The Common Market for Telecommunications and Information Services

Morris H. Crawford

Program on Information Resources Policy
Harvard University
Cambridge, Massachusetts

Center for Information Policy Research
The Common Market for Telecommunications
and Information Services
Morris H. Crawford
July 1990, P-90-6

Project Director
Oswald H. Ganley

The Program on Information Resources Policy is jointly sponsored by Harvard University
and the Center for Information Policy Research.

Chairman
Anthony G. Oettinger

Managing Director
John C. LeGates

Executive Director
John F. McLaughlin

Executive Director
Oswald H. Ganley

Morris H. Crawford is president of International Informatics, an economic research and consulting
firm. His firm specializes in analysis of trade and production of knowledge-based industries in East
Asia and Europe.

Copyright © 1990 by the President and Fellows of Harvard College. Not to be reproduced in any
form without written consent from the Program on Information Resources Policy. Harvard University,

Printing 5 4 3 2 1
Program on Information Resources Policy

Harvard University

Affiliates

Action for Children's Television
American Newspaper Publishers Association
American Telephone & Telegraph Co.
Ameritech Publishing
Anderson, Benjamin, Read & Haney, Inc.
Apple Computer, Inc.
Arthur D. Little, Inc.
Auerbach Publishers Inc.
Bell Atlantic
Bell Canada
BellSouth Corporation
Boice Dunham Group Inc.
Bull, S.A. (France)
Centel Corporation
Chronicle Broadcasting Company
CMC Limited (India)
Commission of the European Communities
Communications Workers of America
Computer & Communications Industry Assoc.
COMSAT
Data America Corp.
Dialog Information Services, Inc.
Digital Equipment Corp.
Dow Jones & Co., Inc.
France Telecom
Gartner Group, Inc.
GTE Corporation
Hitachi Research Institute (Japan)
Honeywell, Inc.
IBM Corp.
Information Gatekeepers, Inc.
Information Industry Association
International Data Corp.
International Resource Development, Inc.
Invoco AB Gunnar Bergvall (Sweden)
I.T. Direction Ltd. (UK)
Knowledge Industry Publications, Inc.
Lee Enterprises, Inc.
John and Mary R. Markle Foundation
MCI Telecommunications, Inc.
Mead Data Central
MITRE Corp.
National Telephone Cooperative Assoc.
NEC Corp. (Japan)
Nippon Telegraph & Telephone Corp. (Japan)
Northern Telecom Ltd. (Canada)

Center for Information Policy Research

Affiliates

Nova Systems Inc.
NYNEX
Ing. C. Olivetti & Co., S.p.A.
OTC Limited (Australia)
Pacific Telesis Group
Public Agenda Foundation
Research Institute of Telecommunications and Economics (Japan)
RESEAU (Italy)
Revista Nacional de Telematica (Brazil)
Salomon Brothers
Seafie Family Charitable Trusts
SEAT S.p.A. (Italy)
Southern New England Telecommunications Corp.
State of California Public Utilities Commission
State of Minnesota Funding
TEKNIBANK S.p.A. (Italy)
Telecom Australia
Telecommunications Research Action Center (TRAC)
Tele/Scope Networks, Inc.
Third Class Mail Association
Times Mirror Co.
Tribune Company
United States Government:
Department of Commerce
National Telecommunications and Information Administration
Department of Defense
National Defense University
Department of Health and Human Services
National Library of Medicine
Department of State
Office of Communications
Federal Communications Commission
General Services Administration
National Aeronautics and Space Administration
National Security Agency
U.S. General Accounting Office
United States Postal Rate Commission
United Telecommunications, Inc.
US West
Williams Telecommunications
Wolters Kluwer
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-1</td>
<td>Telecommunications in the European Community, Japan, and the United States</td>
<td>9</td>
</tr>
<tr>
<td>3-1</td>
<td>Reformation of Telecommunications in the European Community</td>
<td>20</td>
</tr>
<tr>
<td>B-1</td>
<td>The European Community: Current Commissioners and Areas of Responsibility</td>
<td>125</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

• Enacting Common Market goals for 1992 has revitalized the European Community, giving it a more unified outlook and greater international stature. Disarray throughout the Soviet Empire is presenting difficult political issues to the Community, but economic reform in the East has reinforced EC resolve to stick to EC'92 targets and to extend Community authority over monetary policy.

• A basic objective of EC'92 is a sharper competitive edge in high technology. To this end, telecommunications goals are 1) liberalization of administration and operations, and 2) open competitive conditions for production and marketing of equipment and supplies. Solid progress has been made toward both goals.

• Agreement was reached in December 1989 regarding Directives for administration and operation of national systems. When the Directives are issued in July 1990, they will fill out a policy framework calling for 1) national operating systems to be separated from regulatory bodies, 2) monopoly permitted only for basic telephone and telex, 3) competition required in other services, e.g. data processing and value-added services, and 4) open networks provisions for access to the basic infrastructure.

• While the Directives will provide a policy framework, the job of establishing a liberalized and open Community-wide system is far from completed. To make them effective, the Directives have to be translated into uniform national laws and regulations. At present, these are often inconsistent with the Directives; member nation legislation sometimes may deviate in detail from Community decisions, for instance, in dealing with non-EC countries.

• Sorting out these contentious problems will occupy operating administrations, national regulators, and the Commission for many years. Of particular importance is regulatory responsibility, for the members have followed widely varying forms when separating regulatory from operating bodies. The division of responsibility between the Commission and the national regulators, moreover, is ambiguous, leaving a wide-open field for a decade of lawyers.

• Restructuring the telecommunications equipment industry is even more complex. A framework that is falling into place rests on six cornerstones: 1) Guidelines issued on applying rules of competition in telecommunications, 2) a Directive agreed on open competition for public procurement of equipment, 3) a Directive issued on competition in terminals markets, 4) a Regulation issued on mergers and acquisitions, 5) establishment of an Institute for setting of uniform standards, and 6) a Directive in preparation on mutual recognition of types of equipment.

• These are interlocking actions that are far enough along to conclude that when in place, they will provide a policy framework for a competitive Single-Market in this industry. It will have to be
enacted and enforced in member countries and differences dealt with in legislation between countries. Of importance are the probable differences in treatment of non-EC countries.

- Particularly troublesome is the question of division of authority over the rules of competition between Brussels and the national capitals. Difficult questions concerning Community-wide antitrust laws await equipment producers and service suppliers who are expanding abroad in anticipation of EC'92 legislation.

- Beyond the internal market implications, the Single-Market in telecommunications has important international ramifications.

- EFTA's members are deeply dependent on trade and investment with the EC and worried about telecommunications industries that are closely aligned to the Community. After months of shadow play, the EC agreed to negotiate a customs treaty with EFTA in 1990.

- Japanese companies are expanding in Europe anticipating that EC'92 will favor investors already there. EC members who follow restrictive policy at home have gotten tough rules adopted by the Community. Japan's leaders have been unresponsive to requests to negotiate, but the Commission sees hope in the Kaifu Government.

- The Community has reacted to political and economic reform in East Europe and the USSR by trying to build new foundations for trade and finance. The effort has been successful, especially in setting up financing for restructuring on a market basis. As telecommunications have been badly neglected in the East, the prospect for trade and investment is enormous. Results to date have been impeded, however, by "central planning overhang" in the East and CoCom rules on telecommunications trade in the West.

- The US has generally welcomed EC'92 and telecommunications reform as a liberalization movement that both corporate and official America should encourage -- but not without periodic warnings against any indications of exclusion from markets.

- A major US telecommunications interest is in establishing a legal framework for trade and investment. Both the US and the EC support the Uruguay Round in GATT as the right place for a broad framework. GATT may not, however, provide sufficient depth on the complex issues between the US and the EC. Many US businessmen believe bilateral arrangements may be needed. Dealing with the prospective problems in communications and information industries is an issue for the US and EC to explore in the 1990s.

- EC'92 at mid-stream looks more like a world opportunity than a world problem. The contrast between a vibrant Community in the West and a bankrupt COMECON in the East has given the Community an unprecedented opportunity to display world leadership. Keeping it that way will
depend on how the Community's leaders deal with the international community as they bring into actuality an increasingly unified and politicized Common Market.
FOREWORD

This study examines the European Community's program for reforming telecommunications in a Single European Market. A major portion of the study covers the international ramifications of EC'92, including in particular the implications for Eastern Europe and the Soviet Union. Because of the continuing unrest in these countries, it is conceivable that the relevant facts will be quite different when this study is read than when it was written. The reader may note that the author has taken account of events known to him through March 31, 1990.

