U.S. Telecommunications Services in European Markets

INDEX

A	Bell operating companies. See also	foreign investment in Central and
Accounting rates, 68-69	Regional Bell holding companies;	Eastern Europe, 124-125, 127
Administrative Procedures Act, 174	Regional Bell operating companies	RBHCs international activities, 80-81
Advanced Intelligent Network, 35	effect of market liberalization, 60n	Central and Eastern Europe
AEC services. See Construction services	ISDN plans, 33	causes of decay, 116-117
AIN. See Advanced Intelligent Network	R&D expenditures, 185-186	CoCorn, 119-123
Airline reservation systems, 99, 100	Bellcore. See Bell Communications	conclusions, 132-133
Alcatel Data Networks, 78	Research, Inc.	condition of telecommunications,
American Telephone and Telegraph.	BellSouth Corporation, 82-83	113-116
See also Regional Bell holding	BOCs. See Bell operating companies	defining, 1 IO- I 11
companies	British Telecom	effect of Soviet policies, 112-113
antitrust case, 74	competitors, 49-51	problems with liberalization, 127-129
deregulation, 135-136	effect of market liberalization, 60n	regional differences, 111-112
effect of market liberalization, 60n	Syncordia project, 78n	role of telecommunications, 109-110
European activities, 75-76, 131	Broadband Integrated Services Digital	strategies for liberalization, 123-127
international investments, 71	Network, 30	U.S. involvement, 129-132
R&D expenditures, 191-192	BT. See British Telecom	Western approaches to regional relationships,
strategy for international expansion,	Bureau of Communications and Infor-	1 17- I 19
78-80	mation Policy	Central and Eastern European
Ameritech, 86	description, 166-168	Telecommunications Cooperative
		Mechanism, 119
Analog systems, 25n, 26	GATT negotiation, 153-154	CIP. See Bureau of Communications and
Architectural services, 104-107	structural options, 176-179 Bureau of Economic Analysis, 173-174	Information Policy
ARPANet, 41, 43	Bureau of Telecommunication	CMEA. See Council for Mutual Economic
ASST. See Azienda di Stato per i Servizi Telefonici		Assistance
	Development, 118	
Asynchronous Transfer Mode, 30	Bush Administration, 164, 172	Coalition of Service Industries, 154
ATM. See Asynchronous Transfer Mode AT&T. See American Telephone and		CoCorn. See Coordinating Committee on
	C C I C C C C C C C C C C C C C C C C C	Multilateral Export Control
Telegraph	Cable Communications Policy Act	Collection rates, 68-69
Azienda di Stato per i Servizi Telefonici, 53-54	of 1984, 73	Comecon. See Council for Mutual
33-34	Cable television	Economic Assistance
D.	market estimates, 66	Common Air Interface, 36
B	RBHCS international activities, 81	Common Carrier Bureau, 165
Banking. See Financial services	Carter Administration, 160	Common channel signaling, 26
Basic services	CCITT. See Consultative Committee	Communications Act of 1934
market estimates, 64-65	for International Telephone and	Federal communications policy, 160
problems with market access, 149-151	Telegraph	formation of FCC, 164, 165n
BDT. See Bureau of Telecommunication	CEE. See Central and Eastern Europe	preemption by provisions of NAFTA
Development	CEETEC. See Central and Eastern	treaty, 147n
BEA. See Bureau of Economic Analysis	European Telecommunications	Section 214, 74n
Bell Atlantic, 85	Cooperative Mechanism	Section 310, 4, 81n
Bell Communications Research, Inc.,	CEI. See Comparably Efficient Interconnection	Communications Policy Board, 176
192-193	Cell relay, 29-30	Communications Satellite Act of 1962,

