	Organizational Summary		
	PSI Resources is the parent company of Indiana's largest electric utility, PSI Energy. PSI Energy serves more than 600,000 homes, farms, and businesses in North Central, Central, and Southern Indiana.		
Type of Venture	Announcement Date	Country	Comments
Information	March 12, 1992	International	Craig R. Johnson, former president of PSI Resources, left the company in February in order to form a new company, Infrastructure Development International and Associates (IDIA). The company actively participates as a developer in the growing international privatization market, focusing on mature utility infrastructure industries--electric power, water and sanitation services, and telecommunications.
Consortium	Not Available	Argentina	PSI Energy successfully bid as a member of a consortium for a 60 percent interest in Costanera's 1,250 megawatt gas and oil fired power station
Consortium	Not Available	Argentina	PSI Energy successfully bid as a member of a consortium for a 51 percent interest in the southern half of the transmission and distribution system of Servicios Electricos del Gran Buenos Aires

EXHIBIT 2-15
ENERGY SECTOR

Public Service Enterprise Grp Energy Development Corporation	Organizational Summary		
Type of Venture	Announcement Date	Country	Comments
Privatization	January 22, 1993	Argentina	Energy Development Corporation (EDC) a subsidiary of Public Service Enterprise Group, purchased an 11.25 percent working interest in an oil producing field in Argentina.

Southern California Edison

Type of Venture	Announcement Date	Country	Comments
Joint venture	May 12, 1992	India	The London-based, Hinduja Group, submitted proposals to the Indian government for investments worth \$2.8 billion, most of it in power generation and oil refining. Hinduja was seeking a joint effort with Mission Energy to build two thermal power stations with a total capacity of 1,000 megawatts in southern Andhra Pradesh.
Acquisition	April 6, 1992	Australia	Mission Energy was granted preferred bidder status to purchase 40 percent of Loy Yang B power plant in Australia's state of Victoria. The State Electricity Commission of Victoria (SECV), the state-owned and operated utility, is building the power plant to provide electricity to Victoria and the forthcoming national grid. The plant is fueled by low-grade brown coal obtained from a mine adjacent to the facilities. Mission Energy will operate the plant on a 30 year contract. Details of negotiating the purchase have increased the ownership interest to 51 percent.
Acquisition	April 18, 1991	Wales	Mission Energy proposed building a power plant in Wales in conjunction with Texaco. The natural gas fired plant will be larger than 1,000 megawatts and will be built near a Texaco refinery.

EXHIBIT 2-16
ENERGY SECTOR

Southern California Edison Mission Energy	Organizational Summary		
<p style="text-align: center;">Type of Venture</p> <p style="text-align: center;">Information</p>	<p style="text-align: center;">Announcement Date</p> <p style="text-align: center;">April 15, 1993</p>	<p style="text-align: center;">Country</p> <p style="text-align: center;">International</p>	<p style="text-align: center;">Comments</p> <p>At the recent SCE annual meeting Chairman Bryson noted that international projects, especially in the Pacific Rim nations, offer good growth opportunities for its Mission Energy unit. Bryson quoted industry experts as forecasting the international need for power at 100,000 megawatts over the next ten years. Correspondingly, the domestic need for power is half that at 50,000 for the next decade.</p> <p>Mission Energy is looking at possible ventures in China, Indonesia, the United Kingdom, Greece, Philippines, and Germany.</p>
<p style="text-align: center;">Acquisition</p>	<p style="text-align: center;">November 26, 1992</p>	<p style="text-align: center;">Philippines</p>	<p>Mission Energy was one of six foreign firms interested in investing in a 165 megawatt geothermal power plant in the Leyte province in the Philippines. The project, estimated at \$350 million, is part of state-owned Philippine National Oil Company (PNOC).</p>

Southern California Edison

Type of Venture	Announcement Date	Country	Comments
Proposal	Not Available	Central Java	Mission Energy proposed to construct two units totaling 1,200 megawatts (600 megawatts each) of a potentially 4,000 megawatt coal fired power plant.
Proposal	Not Available	India	Mission Energy proposed to develop two units totaling 1,000 megawatts (500 megawatts each) of a thermal power plant.
Joint venture	Not Available	United Kingdom	Mission Energy entered into a joint venture with 50 percent ownership to develop three operating projects in the United Kingdom totaling 638 megawatts and four other projects under development totaling 214 megawatts.