In preparing this study, the author has received valuable assistance from a large number of persons. The author deeply appreciates the help that these men and women provided. Their names and affiliations may be found in appendix C.

The author also wishes to express gratitude to the following persons who reviewed an earlier draft of the study. Their comments were cogent, pertinent, and thoughtful and the author is extremely pleased that these persons took the time and effort to read and comment on the study.

Caryl Aumoine
Mylle H. Bell
Peter D. Bergstrom
John Berndt
Robert P. Bigelow
Yves H. Clerc
Carolyn Conlon
Nicholas P. Costello
R.D. Dalziel
Wilson Dizard
Michael E.C. Ely
Rainer Faust
Larry G. Forester
Arthur Freeman
Artch Griffin
Seisuke Komatsuzaki

John F. Magee
Barry Mullinix
Lionel H. Olmer
Jonathan Phillips
G. Russell Pipe
Piero Ravaoli
Jacques Reinstein
Peter Robinson
Martyn F. Roetter
Kathleen C. Stewart
Alan Tousignant
Herbert Ungerer
Raymond Vernon
Dawson Walker
Dimitri Ypsilanti
Charles A. Zraket

These persons, however, are not responsible for nor necessarily in agreement with the views that are expressed, nor should they be held accountable for errors of fact or interpretation.
# TABLE OF CONTENTS

EXECUTIVE SUMMARY .................................................. 1

FOREWORD ............................................................... v

CHAPTER ONE INTRODUCTION: BUILDING A COMMON MARKET FOR COMMUNICATIONS AND INFORMATION SERVICES .... 1

CHAPTER TWO TELECOMMUNICATIONS IN THE EUROPEAN ECONOMIC COMMUNITY ................................................. 3

2.1 A Vision and a Strategy for High-Tech Telecommunications .. 3

2.2 The Cost of the Past ................................................ 7

2.3 Decision Making within the European Community ............... 12

CHAPTER THREE Restructuring European Telecommunications .... 19

3.1 Legislation in Changing National Systems ......................... 20

3.2 Monopoly and Competition in European Telecommunications .. 22

3.2.1 The United Kingdom ........................................... 22

3.2.2 Germany ...................................................... 24

3.2.3 France ....................................................... 26

3.2.4 Europe’s New Telecommunications Administrations .......... 29

3.3 Commission Directives for Telecommunications Operations .... 30

3.4 Liberalizing and Restructuring Markets for Telecommunications Equipment ......................................................... 35

3.4.1 Liberalizing Terminals Markets ................................ 36

3.4.2 Revitalizing the Telecommunications Industry ............... 38

3.5 Establishing the European Telecommunications Standards Institute ................................................................. 43

3.6 ISDN and Broadband Communications: A Troubled Beginning .... 47

CHAPTER FOUR EC'92 AND THE INTERNATIONAL COMMUNITY .... 57

4.1 Anxieties in the European Free Trade Association ................ 58

4.2 Japan and East Asia: Trying to Beat 1992 ....................... 61
4.3 The US Ponders its New European Competitors 68
4.4 US-EC Telecommunications Issues in Post-1992 76

CHAPTER FIVE BUILDING NEW FOUNDATIONS FOR EUROPEAN-WIDE COOPERATION 85
5.1 The Architects of Change 85
5.2 Institutional Foundations for a Market Culture 87
5.3 Modernizing Telecommunications in East Europe and the USSR 92
5.4 Three Problems 99

CHAPTER SIX THE EMERGING PROBLEMS 109
6.1 Reformation of Telecommunications in the Community 109
6.2 Restructuring of the Telecommunications Industry 110
6.3 International Policy and the Single-Market in Telecommunications 112
   6.3.1 Negotiations with EFTA 112
   6.3.2 Eastern Europe And The USSR 112
   6.3.3 East Asia 114
   6.3.4 The United States 114

APPENDIX A The Organization of the European Economic Community 117

APPENDIX B The European Community: Current Commissioners and Areas of Responsibility 123

APPENDIX C Contacts and Reviewers 127
CHAPTER ONE

INTRODUCTION: BUILDING A COMMON MARKET FOR COMMUNICATIONS AND INFORMATION SERVICES

The Single European Act ratified a long-debated reformation of the economic structure in the European Community (EC). Signed in 1986 by EC Heads of State, the Act was approved by national Parliaments and came into force in July 1987. It notified the world that a Single-Market would soon be a reality and would move Europe a notch or two higher in the global economic power game.*

But the Act only committed EC Governments to reorganizing for a Single-Market; it left unresolved many questions about the form the unified European economy would take, as well as the key question of commitment to political unity. An era of indecision over an unfinished Common Market ended by opening a new era of controversy over policy for a reconstituted Common Market. It is a controversy with roots in every segment of the European economy, but nowhere more than in the regulatory policies for administering and operating telecommunications.

The Community's decision to complete the internal market represented a growing realization that Europe was trailing behind the US and Japan and had to restructure or "become a second rank player." The Community set 1992 as its target. But restructuring for global leadership is more complicated than meeting a target date. The process raises issues that are thoroughly political, even when they may look narrowly technical or purely economic, for telecommunications is a never-ending political controversy. The reformation process engages an army of officials and private individuals throughout Europe, in member countries as well as in Brussels. The interaction among these individuals and the institutions they represent will determine the Single-Market hopes for European communications -- the subject of this paper.

* European Community members are Belgium, Denmark, Federal Republic of Germany, France, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, and the United Kingdom. See appendices A and B for a summary of the principal institutions of the Community.
In setting a broad economic goal for itself, the European Community has awakened long-muted desires to extend Europe's new-found economic unity into other areas -- political union for one, and other parts of Western and Eastern Europe for another. The political upheavals in Eastern Europe and the USSR in 1988-89 have changed the geo-political map of Europe, thereby altering the economic environment for Single-Market policy and raising enormously the stakes in its success. At stake are economic power and status in the new Europe and a challenge to establish a durable, growth producing economic framework for the whole of Europe. Telecommunications policy for the Community will have an important role in building the new Europe.

This paper describes the complex process of defining and achieving common goals in communications and information services. Chapter two describes European telecommunications and EC policy making; chapter three summarizes the state of progress in telecommunications reform; chapter four outlines the international reactions; chapter five deals with the interaction of Western Europe with its rapidly changing eastern neighbours, and chapter six presents a summary of the issues facing the Community at the present stage of the Single-Market program.

The EC'92 process in telecommunications is nearly four years along, and many of its expectations may linger on unresolved well into the 1990s. But the Community is trying to build a unified Europe "brick by brick," the route that Jean Monnet and Robert Schuman prescribed forty years ago when the Common Market was their unrealized dream. As the Treaty of Rome intended, the EC process is pragmatic and does not always move according to its own formulas and detailed plans. EC'92 may produce surprises, and a few disappointments. The Single European Act, nonetheless, is likely to serve as a landmark in the historical record of the last years of the twentieth century.
CHAPTER TWO

TELECOMMUNICATIONS IN THE EUROPEAN ECONOMIC COMMUNITY

The economic foundations for the Single-Market program are incorporated in an official White Paper issued in 1985. Prepared by the Commission and approved by the Council of the European Community, the White Paper, Completing The Internal Market, is an outline for fulfilling the market integration envisaged in the Treaty of Rome thirty years earlier.¹ The document has since served as a basic guide for negotiations and discussion on all questions regarding the new Common Market. It has generated untold numbers of meetings, analytical documents, and decision papers covering the wide spectrum of topics related to a single European market.