Cellular communications

4-5, 165n

Bell Labs, 191-192

US. Telecommunications Services in European Markets

Comparably Efficient Interconnection,	EDI. See Electronic data interchange	F
33n, 44	EFTA. See European Free Trade	Facilities-based suppliers, 64n
Congressional considerations	Association	FASB. See Financial Accounting
encouraging export of telecommunications	800 service, 34-35	Standards Board
services, 88-89	Electronic data interchange	FCC. See Federal Communications
policy options, 21-23	description, 103n	Commission
Construction services, 104-107	market estimates, 66	Federal Communications Commission
Consultative Committee for International	Encompass Europe, NV, 100	Computer 111 decision, 44
Telephone and Telegraph, 34, 142	Engineering services, 104-107	data collection, 173-174
Coordinating Committee on Multilateral	Enhanced services. See Value-added	description, 164-166
Export Control, 119-123	services	FCC Decision, 5
Cordless telephones. See Mobile	Equipment. See Telecommunications	international simple resale, 53
communications	equipment	requirement of BOCS for ISDN
Council for Mutual Economic Assistance,	ETSI. See European Telecommunications	plans, 33
110	Standards Institute	supportof international telecommunications
effect on ethnic relations, 112n	European Bank for Reconstruction and	services, 154-155
CSI. See Coalition of Service Industries	Development, 123	Federal Express Corporation, 100n
	European Community, trade agreements,	Fiber optics, export restrictions,
D	I11	119-120, 122
Data networks, 79-80	European Community Services Directives	Financial Accounting Standards Board,
Data protection directive, 98	description, 57	189n
Data transmission, 94	EC Green Paper, 126, 127	Financial Network Association, 77
Defense Production Act of 1950, 5	Italy ratification, 54	Financial services, 101-104
Demand patterns, 56-59	Open Network Provision Directive,	Frame relay, 29-30
Department of Defense	2, 44-45,57	France, telecommunications market, 51
research computer network, 41	telecommunications directives, 126	Freedom of Information Act, 173n
telecommunications policy, 167-168	Utilities Directive, 156n	Freight transport, 99-100
Department of Justice, 168	European Free Trade Association, 111	
Department of State, 166-168	European market	G
Department of Trade and Industry, 52-53	aggregate telecommunications market,	GATT. See General Agreement on Trade
Deregulation, worldwide consequences,	54-56	and Tariffs
135-137	description, 47-49	GEN. See General European Network
Deutsche Telekom, 51-53	estimates and projections, 64-67	General Agreement on Trade and Tariffs
Digital systems, 25n, 27	importance of U.S. trade, 67-70	Agreement on Technical Barriers to
DOD, See Department of Defense	long-range demand patterns, 56-59	Trade, 44
DTI. See Department of Trade and	market liberalization, 60-63	building an international constituency,
Industry	market unification, 63-64	142-143
	price trends, 59-60	changing international trade relations,
E	structure, 49-54	141-142
Eastern Europe, See Central and Eastern	European Telecommunications Standards	description, 143-144
Europe	Institute, 42	general principles, 144-147
EBRD. See European Bank for Recon-	Eurotel, 130	Government Procurement Code, 156n