NOTE: SCE Corporation/Mission Energy is also reportedly studying proposals in the United Kingdom, Greece, Philippines, and Germany.

Southern California Edison

Type of Venture	Announcement Date	Country	Comments
Information	August 25, 1987	New Zealand	Southern California Edison issued 100 million New Zealand dollar, two-year "Kiwi" notes, reportedly making SCE the first utility in the world to issue foreign currency denominated debt in the U.S. public debt market. This transaction took advantage of lower interest rates in New Zealand and saved SCE more than \$400,000 in lower interest and borrowing costs.
Agreement	November 12, 1980	Mexico	Southern California Edison entered into an agreement to purchase electricity generated in Mexico's geothermal fields near Mexicali. SCE and San Diego Gas and Electric Company agreed to purchase 200,000 kilowatts of geothermal electricity from the Commission de Electricidad (CFE), Mexico's government-owned electric utility.
Acquisition	Not Available	Mexico	Acquisition of a 49 percent right to build, lease, and/or transfer a Carbon 2 350 megawatt unit of a 1,400 megawatt coal and oil fired power plant.
Consortium	Not Available	Indonesia	Mission Energy is a member of a consortium to develop Paiton 5 and 6, two units totaling 1,200 megawatts (600 megawatts each) and two additional units totaling 1,200 megawatts of a potentially 4,000 megawatt coal fired power plant.

Southern Company

Type of Venture	Announcement Date	Country	Comments
Partnership	December 4, 1992	Slovak Republic	The Southern Company, in cooperation with the U.S. Energy Association (USEA) and the U.S. Agency for International Development (USAID), has established a partnership with Slovak Power Enterprise. The agreement involves the exchange of information on engineering, finance, marketing, planning, plant operations, maintenance, generation, transmission and distribution, and other aspects of utility management.
Joint venture	April 26, 1992	Czech and Slovak Republics	Southern Electric International has entered an agreement with Slovak Power Enterprises to serve as owner's engineer for rehabilitation and repowering of the 1,320 megawatt Vojany power plant in the eastern Czech and Slovak Federal Republic. The 12-unit Vojany plant currently burns coal, heavy oil and natural gas and supplies nearly 25% of the Slovak region's power generating capacity.
Joint venture	February 11, 1992	Slovak Republic	Southern Electric International entered an agreement with the Slovak Power Enterprise to study modernizing and upgrading the 1,320 megawatt Vojany power plant in eastern Czechoslovakia.
Consortium	Not Available	Australia	The Southern Company was a member of a consortium which planned to develop, own, and operate a 600 megawatt coal fired power plant

NOTE: The Southern Company/Southern Electric International reportedly unsuccessfully bid for an equity interest in an Australian power station and a bid to develop a power project in Portugal.