In 1987 the Commission released a second basic document -- the Green Paper -- which specifically addresses telecommunications and information service questions. The Green Paper was approved in principle by the Council in 1988 as a plan for discussion and action on telecommunications policy and fills a role similar to that of the White Paper. The plan reflects many years of sparring over the questions the Community faces in reforming of European telecommunications.²

The Commission's formulations reflect dissatisfaction with a Common Market that is falling short of the expectations of the Treaty of Rome. One perceived cost is a handicapped high-tech industry. Many Europeans are convinced that their high-tech firms are unnecessarily confined to national markets and would benefit from a broader horizon, where R&D would be more effective and large scale production and sales more easily assured.³

2.1 A VISION AND A STRATEGY FOR HIGH-TECH TELECOMMUNICATIONS

These ideas are incorporated in the EC analysis of a global techno-economic revolution, in which Europe rarely has been a prime mover.
Four techno-economic forces are remolding the world’s economies, and Europe has responded ineffectively to them:

1) Advancement of the computer and its convergence with telephone systems

2) Growing importance of information management

3) Expanding power of communication systems as vehicles of political and cultural influence

4) Increasing interdependence of nations and globalization of production in a shrinking world.

The Commission’s formulations reflect the thinking of many Europeans who have become increasingly apprehensive that their economies are not sufficiently attuned to the possibilities of the new techno-economics. In 1988 Alain Madelin, the French Minister of Industry, said "Europe has no choice but to become a third pole of equivalent weight to the US and Japan. Or else, poor in raw materials, politically divided, technologically dependent, it will fast become nothing more than a subcontractor for the other two." These Europeans see a Community that is innately capable of high-tech leadership, yet is behind its competitors in the US and Japan, and fear that the gap will continue to grow. They see the lag in terms of the application of technology in profitable and useful products and services, rather than in technology per se. They diagnose the European problem as entrepreneurial and commercial, rather than scientific, and look to a reformation of economic structures as the antidote. The notion that government control of communications must give way to market competition is an idea of growing appeal throughout much of corporate Europe.

This new vision of European high-tech leadership is a major motivating factor in the EC'92 effort. It has been spurred on by European business leaders such as Wisse Dekker of Philips and Jacques Solvay of Solvay who have recognized that old national habits were harmful to them and not really effective in combating domination by US companies. It is the driving force for the Green Paper and the starting point for the Commission’s rationale for giving telecommunications and information
products and services high priority in the Single-Market program. Many European analysts have concluded that the industry lags in technology because it is over-controlled, badly invested, and too insular. A more dynamic telecommunications sector, they say, would bring new vitality into European business and help its information and science-based services compete in world markets.\(^5\)

While Vice President of the Commission of the European Communities, K. H. Narjes put the decision facing Europe in stark either/or terms:

> There can only be two options; either to participate in the dynamic transformation of the world economy, or to become a second-rank player and to accept the loss of wealth and prosperity which this would mean for every European citizen.\(^6\)

The Single-Market program for telecommunications is a response to these apprehensions. It is based on a strategy for reforming the industry in order to place the Community in a better position for competing in the 1990s and for moving into a leadership position before the twenty-first century.

The aim of reformation is "to develop the conditions for the market to provide European users with a greater variety of telecommunications services, of better quality and at lower cost, affording Europe the full internal and external benefits of a strong telecommunications effort."\(^7\) A four-part strategy for achieving this objective calls for a major reconstruction of Europe’s telecommunications industry:

1) Revisions in telecommunications operations, regulatory standards, and administration and greater recognition of rights of users

2) Corporate restructuring and greater competition among equipment manufacturers

3) Community-wide standards for marketing both equipment and services
4) Expanded research and development at the corporate and national levels, and cooperative R&D at the Community level, in particular for digital and broadband communications.

The proposals set out in the strategy are based on discussions over a two-year period preceding their issuance. The consultations included expert studies and comment by labor, business, public representatives, and Government officials. In these proceedings, the Community reached a general consensus on the Green Paper's objectives.

But consensus in principle has not prevented disagreement on details in action, for member governments have differing views on the meaning of the consensus. The Council had approved the Green Paper by resolution and in principle, rather than in detail; thus the members do not feel committed to it unqualifiedly. Moreover, officials in capitals are frequently upset by the Commission's "pushiness" -- its habit of pressing for greater and more rapid change than is politically feasible in the home territory -- and its infringements on national sovereignty. One clear sign of Germany's annoyance with the Commission was a twelve-page critique issued in August 1989 by the Economic Ministry in Bonn. The paper criticized Brussels' plans for monetary reform, and zeroed in on the Commission's zeal "to interfere too much in the affairs of member states."

In many cases, member governments find it necessary to heed local conditions that do not permit following detailed prescriptions for an internal market. Reform in France, for example, has been challenged by trade unions who threatened a strike because of belief that removing the postal and telecommunications services from a common Ministry would undermine the protected status of 435,000 workers. Although the French trade unions generally support the Single-Market program, the postal and telecommunications workers fear losing civil service status and job security, as well as other privileges they have enjoyed. French legislation that is likely to be taken up in Parliament in mid-1990 will reflect these concerns and will be designed to offer assurances of worker protection.
National actions on the Community’s program have commonly followed a course that responds more to domestic issues than to those of the Single-Market program. Although preparations for the program have coincided with reform of telecommunications systems in most member nations, the Commission has shown more zeal for liberalization than decision makers in several capitals. The Commission has clearly wanted to set a faster pace and follow a different route than most member governments. The Commission has more clout than it used to have and is bent on leading a drive to restructure systems in every nation in the Community. Member governments that have signed on cannot ignore the Commission’s recommendations even when they are unsure about how fast they can or should change existing structures.

2.2 THE COST OF THE PAST

One need only look at the control structure over European telecommunications to appreciate the boldness of the Commission’s challenge. The first clue is that there isn’t just one structure -- there are twelve. Several structures are controlled by government monopoly that both operates and regulates the system. Some have partially privatized systems operating under close regulatory supervision and usually under exclusive license. Only in the United Kingdom is the principle of a competitive operator a going concern.²

The control structure historically has combined postal and telecommunications services, usually called the Post, Telephone, and Telegraph (PTT). The PTTs control large budgets and oversee contracts for huge amounts of equipment and supplies that are predominantly placed with domestic companies. They are often major employers. For example, the Deutsche Bundespost employs a half million Germans, about 5 percent of the work force. The PTTs have continuity of many generations. Some have Ministerial status. These strong bureaucracies have retained power by cultivating a public service record that has been commonly seen as trustworthy, reliable, and protective of national interests.
As the Commission has presented its proposals in follow-up reports, Recommendations, and Directives, it has been addressing powerful adversaries. It has been doing so on grounds that raise questions about the validity of the PTTs, which look like holdovers from a past age. Combining postal and telephone services made sense at one time, but their operations and functions have diverged over time and holding them together no longer makes sense. The meaning of the Commission's proposals has been clear: that the national systems operated by the PTTs are inefficient at home and uncompetitive abroad, and should be overhauled.\textsuperscript{10} PTT policies toward users are harmful, for in holding up growth of user applications, they hinder advancement of user oriented industries that would be highly beneficial to Europe's economy. And, in focusing on the "national champion," the Commission has stressed, the PTT system has encouraged wasteful use of R&D resources, and development of switching systems that are costly and not readily compatible.

These conclusions are not readily provable, for in a physical sense the major European systems are highly sophisticated, by almost any standard. A communications gap is not measurable in easily understood statistics, leaving a margin for counterclaims that may sound convincing. Some evidence cited by the Commission reflects weak telecommunications systems in the less-developed EC countries, and doesn't always portray the stronger systems accurately. Several PTTs can point to budgets that in relative terms are as high or higher than in the US and Japan. They can show evidence of reorganization and modernization of their systems, of improvements in service to the public, and of increasing attention to keeping up with the technology. France, for instance, has pioneered development of a popular -- though controversial -- service that gives individuals an at-home videotex system and access by telephone to many information services.