Euroteldev, 118

Exon-Florio Amendment, 5

long-range consequences, 155-157

movement toward trade policy, 139-141

struction and Development

EC. See European Community

negotiating GATT, 15 I -155	Data, 174	L
problem of basic telecommunications	Interagency Trade Policy Review Group,	LANs. See Local area networks
services, 149-151	169	LATA. See Local Access and Transport
Telecommunications Annex. 147-149	Interexchange carriers, 71, 74-78	Area
Uruguay Round, I 1	International Communications Association,	Leased line services
General European Network, 96	79, 154	market estimates, 64
General Telephone and Electronics, 71	international Competitive Carrier, 5	problems with European networks,
Germany, telecommunications market,	International Electrotechnical Commission,	93-94
5 I -53	41 n	LECS. See Local exchange carriers
Global System for Mobiles, 36	International simple resale, 52-53	LEOS. See Low-Earth-orbit satellites
Government Procurement Code, 156n	International Standards Organization, 41n	Liberalization
GSM. See Global System for Mobiles	International Telecommunication	basic services problems, 149-15 l
GTE. See General Telephone and	Regulations, 142	defined, 145
Electronics	International Telecommunication Union	European countries, 60-63
	Central and Eastern Europe, 118	negotiations, 151-153
H	description, 41 n	problems in Central and Eastern Europe,
Holiday Inn Worldwide, 10 I	purpose, 135, 141	127-129
Hotel reservation systems, 101	International telecommunications	strategies in Central and Eastern
HTC. See Hungarian Telecommunications	foreign carriers in U. S., 90	Europe, 123-127
Company	interexchange carriers, 74-78	Local Access and Transport Area, 62n, 73n
Hungarian Telecommunications Company,	investments, 71	Local area networks, 30
122	International Telecommunications Users	Local exchange carriers, 71
		plant value, I On, 188-189
I	Group, 34, 79, 154 International telephone traffic, 67-68	Long-distance services
IBM, international investments, 72		carriers, 71
ICA. See International Communications	International Trade Administration, 1 70-171	problems with market access, 149-151
Association	Internet, 43	Low-Earth-orbit satellites, 72n
IEC. See International Electrotechnical	INTUG. See International Telecom-	
Commission		M
Incentive regulations, 195-196	munications Users Group	Market access principle, 145-146
Industry Sector Advisory Committees, 170	IRI. See Instituto per la Ricostruzione	Market liberalization. See Liberalization
Infrastructure. See Telecommunications	Industrial	Market unification, 63-64
infrastructure	Iridium project, 72n	MCI
Institute for Telecommunications Sciences,	ISACs. See Industry Sector Advisory	European activities, 76-77
163n	Committees	Execunet Service, 57n
Instituto per la Ricostruzione Industriale,	ISDN. See Integrated Services Digital	strategy for international expansion,
54	Network	78-80
Integrated Services Digital Network	1SO. See International Standards Organization	Mercury, 49, 50
Broadband, 30	ITA. See International Trade	Metropolitan Fiber Systems, 195n
description, 31,33-34	Administration	MFJ. See Modification of Final Judgment
Intelligent Network	Italy, telecommunications market, 53-54	MFN. See Most-favored nation status
description, 28	ITU. See International Telecommunication	MFS. See Metropolitan Fiber Systems
routing 800 service calls, 34-35	Union	Millicom, 72n
Interagency Task Force on Services Trade	IXCs. See Interexchange carriers	Mobile communications

U.S.

Telecommunications Services in European Markets

cordless telephones, 36	1988 Montreal declaration, 145	OTP. See Office of Telecommunications
demand for, 58	1988 Trade Act, 140, 153	Policy
description, 30-31	section 301, 156	
market estimates, 65-66	USTR mandate to conduct trade talks,	P
Modification of Final Judgment	155, 169	Pacific Telesis, 85-86
and decline in domestic infrastructure	Nippon Telephone and Telegraph, 45n	Package delivery systems, 100-101
development, 194	North American Free Trade Agreement,	Packet switching, 28-29
effect on international expansion, 72-74	147	Paperwork Reduction Act of 1980, 171-
Section II(D)(3), 73n	NTIA. See National Telecommunications	172
Montreal declaration of 1988, 145	and Information Administration	PCS. See Personal Communications
Most-favored nation status	NYNEX, 83-84	Services
basic telephone service, 149-150	•	Personal Communications Services, 30
Central and Eastern European countries,	0	Portable communications. See Mobile
111-112	OECD. See Organization for Economic	communications
description, 144	Cooperation and Development	Postal, Telephone, and Telegraph ad-
Motorola, 72n	Office of International Communications,	ministrations. See also Public
Multimedia services, 58	165n	telephone operators
Multiplexing, 25n, 29	Office of Telecommunications Policy, 179	effect of deregulation, 136-137
1 3,	Office of the United States Trade	ISDN technology, 34
N	Representative	Price trends, 59-60
NAFTA. See North American Free Trade	GATT derogation, 149	Privacy Directive, 98
Agreement	international telecommunications	Private networks, 35-36, 56-57
NARUC. See National Association of	policy, 1	Privatization
Regulatory Utility Commission	negotiating positions in GATT, 153-155	in Central and Eastern Europe, 126
National Association of Regulatory Utility	opening foreign markets, 140	RBHCS international activities, 81
Commission, 22	trade policy, 169-170	PTOs. See Public telephone operators
National Information Infrastructure, 14	OIC. See Office of International	PTTs. See Postal, Telephone, and Tele-
National Network, 50	Communications	graph administrations
National sovereignty, 146	Omnibus Trade and Competitiveness Act	Public telephone operators
National Telecommunications and Infor-	of 1988, 172	partnerships with long-distance carriers,
mation Administration	ONA. See Open network architecture	78-79
assessment of infrastructure deterioration,	OND. See Open Network Development	public frame relay services, 30
183	ONP. See Open Network Provision	strength of European operations, 137n
description, 162-164	Open network architecture, 44	Public utility commissions, 195
formation, 160	Open Network Development, 45n	PUCS. See Public utility commissions
single network transmission, 73n	Open Network Provision, 2,44-45, 57	
support of telecommunications	Open Systems Interconnection model, 41	R
services, 155	Organization for Economic Cooperation	Rate-of-return regulations, 195
Network management systems, 67	and Development	RBHCS. See Regional Bell holding
Networks, interoperability, 39-41	cost of modernizing European systems,	companies
1934 Communications Act. See Com-	121	RBOCS. See Regional Bell operating
munications Act of 1934	role in international agreements, 141	companies
1979 Trade Agreements Act, 139	0S1. See Open Systems Interconnection	R&D. See Research and development
1984 Trade and Tariff Act, 139, 172	model	Reagan Administration, 164