EXHIBIT 2-17
ENERGY SECTOR

Southern Company Southern Electric Southern Electric International	Organizational Summary		
	<p>The Southern Company (NYSE: SO) is the parent firm of five electric utilities: Alabama Power, Georgia Power, Gulf Power, Mississippi Power, and Savannah Electric. Southern Electric, also a subsidiary of The Southern Company, designs, builds, owns, and operates power production facilities and provides a broad range of services to industrial companies and utilities in the U.S. and abroad. Southern Electric International, a Southern Company subsidiary, is the organizations international arm.</p>		
Type of Venture	Announcement Date	Country	Comments
Acquisition	April 30, 1993 September 30, 1992	Bahamas	<p>Southern Electric International has completed, on behalf of its parent, The Southern Company, the purchase of 50% of Freeport Power. Freeport Power provides electricity to about 40,000 residents on the island of Grand Bahama. The generating facility consists of three oil fired steam units and two combustion turbines with a total capacity of 107 megawatts.</p>
Advisory/Consultancy	February 9, 1993	Turkey	<p>Southern Electric International has been selected to develop cost-analysis and tariff structures for the Turkish Electric Authority and to conduct an efficiency review of some of the utility's power stations, transmission and distribution systems, and other operational functions.</p>
Executive appointment	January 21, 1993	United States	<p>Southern Electric International named Raymond D. Hill vice president for strategic planning and mergers and acquisitions. Hill was responsible for many large-scale privatization projects in Asia when he worked for Lehman Brothers previously.</p>

EXHIBIT L-18
ENERGY SECTOR

Tenneco Gas	Organizational Summary		
	<p>Tenneco Gas is a Houston based company which transports more than 14 percent of the U.S. natural gas volume along its 20,000-mile pipeline system. In addition to gas transmission, the company is active in marketing natural gas, developing gas-fired power generation projects worldwide, and providing capital for drilling and reserves.</p>		
Type of Venture	Announcement Date	Country	Comments
Joint venture	May 19, 1993	International	<p>Tenneco Gas and British Gas entered into an agreement to jointly pursue natural gas transportation projects in South America. British Gas led a consortium which won a controlling share in MetroGas, the newly privatized distribution company serving 1.7 million customers in Buenos Aires.</p>
Privatization	December 2, 1992	Argentina	<p>Tenneco was one of a number of foreign companies which qualified for the final bidding process in a tender for the privatization of Gas del Estado, the Argentine natural gas monopoly. The privatization transaction is expected to bring in approximately \$3.0 billion.</p>
Divestiture	November 16, 1988	International	<p>British Gas acquired Tenneco's oil and gas operations outside North America, excluding those in Norway and Colombia, for \$194.5 million.</p>

EXHIBIT 2-19
ENERGY SECTOR

Union Pacific Resources	Organizational Summary		
	<p>Union Pacific Resources is primarily a domestic company. However, UPRC devotes approximately ten percent of its exploration budget for programs outside North America. These activities include projects in Indonesia, Argentina, and Egypt.</p>		
Type of Venture	Announcement Date	Country	Comments
Production sharing	October 10, 1991	Indonesia	<p>Union Pacific Resources Company (UPRC) tested its first exploration well in south Sumatra, Indonesia. The Tanjung Kurung No. 1 flowed 310 barrels of oil, 100,000 cubic feet of natural gas per day. UPRC, through its subsidiary, Golden Spike Indonesia Ltd., jointly operates a production sharing contract with Pertamina, the Indonesian national oil company. Additional partners in the two blocks are the Kodel Group, Enron Exploration Company, and the International Finance Corporation.</p>

UtiliCorp United

Type of Venture	Announcement Date	Country	Comments
Joint venture	May 6, 1992	Portugal	UtiliCorp entered into a joint venture with Endesa, a Spanish utility, and NRG Energy, to bid on a project to build and operate four 300 megawatt coal fired energy plants in Portugal at a total cost of \$1.6 billion.
Acquisition	July 10, 1987	Canada	UtiliCorp purchased West Kootenay Power and Light of Trail, British Columbia. The hydroelectric concern will be purchased from Cominco Ltd., Vancouver, for \$60 million. West Kootenay Power has four hydroelectric plants and serves 97,000 customers over a 10,000 square mile area.

EXHIBIT 2-20
ENERGY SECTOR

UtiliCorp United	Organizational Summary		
Type of Venture	Announcement Date	Country	Comments
Joint venture	July 31, 1992	New Zealand	UtiliCorp United announced its desire to expand into newly deregulated utilities in New Zealand and the Pacific Rim. In accordance with this strategy, UtiliCorp entered into a joint venture agreement with New Zealand's Waikato Energy Authority. The joint venture requires UtiliCorp to inject NZ\$42 million into the authority's power company in exchange for a 49 percent stake.
Joint venture	May 6, 1992	United Kingdom	UtiliCorp announced that it will continue to pursue international utility and energy investments and ventures. The company is involved in a number of joint venture agreements to market natural gas to large volume customers in the United Kingdom. It owns a 25 percent interest in a newly formed gas marketing affiliate of an electric utility in the northwestern part of England.