But the national systems are, nevertheless, vulnerable to the Commission's evidence of inefficiency. One reason for high cost is overspecification of systems -- e.g. double armory and welded seams for optic fiber cables -- that increase the manufacturing and installation costs of cables significantly\textsuperscript{11} (see Table 2-1 below). A study made
for the Commission estimated equipment costs in the Community and concluded that savings of 25 to 30 percent would be possible if these costs were brought down to world market levels; it estimated that roughly comparable savings were possible from the lower costs resulting from the major operational proposals of the Green Paper.12

Table 2-1

Telecommunications in the European Community, Japan, and the United States

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>59</td>
<td>164</td>
<td>194</td>
<td>44</td>
</tr>
<tr>
<td>Denmark</td>
<td>53</td>
<td>224</td>
<td>696</td>
<td>78</td>
</tr>
<tr>
<td>France</td>
<td>83</td>
<td>264</td>
<td>1436</td>
<td>62</td>
</tr>
<tr>
<td>Germany</td>
<td>104</td>
<td>260</td>
<td>432</td>
<td>62</td>
</tr>
<tr>
<td>Greece</td>
<td>33</td>
<td>71</td>
<td>549</td>
<td>37</td>
</tr>
<tr>
<td>Ireland</td>
<td>45</td>
<td>152</td>
<td>460(^5)</td>
<td>26</td>
</tr>
<tr>
<td>Italy</td>
<td>59</td>
<td>128</td>
<td>305</td>
<td>45</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>31</td>
<td>218</td>
<td>—</td>
<td>55(^6)</td>
</tr>
<tr>
<td>Netherlands</td>
<td>40</td>
<td>186</td>
<td>400</td>
<td>61</td>
</tr>
<tr>
<td>Portugal</td>
<td>18</td>
<td>82</td>
<td>—</td>
<td>18</td>
</tr>
<tr>
<td>Spain</td>
<td>39</td>
<td>90</td>
<td>—</td>
<td>37</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>49</td>
<td>226</td>
<td>407</td>
<td>52(^7)</td>
</tr>
<tr>
<td>Japan</td>
<td>56</td>
<td>166</td>
<td>—</td>
<td>55</td>
</tr>
<tr>
<td>United States</td>
<td>67</td>
<td>360</td>
<td>1508</td>
<td>86</td>
</tr>
</tbody>
</table>

\(^1\) Per capita investment by common carrier; three year moving average.
\(^2\) Revenue from telecommunications services divided by population.
\(^3\) Number of calls, divided by population, except for France and Ireland, where number of charged pulses is used.
\(^4\) Number of telephones per 100 inhabitants.
\(^5\) For 1983.
\(^6\) For 1983.
\(^7\) For 1984.

In offerings of new and innovative services, the differences are also revealing. In some countries, e.g. France and Spain, much R&D is carried out in government laboratories or under their financing and has weak commercial orientation, and PTTs sometimes require their suppliers to participate in R&D that would not otherwise be undertaken. As a result, some observers point out, many European products, developed in response to PTT specifications, are over engineered and not suitable for global markets. Analyses made for the EC conclude that most European manufacturers, selling primarily in domestic markets of limited size, are either unable or unwilling to support research and development necessary even to stay abreast of a rapidly developing technology. Their central office switching systems are generally considered as less advanced and unable to provide as high-quality service as North American models. New models are put on the market two to four years behind their competitors'. Although communications systems in much of Europe are technologically superior, the information services that are vital for modern commerce are less advanced and more costly than in Japan and North America, which, business users in the Community complain, handicap them in global trade.

For example, Jacques Stern, the former Chairman of Groupe Bull of France, has warned of the urgent need to strengthen and unify Europe's fragmented market for computer and telecommunications systems. Stern believes that a healthier market for information technology is necessary to solve major problems such as the weakness of the European computer companies compared to US and Japanese competitors.

As another sign of European weakness, the Commission points to lower market share and lagging sales of European communication and information products. Although Siemens and Alcatel are the second and third largest manufacturers in the world, the European industry as a whole does not fare so well in global markets. The world market for telecommunications equipment in 1985 was some $70 to $80 billion, of which the Community accounted for less than 20 percent and the US nearly 40 percent, though their GNPs are roughly similar. European manufacturers of switching equipment are operating at 70 percent of capacity, as competitors from
North America and Japan offer superior equipment at lower cost. With 
home-produced transmission equipment, each installed line in the EC 
costs from $225 to $500, compared to about $100 in the US. Europe’s 
high-cost production has led to weak and falling market share in 
telecommunications trade.  

2.3 DECISION MAKING WITHIN THE EUROPEAN COMMUNITY

The Commission’s case for communications reform is powerful and has 
gained many converts, particularly in Europe’s business community. But 
the Commission is only one part of a decision structure that involves a 
wide range of players with different perspectives and not necessarily 
the same attitude toward reform and dealing with Member Governments as 
the Commission. Indeed, the Council of Ministers and its hierarchy are 
ultimate arbiters and dominate decision making, and other elements in 
the Community also must be accommodated. While the Commission is 
leading the charge, other parts of the Community structure, the Council, 
the Parliament, and the Court of Justice also have important roles to 
play (see appendices A and B).

Under the Treaty of Rome, the Council sets the tone, direction, and pace 
for policy making, particularly in its semi-annual Heads of State 
meetings. The Commission serves as executive and administrative body 
and initiates all formal policy decisions. The Commission is the only 
body authorized to draft Community law, which it can propose as legally 
binding decisions in three forms, the Directive, the Regulation, and the 
Decision. Each has the force of law, in the sense that Member States 
are responsible for abiding by them in national law.

The obligation of Member States is specified in Article 189 of the 
Treaty. But this has not prevented questions arising as to its 
interpretation and the Single European Act does not remove the 
ambiguity. The latter, in calling upon the Council and the Commission 
to adopt measures for "the approximation of the provisions laid down by 
law, regulation, or administrative action in Member States," appears to
Member States to instruct the Council and the Commission to develop Directives and Recommendations that are in line with national legislation. Questions regarding the acts of the Council and the Commission in relation to legislation in Member States are among the European Community’s most controversial issues (see chapter three for how this issue is handled with telecommunications).

Policy decisions must be approved by the Council of Ministers, except in some cases of "competition law," as described below. Yet it is clear that even with regard to the "exceptions," the Commission cannot take actions that are inconsistent with decisions approved by the Council.\(^{18}\) The Commission is required to route proposed decisions through the European Parliament. Prior to the Single European Act, Council approval could be blocked by a single dissent, and routing through Parliament was essentially a formality, except for the annual budgets. The Single European Act altered these criteria for both Parliamentary and Council approval.

The new standards provide for weighted voting in the council on Single-Market issues, with the weighting related to members’ size. Exceptions to majority voting are stipulated in the Act and include taxes, professional qualifications and employee interests, but there is a presumption that all important issues will be decided by a "qualified majority." Although the Treaty had already included the principle the Single-Market Act clarified the practice. Votes are apportioned among the members in accordance with weights described on page 120 of this paper. In essence, it means that no single country has veto power over a proposed decision as in the past, for at least three members must disapprove in order to block a "qualified majority" that does approve.

These revisions should make it easier to get approval of Commission proposals. Because the Member Governments have more direct control over the Council, and only indirect control over the Commission, the revisions are commonly regarded as making the Commission more powerful at the expense of the Council and of the Member Governments.\(^{19}\)
On the other hand, the revisions regarding Parliament are usually seen as making it a more influential body. Commission proposals are now taken up in Parliament in two stages. As in the past, Parliament may render an opinion and offer amendments in the first stage. The Council must take these into account but may override by a qualified majority vote. The Parliament is also entitled to a second reading. Any amendments passed by a two-thirds vote on this reading can be overridden only by a unanimous vote in the Council.

An important task of the Commission is to serve as the "Guardian" of the Treaty. Articles 85 and 86 refer to the Commission's authority in instances where a specific action in a Member State is thought to be in violation of the Treaty. Article 90 of the Treaty gives the Commission authority to act in regard to "public undertakings and undertakings to which Member States grant special or exclusive rights." Article 90(3) states that for such undertakings

the Commission shall ensure the application of the provision of the Article and shall, where necessary, address appropriate directives or decisions to Member States.

The purpose of this evidently is to prohibit state measures incompatible with the Treaty and by implication to provide extra assurance that Member States will not circumvent the rules of the Treaty regarding monopolistic practices. Because monopoly is the prevalent form for organizing European telecommunications, this special power is relevant to their reform, despite questioning of its applications in Europe's capitals.