Regional Bell holding companies. Seealso	role of U.S. Government. 9 l	T
Bell operating companies; Regional	travel and transportation services,	Telecommunications Annex, 147-149
Bell operating companies	98-101	Telecommunications costs, 96-97
AT&T antitrust case, 74	Sheraton reservation system, 101	Telecommunications equipment
Bellcore R&D, 192-193	Signaling, 26	discriminatory procurement practices,
decline in domestic infrastructure	SIP. See Societa Italiana per l'Esercizio	97-98
development, 194	delle Telecommunicazioni	export restrictions, 119
international activities, 7 I, 80-87	SITA. See Societe International de Tele-	exporting, 88n
regulations effecting international	communications Aeronautiques	sale of German equipment in U. S., 138r
expansion, 72-74	SMDS. See Switched Multi- lMegabit Data	Telecommunications infrastructure
strategies for international expansion,	Service	comparisons of modernization
87 Regional Bell operating companies.	Societa Italiana per l'Esercizio delle Tele- communicazioni, 53-54	internationally, 182-184 conclusions, 197-201
See a/so Regional Bell holding	Societe Internationale de Telecommunications	determinants of investment, 193-197
companies inter-LATA toll service, 62n	Aeronautiques, 99	modernization debate, 181-182
Regional Development Conference,	Society for Worldwide Interbank Financial	question of domestic disinvestment, 188-193, 197-199
118-119	Telecommunications, 102	R&D expenditures, 184-188
Regulations	SONET. See Synchronous Optical	Telecommunications policy
European regulatory problems, 97-98	Network	adequacy of data, 171-174
and overseas expansion, 72-74	Southwestern Bell, 86-87	CIP, 166-168
Research and development	Soviet Union policies. 112-113	conclusions, 174-179
expenditures, 184- I88	Sprint	Department of State, 166-168
question of decline in expenditures,	European activities. 77-78	FCC, 164-166
197-201	strategy for international expansion,	ITA, 170-171
trends, 189-193	78-80	NTIA, 162-164
Resellers. See International simple resale	Standards	options, 174-179
Rural service, 115, 118	defined, 38-39	overview, 159
	development, 108	structure, 160-162
\$	and the future, 42-45	trade in services policy structure,
Satellite business services, 66	networks and interoperability, 39-41	168-169
Satellite television, 66-67	producers vs. users, 41-42	USTR, 169-170
SEED Act. See Support for Eastern	Stored-program control switching, description,	Telecommunications services
European Democracies Act	26, 28	changing attitudes toward services trade 138-143
Services exports construction services, I (M-107	Submarine Cable Landing Act, 4	considerations for European export,
earnings of service industries, 92, 93	Support for Eastern European Democracies Act, 129	1-21
encouraging expansion in telecom-	SWIFT. See Society for Worldwide Inter-	defined, 47n
munications, 88-89	bank Financial Telecommunications	encouraging foreign expansion, 88-89
European regulatory problems, 97-98	Switched Multi-Megabit Data Service, 30	European investment levels, 116-117,
financial services, 101-104	Switching, 26, 28	119
policy issues, 107-108	Synchronous Optical Network, 28	export policy options, 21-23
problems with European telecommunications networks, 92-97	Syncordia project, 78n	foreign carriers' operations in U. S., 89,90