APPENDIX A
GLOSSARY OF TERMS

ERMES	European Radio Messaging System - the pan-European paging system specifies by ETSI
ETNO	Association of European Telecommunications Network Operators
ETSI	European Telecommunications Standards Institute
EUTELSAT	European Telecommunications Satellite Organization
GSM	Pan-European Digital Cellular Communication System (Groupe Speciale Mobile)
IBC	Integrated Broadband Communications
IBCN	Integrated Broadband Communications Network
ICCP	Committee for Information and Communications Policy
IEC	International Electrotechnical Commission
INTERSAT	The International Telecommunications Satellite Organisation
ISO	International Standards Organisation
ITU	International Telecommunications Union
KTS	Key Telephone System
LAN	Local Area Network
MATV	Master Antenna Television Systems
NA5	Network Aspects group 5 of CEPT, SG on Broadband
ONP	Open Network Provisions. ONP is directly linked to the development of a European-wide market for telecommunications services. ONP is based upon equal access conditions to the network infrastructures and to certain services for both service providers and users within the Community.
PABX	Private Automatic Branch Exchange
PSTN	Public Switched Telephone Network

APPENDIX A

GLOSSARY OF TERMS

CCIR	Consultative Committee for International Radio Telecommunications
CCITT	International Telephone and Telegraph Consultative Committee
CEN	European Committee for Standardization
CENELEC	European Committee for Electrotechnical Standardisation
CEPT	European Conference of Postal and Telecommunications Administrations
CTI	First Generation (analogue) Cordless Telephone
DBS	Direct Broadcast Satellite
DECT	Digital European Cordless Telecommunications
DTH	Direct to The Home (satellite television)
EBU	European Broadcasting Union
ECTEL	European Telecommunications and Professional Electronics Industry Association
ECTRA	European Committee for Telecommunications Regulatory Affairs
EDI	EDI combines the power of computers with that of telecommunications to replace paper documents and serve as data carrier for all commercial activities and services. By making computer systems of trading partners correspond directly with one another, it is possible to do business more efficiently.
ENO	European Numbering Office
ERC	European Radiocommunications Committee
ERO	European Radiocommunications Office



PTT	Post Telegraph and Telecommunications administrations
RACE	Research and Development in Advanced Communications Technologies in Europe
ROES	Receive Only Earth Stations
ROS	Receive Only Antenna
RTT	Road Transport Systems
SGXVIII	Study group 18 of CCITT, SG on broadband
SOG-T	The Senior Officials Group for Telecommunications. A group of officials from the European Commission and Member States concerned with telecommunications.
Telepoint	A service which enables users of cordless telephones to make calls within about 200 meters of receiver points usually located at railway stations and airport terminals
TFTS	Terrestrial Flight Telecommunications Systems
VSAT's	Very Small Aperture Terminals. This refers to small earth stations usually with an antenna diameter below 2.5 meter which can be installed at a user's own premises and used for one-way or two-way private communications. Also known as microstations.