Although the Commission rarely invoked this authority in the past, it has done so in issuing two recent telecommunications Directives (see later discussion in chapter three). In each case member governments are contesting the Directives and pursuing their objections into the European Court of Justice. In coming years, the Commission is likely to appear before the Court of Justice many times to defend the constitutionality of these and other Directives on telecommunications.
The Court has become increasingly active in the past decade, handing down several landmark cases regarding the internal market program. Most frequently cited is the "Cassis de Dijon" decision of 1979, which established the principle that unless an importing country can show that public health or safety is at stake, it cannot obstruct the sale of products from other Members. The Court upheld in this case a Commission Decision that Germany could not refuse entry to a French liqueur solely because it did not comply with a German standard for liqueur. In this and subsequent instances the Court has ruled that a product or commodity produced and sold in any member country must be permitted to move freely throughout the Community unless exclusion could be shown as based on genuine concern for safety and health.

One important consequence of this ruling is the precedent that Cassis de Dijon (the name of the French liquor) has played in developing the "principle of mutual recognition" as a cornerstone of the Single-Market Act. The "principle of mutual recognition" means that standards and regulations adopted in one member country must be recognized as valid in other member states and is the basis on which many specific decisions in the Single-Market program are being developed.

The "British Telecom" case in 1985 is another precedent that is more directly related to telecommunications reform. The case involved a complaint lodged by a private UK message forwarding agent against the UK telecommunications administration. It concerned prohibitions imposed by the UK administration for the transit of telex messages between third countries, e.g. between continental Europe and North America. The tariffs charged for telex service meant that a telex from Italy to the US could be sent at a lower charge if it were routed through the UK. The Court found that British Telecom was in violation of the Treaty of Rome when it refused to forward telex messages that it received from other member countries, and determined that British Telecom had to forward such messages and do so at the same rates that it charged to British customers. The decision is a cornerstone of Community case law in telecommunications and had been a major influence over subsequent policy making by the Commission.24
Thus, the role of the Court of Justice is much more than that of an adjudicator of policy disputes. In the Court's decisions, it is establishing precedents for a firmer constitutional basis for policy making. The telecommunications Directive that is moving through the judicial mill may eventually provide clearer grounds for the Commission's authority and for its power to issue Directives in cases involving monopoly and restraint of competition.

The decision machinery of the European Community is complex and often regarded as excessively cumbersome. But the complexity of the institution is an unavoidable consequence to the task of unifying twelve nations. Reform of telecommunications, as all other areas of the program, raises technical and economic issues that have politically loaded implications and pit the players in confrontational situations. Resolving these issues while holding the organization together and damping the risk of disintegration is easily the most persistent challenge faced by the Community.

The "EC Process" for handling this challenge is the product of forty years' experience. The process is based on a legacy from Jean Monnet and Robert Schuman, the chief creators of European unification and architects of its first working efforts. Monnet insisted that a Single-Market should be built "brick by brick," which Schuman said could be done only by concrete accomplishment at each stage. The Monnet-Schuman principle is incorporated in the Treaty of Rome, which formulates the Community's fundamental purposes in terms of "progressively approximating" the economic policies of member states.

The Monnet-Schuman principle has been institutionalized as the EC process, and representatives of the Community often comment that the EC Single-Market program is "a process not a program." But both the principle and the process are meant to be imprecise concepts, and they don't provide precise guidance as to how the Community will establish policy for telecommunications reform.
In practice, the process is a mixture of aggression and cooperation that is sometimes called "a competition between regulatory systems" -- between the twelve in the member states and the thirteenth in Brussels.\textsuperscript{28} Paradoxically, the ultimate goal for the Single-Market is harmonization and mutual recognition of differences among the systems.\textsuperscript{29} At this stage of the Single-Market process the Commission is the driving force, and "bullying and banging heads" is commonly viewed as a part of its armor.\textsuperscript{30}
NOTES


6. Ibid., p. 5.


10. Research On The Cost Of Non-Europe: The Benefits Of Completing The Internal Market For Telecommunications, Commission of the European Community, Brussels, Belgium, 1988. This document, written for the Community by Jürgen Muller, INSEAD, provides statistical estimates of benefits from eliminating barriers to equipment production and to services transactions.

11. Personal communication.

12. Ibid., pp. 26-39, 60-84.

13. Personal communication.

14. Personal communication.

16. See Note 9.


18. Personal communication.


21. Personal communication.


23. See Note 5, pp. 186-192.


26. See Note 19.

27. The European Community Representative in Washington, Ambassador Sir Roy Denman, frequently quoted this phrase, for example, at the EC Seminar: Telecommunications, of Squire, Sanders, & Dempsey in Washington, D.C., October 11, 1988.


30. Personal communication.
CHAPTER THREE
RESTRUCTURING EUROPEAN TELECOMMUNICATIONS

Keeping twelve governments moving together is crucial to Community unification and a major function of the Commission in Brussels. All EC members are enacting legislation that will form the regulatory framework for telecommunications in the new Common Market. The Single European Act specifically obligates them to "adopt measures with the aim of progressively establishing the internal market over a period expiring on 31 December 1992." In principle, the national legislation or administrative decrees bolster the Green Paper's proposals. In fact, national action is often delayed; even when taken, it frequently conflicts with the Community's proposals and with legislation of other members as well.

Can the Community produce unified telecommunications policy in these circumstances? Martin Bangemann, the EC Commissioner for the Internal Market, warned in September 1989 that of 68 Single-Market Directives, only 7 had been written into national law. Moreover, even when the Commission goes to the European Court and obtains a ruling against a Government's infraction of a Directive, the judgement may be ignored. According to the Economist, forty-four such rulings have not been carried out, including several on telecommunications related issues. While Bangemann's warning seems likely to stimulate action, the problems of enactment and enforcement are real. Even when a Directive is disregarded, it can still have direct effect within that nation. But enactment and enforcement remain ultimately for national decision and laxness or indifference toward a decision means conflict between the EC and national and local authorities -- and consequent delays until the issues are sorted out in the Courts.

Telecommunications policy is especially contentious, a case where the "competition between regulatory systems" penetrates every aspect of Single-Market reform in Europe. It is certain to continue on long after the transition period to 1992. This section describes the divisive
interplay between governments and the Commission over the telecommunications reforms of EC'92.

3.1 LEGISLATION IN CHANGING NATIONAL SYSTEMS

The primary objectives in the first stage of the reform are revising administration and operations in the national systems, as summarized in the ten interrelated priorities listed in Table 3-1 below. Progress toward the objectives may be seen in the review and issuance of key Directives and the installation of machinery for coordinating standards.

Table 3-1
Reformation of Telecommunications in the European Community

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Status*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Competitive service markets</td>
<td>Provisional Directive under review</td>
</tr>
<tr>
<td>2. Open network provision</td>
<td>Provisional Directive under review</td>
</tr>
<tr>
<td>3. Separate regulatory from operations</td>
<td>Recommendations issued</td>
</tr>
<tr>
<td>4. Cost-related pricing</td>
<td>Covered in several Directives</td>
</tr>
<tr>
<td>5. Community-wide standards</td>
<td>European Telecommunications Standards Institute, 1988</td>
</tr>
<tr>
<td>7. Open procurement for infrastructure equipment</td>
<td>Proposals for Directive issued</td>
</tr>
<tr>
<td>8. Foundations for ISDN</td>
<td>Recommendations issued, R&amp;D underway</td>
</tr>
<tr>
<td>9. Competition in telecommunication markets</td>
<td>Guidelines issued and Directives under discussion</td>
</tr>
<tr>
<td>10. Mutual recognition of type approvals</td>
<td>Directive under review</td>
</tr>
</tbody>
</table>

*As of March 15, 1990.

But unresolved disputes concerning all Commission proposals continue, including those where Directives have been issued. The status of the transition priorities (as of October 1, 1989) is listed below.

All of the Commission's proposals require important changes in national policies -- changes that mean radical upheavals in the operational practices in national telecommunications systems. The need for some degree of revision is accepted in all capitals; it is the form and extent that are contested. Reform legislation in individual Member Governments is proceeding simultaneously with the Community effort and even predates the Community program in several countries. An important landmark was the British Telecommunications Act of 1981 and revisions of 1989. Germany and the Netherlands subsequently passed similar legislation; France and Denmark have made important changes, for instance, in separating regulatory from operational functions. Every member has taken steps to open up terminal markets. Even less-developed members that are exempted from full liberalization immediately have begun enacting reform legislation.