U.S.

Telecommunications Services in European Markets

modernization of European systems,	Transmission systems, 28
121, 123	Transparency, 145, 147
problems with European networks,	Transportation services, 98-101
92-97	Travel services, 98-101
problems with market access for basic	Treaty of Rome, 57n
service, 149-151	Truman Administration, 176
restrictions on access to U.S. market,	
4-5	u
trade deficit, 18-19	UNCTAD, See United Nations O
Гelegraph Act, 4	on Trade and Developme
Telephone networks	UNDP. See United Nations Dev
implications of change, 37	Program
infrastructure, 31, 32	Unisource, 78
privatization, 81	United Kingdom
Telephone penetration	international simple resale, 52
defined, 59n	telecommunications market, 4
levels, 112, 113-114	United Nations Conference on T
Telephone service	Development, 141
market estimates, 64-67	United Nations Development Pr
operator productivity, 115, 117	118
problems with market access, 149-151	United Parcel Service, 100-101
quality faults, 114, 116	United States
revenues for European countries,	considerations for exporting
117, 120	communications services
waiting time for installation, 114, 115	encouraging foreign expansion
Γelevision. See also Cable television;	foreign carriers' operations, 8
Satellite television	formulation of negotiating po
EC directive concerning broadcasting,	GATT, 153-155
66n	international activities, 71-72
Terminal equipment, functionality, 31	international telephone traffic
Three-dimensional computer assisted	involvement in Central and E
design, 106	Europe, 129-132
B-D CAD. See Three-dimensional	regulations concerning intern
computer assisted design	expansion, 72-74
TPSC. See Trade Policy Staff Committee	telecommunications services
Γrade Act of 1974, 139, 172	68-70
Frade Act of 1988, 140, 153, 155-156, 169	trade balance, 3, 68
Trade Agreements Act of 1979, 139	worldwide consequences of de
Frade and Tariff Act of 1984, 172	135-137
Γrade balance, United States, 68-70	United States v. AT&T, 73n
Frade policy. See Telecommunications	Universal service, 57n
policy	UPS. See United Parcel Service
Frade Policy Staff Committee, 169	Urban service, 115,118

01 ns Conference ment Development , 52-53 et, 49-51 on Trade and Program, 01 ng teleces, 1-21 nsion, 88-89 s, 89, 90 positions in -72 ffic, 67-68 d Eastern ernational ces trade, deregulation, U.S.-Canada Free Trade Agreement, 140-141 U.S. Coordinator for International Communications and Information Policy, 166 U.S.-Israel Free Trade Agreement, 140-141 U.S. Trade Agreements Act of 1979, 44 U.S. West European cellular network, 130-131 international activities, 84-85 USTR. See Office of the United States Trade Representative Utilities Directive, 156n

٧

Value-added services description, 1n,151 market estimates, 65-67 problems with European networks, 95 Very Small Aperture Terminals, 36 Virtual Private Networks description, 35-36 international expansion, 80 problems with European networks, 95 VPN. See Virtual Private Networks VSATS. See Very Small Aperture Terminals

W

Warsaw Treaty of Friendship, Cooperation, and Mutual Assistance, 1I On WATTC. See World Administrative Telegraph and Telephone Conference Wireless communications. See Mobile communications World Administrative Telegraph and Telephone Conference, 142 World Bank cost of modernizing European systems, 121 market liberalization, 123 Worldsource, 76