APPENDIX B
SELECTED INTERNATIONAL INFORMATION SOURCES

Claremont Institute
4650 Arrow Highway
Suite D-6
Montclair, California 91763
(714) 621-6825

Commonwealth Foundation for Public-Policy Alternatives
600 North Second Street
Suite 300
Harrisburgh Pennsylvania 17101
(717) 231-4850

Competitive Enterprise Institute
233 Pennsylvania Ave., S.E.
Suite 200
Washington, D.C. 20003
(202) 547-1010

Council of State Governments
Iron Works Pike
P.O. Box 11910
Lexington, Kentucky 40578
(606) 252-2291

Fin Mark Research
1576 River Road
Castle-on Hudson, New York 12033
(518) 732-5756

Foundation for Research on Economy and the Environment
4900 Twenty-Fifth Ave., N.E.
Suite 201
Seattle, Washington 98105
(206) 548-1776

Free Market Foundation
P.O. Box 741777
Dallas, Texas 75374-1777
(214) 348-2801

Heartland Institute
634 South Wabash Ave.
2nd Floor
Chicago, Illinois 60605
(312) 427-3060

APPENDIX B

SELECTED INTERNATIONAL INFORMATION SOURCES

Research Organizations

Alpha Center for Public/Private Initiatives
South Gate Office Plaza, Suite 405
5001 West 80th Street
Bloomington, Minnesota 55437
(612) 831-5506

American Enterprise Institute
1150 17th Street, N.W.
Washington, D.C. 20036
(202) 862-5800

American Federation of Small Business
3441 Ridge Road
Lansing, Illinois 60438-3104
(708) 595-7700

American Legislative Exchange Council
214 Massachusetts Ave., N.E.
Washington, D.C. 20002
(202) 547-4646

Arizona Institute
2700 Woodlands Village Blvd.,
#300-329
Flagstaff, Arizona 86001
(602) 526-2597

Cato Institute
224 Second Street, S.E.
Washington, D.C. 20003
(202) 546-0200

Citizens for a Sound Economy
1250 H Street, N.W.
Suite 700
Washington, D.C. 20005
(202) 783-3870

Trade Associations

Information Technology Association of America
1616 North Fort Myer Drive
Suite 1300
Arlington, Virginia 22209
(703) 522-5055

National Association of Water Companies
1725 K Street, N.W.
Washington, D.C. 20006
(202) 833-8383

National Council for Public-Private Partnerships
1101 17th Street, N.W.
Washington, D.C. 20036
(202) 467-6800

Heritage Foundation
214 Massachusetts Ave., N.E.
Washington, D.C. 20002
(202) 546-4400

Independence Institute
14142 Denver West Park Way
Suite 101
Golden, Colorado 80401
(303) 279-6536

Manhattan Institute
52 Vanderbilt Ave.
2nd Floor
New York, New York 10017
(212) 599-7000

National Center for Privatization
P.O. Box 1998
Wichita, Kansas 67201-1998
(316) 261-5215

National Chamber Foundation
1615 H Street, N.W.
Washington, D.C. 20062
(202) 463-5552

Reason Foundation
Privatization Center
3415 S. Sepulveda Blvd.
Suite 400
Los Angeles, California 90034
(310) 391-2245

Thetford Group
2086 Mildred Road
Columbus, Ohio 43221
(614) 457-7303

World Bank
1818 H. Street
Washington, D.C. 20433
(202) 477-1234

APPENDIX C
LISTING OF COMPANIES SEARCHED

Hawaiian Electric Renewable Resources
Howard Electric Coop.
IE Industries
Iowa Resources
Ipalco
Kansas Gas & Electric
Laclede Electric Coop.
Maine Public Service
Minnesota Power & Light
Niagara Mohawk Power
North Central Missouri Electric Coop.
N.W. Electric Cooperative
Oklahoma Gas & Electric
Ozark Electric Coop.
People Energy
Pinnacle West Capital
Portland General
Public Service of Colorado
Rolls County Electric Coop.
SCANA
Sierra Pacific Resources
Southwest Electric Coop.
Texas Utilities
United Illuminating
UNITIL
Wisconsin Energy
Wisconsin Public Service

Houston Industries ...
HYDRA-CO
Illinois Power
Iowa Southern
Kansas City Power & Light
Kentucky Utilities
Louisville Gas & Electric
Midwest Energy
NECO Enterprises
NIPSCO Industries
Northern States Power
Ohio Edison
Orange & Rockland Utilities
Pennsylvania Power & Light
Philadelphia Electric
Patte-Clay Electric Coop.
PSI Holdings
Public Service Enterprise Group
Saratoga Development
SCEcorp
Southern Indiana Gas & Electric
TECO Energy
TNF Enterprises
Union Electric
Upper Peninsula Energy
Wisconsin Power & Light
WPL Holdings