The independently initiated legislation, however, frequently deviates from the liberalization and harmonization guides of the Green Paper. Despite Commission efforts to give direction to national reform, the legislative actions of individual EC members differ significantly and sometimes fall short of the liberalizing aims of the program. While individual governments are moving in the same general direction, they are -- as described below -- deviating from a common path in a contentious and potentially troublesome fashion.

It is likely that these contradictions will be ironed out as acceptable Directives are agreed upon and member countries work out acceptable ways to adjust their structures. The Treaty of Rome and the amendments of the Single European Act commit members to follow policies that are consistent with Community decisions made in accordance with the process described earlier (see chapter two). The contradictions impede unification, however, by slowing down and complicating the process; they may also dilute liberalization if they limit competition in services and
place intra-community competition on a lower common denominator. They are, for sure, producing an intensive struggle over reformation of telecommunications administration.5

3.2 MONOPOLY AND COMPETITION IN EUROPEAN TELECOMMUNICATIONS

The underlying reason for the struggle is the difference in attitude among and within governments toward the role of monopoly power and competition in European telecommunications services. The national differences reflect the relative strength of internal forces that pit, on the one side, the telecommunications administrations (TAs)* who see their interests as holding on to exclusive marketing of as many services as they can, and on the other side, the privately owned competitors and the users who are seeking open telecommunications markets. TAs face influential and well-organized "user" and "information service" interest groups that were not a part of the earlier PTT world. The TAs, no less than the PTTs, want the exclusive markets that make their jobs easier, but they have to compromise much more than the PTTs.

3.2.1 The United Kingdom
The leading champion of competition is the UK. British banks and financial service groups were major instigators who combined with other users and financial service suppliers to pass the Telecommunications Act of 1981 which ended monopoly control over telecommunications. The Act set up a separate postal system apart from British Telecom, gave the Secretary of State for Industry authority to issue licenses for market entry, and provided for selling of shares in the Cable and Wireless corporation for telecommunication equipment manufacture to the public. The telecommunications service interests were the prime movers in the legislative revisions of 1984 when the Act was amended to wrest from

* The term "telecommunications administrations," or TAs for short, has been adopted as terminology to refer to the new and different organizations that are coming into play as operators and/or administrative authorities for national telecommunication systems, to replace the PTTs, but with less overall authority.
British Telecom some of its power over giving licenses for value-added network operations.

This path-breaking legislation in 1981 has enabled the UK to improve its strong global position in the communication intensive industries, dramatized by the "Big Bang" liberalization in 1985 of London's financial center. The statistical data are impressive, as the United Kingdom accounts for more than 50 percent of the Community's data communication services market. The British are responsible for virtually all of the Community's 25 percent rate of growth in these services, despite the lack of technical superiority over other European telecommunications systems.6

In the UK's privatization, the Government is the principal stockholder of British Telecom, whose competition is, so far, primarily engaged in international circuits. British Telecom, moreover, frequently behaves like the PTT it replaced, for instance, in protecting its market position in value-added services. Value-added data services are open to competition, but regulations governing the market are complex, providing opportunity for anyone so inclined to show why "open" competition should be "restrained" competition. British Telecom executives say, privately, that they spend a lot of time trying to figure out legal ways to keep the competition out of certain types of value-added services.7

Margaret Thatcher's highly sympathetic government has made liberalization a stronger force in the UK than elsewhere in Europe. Her antipathy toward large bureaucracy has kept the newly created regulatory office of OFTEL (for Office of Telecommunications) on short rations, as compared for instance to the FCC in the US, gaining it acclaim on the one side for allowing the market to function efficiently and on the other brickbats for not being a careful watchdog over the industry. The pro-regulators claim that British Telecom has been agile in exploiting OFTEL's limitations. Even they, however, give OFTEL's Director, Sir Brian Carsberg, high marks for accomplishing so much with so little and charge the Thatcher Government with failing to recognize the need for regulatory oversight of a privatized TA. Pro-liberalization forces, on
the other hand, laud OFTEL's conduct, pointing for instance to its usage of "price cap" regulation as an effective step that has been adopted by several other countries. They also stress the evident benefits of increased consumer choice and service incentives that OFTEL's policies have encouraged.

Moreover, despite Mrs. Thatcher's anti-regulatory bent, her Government has given OFTEL strong support in its decisions for regulating anti-competitive actions, for instance in supporting OFTEL's ruling against a 1984 proposal for British Telecom and IBM to jointly operate a managed data network. OFTEL has pursued a consistent regulatory philosophy of encouraging competition as a means of limiting potential abuses, a regulatory stand that has been instrumental in the growing strength of the UK in European telecommunications. In most respects Mrs. Thatcher's Government has exercised relatively little "regulatory" authority over this regulatory body, leaving OFTEL relatively free from the political "guidance" that is an agonizing part of the continental regulator's life.8

3.2.2 Germany
Germany is a late convert to liberalization. Reorganization of the Deutsche Bundespost was approved in 1989 after more than four years of Parliamentary study, hearings, and debate. The State Governments have tried for more than a decade to cut back on the monopolistic position of the Bundespost. They have gained allies in recent years from information service suppliers and users as well as key equipment manufacturers. An alliance of mutual interests combined in the 1980s to lobby the Ministry of Economic Affairs, which became convinced that clipping the Bundespost's wings was necessary for a competitive Germany. A measure of the Bundespost's power is its staying ability in the long struggle against this combined alignment of forces. An important ally of the Deutsche Bundespost was the Bundespost Trade Union; a key event in the breakthrough was an agreement on job protection between the Trade Union and the German Government.9
The new telecommunications law is generally regarded as a turnaround from the past primacy of the Bundespost, by lessening its comprehensive control over German telecommunications and opening a large part of the services market to competition. The extent of the opening has been estimated in an official forecast, which projects that in another five years only one-half of Germany’s telecommunications market will be covered by monopoly rights, down from about 90 percent in 1988. Thus, it is said “the door to competition is half open.”

The Germans have also become strong supporters of Green Paper restructuring. Although some parts of the German law do not conform to Commission proposals, the legislation follows the Green Paper line in most important respects. The old Bundespost has been remodeled, with Telekom being split off from the Postal Service and Post Banks. Telekom (with the two other divisions) is a part of the Ministry of Posts and Telecommunications, not an independent agency or a private corporation. Regulatory duties are in a different part of the Ministry, no longer directly related to telecommunications operations and administration. The new operational division retains its monopoly position over the basic infrastructure and over telephone and telex services, but has been shorn of monopoly rights over other telecommunications services, including mobile services.

As the German reform became effective only in August 1989, it has a limited track record in performance, compared for instance to the UK. Clearly important changes are in store for the competitive market. Telekom has a monopoly over terrestrial transmission and public voice telephony, but will face competition in value-added services, data communications, and in the use of leased lines. Germany is also opening mobile services to private competition. The Bundespost announced in mid-1989 that it would license a second operator that would compete with Telekom in this market. Six international consortia bid for the license, which was awarded in December 1989 to a group headed by Mannesman Mobifunk and included Pacific Telesis of the US and the UK’s Cable and Wireless. This award is an important introduction of competition into German telecommunications. The license permits the
Mannesman group to offer services throughout the country -- unlike other countries where licenses are limited to a given region -- and could in time provide an encroachment into the basic services.\textsuperscript{11}

Telecommunications reform in Germany is taking place in a less receptive political environment than in the UK. The Kohl Government, unlike Margaret Thatcher's, has not been an enthusiastic apostle for liberalizing regulation, and Minister Schwarz-Schilling has had to lead the reform without much help from above. The government's somewhat neutral stance provided a crucial environment, however, that allowed a strong business-oriented bloc to work effectively against the potent political groups aligned with the Deutsche Bundespost.

This favorable environment for Green Paper reform could be reversed if a less neutral or hostile government were to take office. The reform is not self-implementing, and a government hostile to its liberalization objectives could frustrate them. The Telecommunications Act provides for an active political hand over policy. The Act calls for a politically appointed Council in the Ministry of Posts and Telecommunications, a Council whose powers could be effectively turned against liberalization as the new organization is forming. The effectiveness of the German telecommunications reform may well turn on domestic politics, particularly on the 1990 elections, which might return to power a Social Democratic Party that says it wants to repeal the legislation. However, Germany is generally looked upon as a strong supporter of liberalized telecommunications and is expected to pursue actions that will implement those policies.

3.2.3 France

French telecommunications reform has a longer history than in Germany, but one no less associated with national politics. The Nora-Minc Report of 1978 was a landmark in the reform of the French system.\textsuperscript{12} The Report described in detail the cost to France of failing to keep pace with the advances in telecommunications and computer technology, and painted a dismal future if the system were not modernized. Nora-Minc jolted the country into action, and in the next several years succeeding
governments regardless of political coloration led a drive that poured investment and other resources into the telecommunications system. The results are apparent in technical terms, as France now claims the world’s most highly digitized telephone networks and a saturation level of 95 percent of households with telephone service.\textsuperscript{13}

But the improvements in the system were mainly technological and were not aimed at market reform. They added to rather than detracted from the dominant State role in telecommunications. Indeed, after François Mitterrand was elected President in 1981, the Socialist Party’s nationalization program further extended governmental control and ownership by undertaking the "Filière Électronique." This plan, essentially intended to enhance French technological capabilities, was also aimed at nationalizing all telecommunications services and products, and reducing French dependence on foreign suppliers. Although the plan ran into trouble and was not fully implemented, several key nationalizations were carried out.\textsuperscript{14}

The elections of 1986 produced a shift in control in the French Parliament and a government of "cohabitation" emerged, headed by Jacques Chirac. Like Margaret Thatcher, he was sympathetic to the new business interests who were calling for liberalization of the telecommunications system. The Chirac Government tried to reverse the direction of French policy, launching several reforms, most of which were not completed during its two years of life. A telecommunications bill was drafted, though time ran out before it was submitted to Parliament. But the Directorate General of Telecommunications (DGT) was revamped administratively and became the more commercially oriented France Telecom. This new operational unit remains a part of the ministry, and a new and separate regulatory directorate was established within the same ministry. This directorate shares regulatory duties with another independent body set up in 1986; now called the "Conseil Superieur de l'Audiovisuel," this body has regulatory authority over private networks, particularly concerning broadcasting, data protection, and freedom of expression. Regulatory reform in France has produced similar overlapping and confusion and consequently has been the subject of
continuing examination and revision and is slated for further shifting of responsibilities in 1990.\textsuperscript{15}

The Chirac Government's plans for further liberalization were upset when the election of 1988 returned the Socialist Party to office. The new Minister of Posts and Telecommunications promptly indicated that the days of leading a reform movement were ended. He said that he considered deregulation a fact to be integrated into the French policy, but that he would "do nothing to accelerate the pace of it."\textsuperscript{16} This neutral attitude is seen in commissioning the Prevot Report of 1989 which the Government looked on as initiating a "public debate" to clarify responsibility for regulating telecommunications. But when completed, the Prevot Report warned that France Telecom needed to change in order to compete once EC plans to liberalize went into effect. France Telecom also added to the pressures on the Government by pointing out the ways in which reorganization would enable it to compete in international markets. The Government in accord with these recommendations is placing before the 1990 Parliamentary session a bill that will give operating autonomy to France Telecom as well as to the Post Office, turning them essentially into organizations much like the national railroad network.\textsuperscript{17}

Despite the twists and turns, the French system has moved towards the liberalized policies of the Green Paper. The result, however, is competitive markets that are often closely controlled administratively. The French system allows France Telecom considerable administrative flexibility; when a new service is introduced, for example, France Telecom often provides it by establishing a subsidiary. While France Telecom has authority to license private competitors in services, it frequently gives monopoly rights to subsidiaries, for instance, to TRANSPAC for packet switching. But not in every case. France Telecom permits competitive marketing in value-added and information services so long as the public network (that is, TRANSPAC) is used. At the same time, France Telecom discourages the use of leased lines in value-added services, which consequently are rarely offered except through TRANSPAC.\textsuperscript{18}
3.2.4 Europe’s New Telecommunications Administrations

These references to legislation of three leading EC nations show the style of reform that is taking over in most of Europe. Central to the reform is the role of the organization that is replacing the PTT. Along with the new nomenclature of Telecommunications Administration (TA), the Europeans often designate their operative component as Telecom. The new TAs look like whittled down PTTs, stripped, for example, of their regulatory powers. But the degree of whittling and the form of stripping varies from one country to the next.

The German Telekom is a government-operated entity. The Dutch organization is a corporation whose shares are owned 100 percent by the government, compared to British Telecom’s shares, which are owned 49 percent by the government. France has a government-run administration but it may turn to a separate, wholly-owned corporation. In Spain, the Telefonica has the juridical status of a private company, whose shares are primarily in government hands, and is the authorized monopoly for telecommunications. These organizational forms fall within the Green Paper’s guidelines. But the wide variety in form means trouble, for instance, in developing uniform accounting and costing standards that will lead to harmonized tariff principles.

Differences are also found in the operational authorities assigned to the TA, leading to important divergences from the proposals advanced in the Green Paper. The emerging national structures -- with minor exceptions -- call for the TA to operate as a privileged monopoly over telephones and infrastructure, and for competition in value-added and in mobile telephone services. But there are differences in distinguishing the role of the TA from that of the competitive industry. Defining this boundary line between what the TA may and may not do is the central problem in this stage of the Community’s reform program.
3.3 COMMISSION DIRECTIVES FOR TELECOMMUNICATIONS OPERATIONS

This critical question reached a decisive turn in late 1989 during review of a Commission Directive that would limit the TA's monopoly to telephone and telex services. In the proposal the Commission sought to minimize the troubles of the US and Japan in defining boundaries. It concluded that the US distinction between "basic" and "enhanced" services as well as Japanese definitions of Type I and Type II were inherently unstable. The Commission consequently proposed an approach based on convention rather than technology, realistically accepting thereby a distinction that could only be decided as a matter of policy. The Green Paper spelled out how the Commission wanted to distinguish between "reserved" and "competitive" services:

Reserved services are defined as services reserved for exclusive provision by the telecommunications administrations. Reserved services must be narrowly defined in order to avoid restrictions or distortions of competition. They must be provided on a universal basis. Competitive services would include all other services, in particular, value added services.**20**

The Commission's rationale for this approach was its belief that a consensus could be negotiated on a policy wherein voice telephone and "a limited number" of other services would be "reserved," and all others would be considered "competitive."**21** It also acknowledged that a consensus on what is reserved and what is competitive could only be temporary and "subject to review if it is not to impede the overall development of communications services."**22**

The consensus that the Commission sensed was possible in 1987 had not yet formed when the Commission proposed a Directive on liberalization of telecommunications services in June 1989. The draft Directive would be issued under the controversial Article 90 which, as discussed earlier, permits the Commission in some cases to act on its own without obtaining approval of the Council or Parliament. According to the Commission's proposal, the infrastructure of a system and the voice telephone and telex services could be entrusted to a monopoly, though they need not
be. All other telecommunications services, the proposal stated, would be opened to competition.\textsuperscript{23}

The draft was received favorably by several governments whose policies are closely attuned to this alignment, including the Netherlands, the UK, and Germany, though some who liked its content objected to its proposed issuance without going through Council approval. As expected, the Commission's draft encountered opposition from others, such as France, Italy, and Belgium, who wanted to continue monopoly control over supply of switched data services (such as France's Minitel system for teletext) and in particular for packet switched data services. They were also angered by what they called the Commission's "unilateralist" strategy in skirting around Council approval. The opposition had vigorously protested an earlier draft and found no improvement in this one.

The version of June 1989, in fact, was not much changed from earlier drafts, and neither were the objections. For several members, the Directive conflicts explicitly with existing law. French and Spanish legislation, for instance, provides for a moving boundary between the reserved and the competitive realms. Services that develop as competitive and rise to the level of national importance may be moved into the reserved category.\textsuperscript{24} The German legislation provides for a third category somewhere between the restricted and competitive. It is termed "mandatory," defined on a case-by-case basis on two criteria: whether the service is important for infrastructure development and whether the service requires binding international standards or agreement. It seems intended to make Telekom the supplier of last resort for certain services, such as packet switching. The mandatory category also may be enlarged when a service once deemed as competitive comes to be regarded as a candidate for the universal service that weighs heavily in German thinking.\textsuperscript{25}

Because of the antagonism toward the Directive and the threat of legal action, the Commission made a minor, tactically important conciliatory gesture. In announcing the Directive, the Commission stated that it was
delaying the application date until April 1990 and tying this to approval of its forthcoming Directive on Open Network Provision (ONP) (see below). The Commission repeated its commitment to send the ONP Directive through the normal procedure of Parliament review and Council ratification. The gesture was intended to put more pressure on governments but also to give them time to negotiate some kind of compromise between two closely related directives. In practical terms, linking the two directives this way offered an opportunity to deal in a tradeoff between a strictly defined directive on monopoly rights and an element of flexibility in a directive on operations. The gesture also gave the Commission space for adjustment that it would need before final decisions are reached.