Natural Gas Companies

Arkla
Columbia Gas System
Consumers Power
Enron Corporation
K N Energy
Michigan Consolidated Gas
National Fuel Gas
ONEOK
Panhandle Eastern
Questar
Southern Natural Gas
Transco Gas
The Williams Companies

Coastal
Consolidated Natural Gas
El Paso Natural Gas
Equitable Resources
Lone Star Gas
MidCon
Northern Illinois Gas
Pacific Gas & Electric
Public Service Electric & Gas
Southern California Gas
Tenneco
United Gas Pipe Line

APPENDIX C

LISTING OF COMPANIES SEARCHED

TELECOMMUNICATIONS SECTOR

Ameritech	Bell Atlantic
BellSouth	GTE Corporation
NYNEX	Pacific Telesis
Southwestern Bell	US WEST
United Telecom	

ENERGY SECTOR

Registered Utility Holding Companies (12/31/89)

Allegheny Power System	American Electric Power
Central and South West Corporation	Eastern Utilities Associates
Entergy Corporation	General Public Utilities Corp.
New England Electric System	Northeast Utilities
Southern Company	

Exempt Electric Utility Holding Companies (5/31/89)

Alaska Electric Light & Power	Alaska Energy & Resources
Alexander & Baldwin	Atlantic Energy
Atlantic City Electric	Baltimore Gas & Electric
Bangor Hydro-Electric	Boone Electric Cooperative
Catalyst Energy	Catalyst Vidalia
Centerior Energy	Central Illinois Public Service
Central Maine Power	Central Vermont Public Service
Chariton Valley Electric	CILICORP
Cincinnati Gas & Electric	Cliffs Electric Service
CMS Energy	Commonwealth Edison
Commonwealth Energy Systems	Consolidated Electric Coop.
Consolidated Papers	Crawford Electric Coop.
Cuivre River Electric Coop.	Dominion Resources
DPL	Duke Power
Edgewater Development	ESELCO
Farmer's Electric Coop.	Fisher's Inland Utility
Florida Progress	FPL Group
Green Mountain Power	Gulf States Utilities
Hawaiian Electric Industries	Hawaiian Electric



APPENDIX D

TABLES

Table 1 (Continued)
World's 100 Largest Public Companies

41	American Home Prod.	US	22,492
42	Ford Motor	US	22,171
43	Matsushita Electric	Japan	21,772
44	SmithKline Beecham	UK	21,478
45	Minnesota Mining	US	21,267
46	B.A.T Industries	UK	21,016
47	British Petroleum	UK	20,845
48	Deutsche Bank	Germany	20,741
49	Guinness	UK	20,513
50	British Gas	UK	20,153
51	Hitachi	Japan	19,754
52	Nomura Securities	Japan	19,449
53	Bell Atlantic	US	19,091
54	Eli Lilly	US	19,057
55	Microsoft	US	18,867
56	American Int'l Group	US	18,812
57	Walt Disney	US	18,749
58	Hanson	UK	18,721
59	Elf Aquitaine	France	18,628
60	Southwestern Bell	US	18,310
61	Grand Metropolitan	UK	18,212
62	Assicurazioni Generali	Italy	17,481
63	Marks & Spencer	UK	17,352
64	Hewlett-Packard	US	17,325
65	BTR	UK	17,285
66	Kansai Electric Power	Japan	17,219
67	Atlantic Richfield	US	17,123
68	Broken Hill Pty.	Australia	17,120
69	Ameritech	US	16,816
70	Waste Management	US	16,598
71	Seven-Eleven	Japan	16,495
72	Toshiba Corp.	Japan	16,473
73	McDonald's Corp	US	16,431
74	Imperial Chemical	UK	16,290
75	Pacific Telesis	US	16,124
76	Nynex	US	16,069
77	Texaco	US	15,962
78	Kellogg	US	15,961
79	Bank of Tokyo	Japan	15,883
80	Sandoz	Switzerland	15,880

APPENDIX D

Table 1
World's 100 Largest Public Companies

Company	Country	Market Value (\$ mil.)
1 Royal Dutch/Shell	Netherlands/UK	78,936
2 Exxon	US	76,849
3 NTT	Japan	73,142
4 Philip Morris	US	67,609
5 General Electric	US	67,185
6 Wal-Mart Stores	US	61,760
7 AT&T	US	57,034
8 Merck	US	56,527
9 IBM	US	55,888
10 Coca-Cola	US	53,158
11 Toyota Motor	Japan	42,511
12 British Telecom	UK	39,309
13 Glaxo Holdings	UK	38,734
14 Bristol-Myers Squibb	US	34,223
15 Du Pont	US	33,898
16 Sumitomo Bank	Japan	33,392
17 Mitsubishi Bank	Japan	32,400
18 Unilever	Netherlands/UK	33,787
19 Procter & Gamble	US	31,104
20 General Motors	US	30,230
21 Johnson & Johnson	US	29,818
22 Fuji Bank	Japan	29,633
23 Allianz Holding	Germany	29,093
24 Dai-Ichi Kangyo Bank	Japan	28,963
25 Industrial Bank of Japan	Japan	28,542
26 GTE	US	28,334
27 PepsiCo	US	27,666
28 Tokyo Electric Power	Japan	26,991
29 Sanwa Bank	Japan	26,684
30 Nestle	Switzerland	25,888
31 Abbott Laboratories	US	25,448
32 Sakura Bank	Japan	24,949
33 Mobil	US	24,496
34 Pfizer	US	24,064
35 BellSouth	US	23,952
36 Amoco Corp	US	23,700
37 Chevron	US	23,230
38 Daimler-Benz	Germany	23,197
39 Siemens	Germany	23,158
40 Roche Holding	Switzerland	22,532

APPENDIX D

Table 2
World's Top 50 Utilities

Company	Country	1991 Sales (\$ mil.)
1 Electricite de France	France	123,755
2 Stet	Italy	90,304
3 Tokyo Electric Power	Japan	87,475
4 Deutsche Bundespost Telekom	Germany	85,526
5 British Gas	UK	48,451
6 Kansai Electric Power	Japan	44,622
7 GTE	US	42,437
8 Telefonica de Espana	Spain	38,750
9 Ontario Hydro	Canada	37,415
10 BT	UK	37,299
11 Chubu Electric Power	Japan	36,837
12 Hydro Quebec	Canada	36,210
13 Iberdrola	Spain	31,592
14 Bellsouth	US	30,942
15 Bell Atlantic	US	27,882
16 US WEST	US	27,854
17 NYNEX	US	27,503
18 Kyushu Electric Power	Japan	24,870
19 Southwestern Bell	US	23,179
20 Pacific Gas & Electric	US	22,901
21 Taipower	Taiwan	22,402
22 Ameritech	US	22,290
23 Pacific Telesis Group	US	21,838
24 Osterreichische Post	Austria	20,576
25 Tohoku Electric Power	Japan	19,990
26 Southern	US	19,863
27 Texas Utilities	US	18,793
28 PTT Suisses	Switzerland	18,706
29 Commonwealth Edison	US	17,365
30 SCEcorp	US	16,828
31 Chugoku Electric Power	Japan	16,166
32 PTT Nederland	Netherlands	15,363
33 Bell Canada	Canada	14,849
34 Public Service Enterprise Grp.	US	14,824
35 Eskom	South Africa	14,672
36 Entergy	US	14,383
37 Endesa	Spain	14,380
38 American Electric Power	US	14,125
39 Vattenfall	Sweden	13,930
40 Pacificorp	US	13,229

Table 1 (Continued)
World's 100 Largest Public Companies

81	Anheuser-Busch	US	15,820
82	J. Sainsbury	UK	15,775
83	Dow Chemical	US	15,600
84	Alcatel Alsthom	France	15,385
85	BankAmerica Corp.	US	15,110
86	Schlumberger	US	15,088
87	U S WEST	US	14,973
88	Nippon Steel	Japan	14,649
89	Federal Natl Mortgage	US	14,535
90	Home Depot	US	14,267
91	Wellcome PLC	UK	14,148
92	Mitsubishi Heavy	Japan	14,147
93	Long-Term Credit Bank	Japan	14,143
94	Ito-Yokado	Japan	14,120
95	Ciba-Geigy	Switzerland	14,044
96	Sears Roebuck	US	13,711
97	Tokai Bank	Japan	13,696
98	Boeing	US	13,609
99	Pacific Gas & Elec.	US	13,467
100	Chubu Electric Power	Japan	13,466

Note: Companies are ranked by market value as of June 30, 1992.

Source: The Wall Street Journal; September 24, 1992

APPENDIX D

Table 3
World's 25 Largest Telecom Companies

Company	Country	Telecom Sales (\$ mil.)
AT&T ✓	US	55,362
NTT ✓	Japan	43,366
British Telecom	UK	21,805
GTE	US	19,621
Alcatel	France	17,307
BCE	Canada	15,164
STET	Italy	14,363
BellSouth	US	11,719
Nynex	US	11,462
Bell Atlantic	US	10,197
Ameritech	US	9,737
MCI Communications	US	9,500
Telefonica de Espana	Spain	8,896
Siemens	Germany	8,776
Facim- Telesis	US	8,715
Southwestern Bell	US	8,484
U S WEST	US	8,425
NEC	Japan	8,178
Sprint	US	7,954
Hitachi	Japan	7,287
Ericsson Telephone	Sweden	6,843
Telefonos de Mexico	Mexico	6,509
IBM	US	5,300
Cable & Wireless	UK	5,193
Motorola	US	3,629

Source: Worldscope; Arthur D. Little, Inc.; FW, September 15, 1992

Table 2 (Continued)
World's Top 50 Utilities

41	Tele-Communications	US	13,010
42	Philadelphia Electric	US	12,558
43	Electrabel	Belgium	12,351
44	Telefonos de Mexico	Mexico	12,182
45	Centerior Energy	US	12,042
46	Houston Industries	US	12,029
47	FPL Group	US	11,282
48	Dominion Resources	US	11,201
49	Consolidated Edison/NY	US	11,108
50	Televerket	Sweden	10,615

Source: Fortune; August 24, 1992



APPENDIX D

Table 4
Europe's Top 20 Private Telecom Companies

Company	Country	Sales 1991 (\$ mil.)	Employees
Deutsche Bundespost Telekom	Germany	25,359	216,156
France Telecom	France	20,745	157,313
Australian Telecom	Australia	7,794	82,039
Korean Telecom Administration	Korea	5,639	53,033
Dutch PTT	Netherlands	4,633	29,142
Swiss PTT	Switzerland	4,461	20,751
Televerket	Sweden	4,459	41,900
Directorate General Telecom	Taiwan	3,899	35,180
Austria PTT	Austria	2,829	18,392
Polish P&T	Poland	2,816	64,400
Regie des Telegraphes & Tel	Belgium	2,711	25,255
Entel	Argentina	2,620	53,370
Denmark PTT	Denmark	2,350	NA
Finland PTT	Finland	2,019	20,650
South African Post Office	South Africa	1,939	95,387
Telebras	Brazil	1,672	104,560
China PTT	China	1,652	404,400
Turkey PTT	Turkey	1,117	89,209
Hellenic Telecom Authority	Greece	989	29,654
Department of Telecom	India	907	312,303

Source: Arthur D. Little, Inc.; FW, September 15, 1992