The Commission’s gesture, however, reflected more than a tactical move, for the two directives are as closely related as two halves of an apple. The ONP Directive is aimed at harmonizing member country regulations for dealing with technical problems arising from opening telecommunications services to competition. Provision of intra-Community services is hindered at present by the lack of harmonized technical interfaces, differing conditions of use, and discriminatory principles of rate setting. The ONP Directive aims at dealing with such problems through harmonization among the systems that is achieved in close collaboration with the European Telecommunications Standards Institute (ETSI). In draft the ONP Directive is directed at "rapid definition, by Council Directives, of technical conditions, usage conditions and tariff principles . . . closely linked with the creation of an open common market for non-reserved telecommunication services."26

The Commission’s actions follow the logic of the Green Paper, which associates the ONP and liberalization directives as counterparts to one another. One establishes the boundaries of competition in communications; the other sets the regulatory conditions under which competitive marketing is possible and answers fears of both the free marketers and the monopolists. The free marketers fear that permitting TAs to participate in competitive markets, which the liberalization directive provides for, opens the prospect that they might use their
monopoly position over infrastructure supply or through cross-subsidization to undercut private competitors. The monopolists, for their part, have concerns of their own about "cream skimming," when they are required to provide services to all comers and may be undercut by competitors who offer service only to the most profitable portions of the market. The ONP Directive deals with both of these problems.

This two-part approach reflects a long-standing consensus within the Community: that regulations defining how the reserved and competitive services are to be offered are an essential counterpart to opening service markets to competition. Others may hold that "1992 is essentially a deregulatory exercise," as a US official stated in a May 1989 address.\(^{27}\) Perceptions in the Community are different, that deregulation is only half the job and must be accompanied by reregulation, and liberalization must be tied to harmonization.\(^{28}\)

The Commission's proposals for ONP and liberalization were debated for several months before a common position was achieved at a Ministerial meeting on December 9, 1989, in Brussels. The compromise calls for the two Directives to be issued at the same time in about June 1990, when acceptable language has been worked out on a text. The basic intent of the draft Directive on liberalization, as described above, is maintained, applicable to basic data transmission beginning in 1993 and to value-added services beginning on issuance of the Directive. But the transition for liberalization of simple resale of capacity may be extended by the Commission up to 1996. In addition, the compromise permits a member state to impose special "obligations" (the French term is "cahier de charges") on private service providers when it is necessary to safeguard the interests of a public undertaking (i.e., a TA).

Similarly, the provisions of the ONP Directive, summarized above, were left intact in the compromise. The technical interface and service features set by ETSI will, however, be voluntary in principle, on the presumption that service providers who comply with the standards will be able to offer services throughout the Community. Should voluntary
implementation be ineffective in any particular instance, the Commission may make the standard in question mandatory. The compromise agreement also produced a work program for implementing ONP, e.g. for drawing up specific directives or recommendations on leased lines, voice telephony, packet switched data, and ISDN.

Subsequent to reaching an understanding on the ONP and liberalization Directives, the Commission issued a Decision in March 1990 that will compel the TAs to revise pricing of international leased lines. Tariff setting has followed a pricing recommendation of the European Conference of Postal and Telecommunications Administrations (CEPT), under which the TAs were levying a 30 percent surcharge on international leased lines and setting the rules for determining the prices charged to the leasor. Although the CEPT recommendation was not binding on the TAs, the Commission determined that it was an illegal agreement under the Treaty of Rome as it allowed companies to restrict competition. An important consideration in the Commission's decision was evidence presented that the price setting was adding to the cost of using telecommunications services and thereby limiting the growth of value added services.29

The Decision on pricing of leased lines along with agreement on the two Directives represents a major advance in the Single-Market program in telecommunications; indeed, the EC has made a giant step forward. Given the intense disagreement over questions of extending competition in telecommunications services, however, it seems certain that the Commission and the TAs will continue this debate. They may possibly pursue it litigation as well, for the dissenting nations did not drop their objections to issuing the liberalization Directive as a Commission prerogative. At issue is the heart of telecommunications reform; the dispute is over who is going to control these highly remunerative services and how they are going to do it. Several immediate issues in telecommunications services and ONP may well be resolved with the issuance of two Directives in mid-1990, as the Commission anticipates. But basic questions of control and marketing of telecommunications services are certain to persist throughout the 1990s as reform moves on from policy to performance and implementation.
3.4 LIBERALIZING AND RESTRUCTURING MARKETS FOR TELECOMMUNICATIONS EQUIPMENT

Liberalized equipment markets are another objective of the Community's strategy for restructuring telecommunications. The Community could have taken action on these markets in the 1970s, when it revised its contract procedures for public corporations. Under pressure from the PTTs, it did not extend the revised rules to cover telecommunications. The Single-Market program offers a new opportunity to revive efforts to bring competition into the equipment industries.

Europe's equipment markets have been dominated by monopolies for decades, with the unsatisfactory results described earlier (see chapter two). Domination of these markets was the direct consequence of the PTTs monopoly control over telecommunications infrastructure, exercised through contracting procedures and through setting standards and specifications for telephones and other terminal facilities, as well as networking equipment. These practices have been a major cause of high cost and inefficient networks and have contributed to Europe's lagging behind in the use of sophisticated electronic data systems. According to the Commission, they lead to "supply led" markets that inhibit usage, rather than "demand led" markets where supply is responsive to user choice that stimulates supplier innovations.30

The Commission's strategy for dealing with these problems is focused on deregulating the requirements in member countries for attaching terminals to the telecommunications systems and opening up bidding on contracts for central office and line transmission equipment. Progress has been more rapid for the former than for the latter, primarily because a consensus could be reached more easily on liberalizing terminals markets. Thus, the Commission was able to issue a Directive on terminals in July 1988, but is not expected to have a Directive on procurement until 1990.
3.4.1 Liberalizing Terminals Markets

The terminals Directive calls for EC members to withdraw any grants of exclusive rights for production or distribution of terminal equipment, and to assure that all customers can import, connect, and maintain terminal equipment. The Directive prescribes general conditions for setting specifications and standards for terminal equipment and for making this information available. The Directive also provides a list of products to which it applies (such as modems, data transmission terminals, and receive-only satellite stations) as well as a calendar for full deregulation by June 1990.\(^{31}\)

Actually, the European terminal markets already have been deregulated to some extent. They are fully deregulated in Britain and nearly so in France, though subsidiaries of France Telecom still supply some products. Germany's legislation of 1989 provides for open competition, allowing Telekom to sell and maintain products. Several countries -- Luxembourg, Denmark, Ireland, Belgium, and the Netherlands -- began deregulating several years ago and have largely completed these actions. Greece and Spain still control marketing of several types of equipment, but they expect to deregulate further in line with the Directive.\(^{32}\)

The Commission is finding that the most troublesome task for this Directive is its implementation. The major problem is working out acceptable procedures for approving equipment so that the products can be traded across borders. The Community envisages that, as in telecommunications operations, national deregulation has to be accompanied by reregulation on a Community level. It is not enough, the Commission says, to lift exclusive rights to market terminal equipment; fair procedures for approving types of equipment are also necessary in order to make open marketing of communication equipment effective.\(^{33}\)

An earlier Council Directive in 1986 called for mutual recognition of testing for type approvals, and the 1988 Directive specified further action to make mutual recognition effective.\(^{34}\) The testing system that the Community hopes to displace is one where each country requires conformance with its own national standards in one of its own testing
laboratories. A manufacturer wanting to sell his product in another country must undergo long and expensive testing and approval procedures before he can start selling in the second market -- and then repeat this process in each of the other countries. Mutual recognition of testing would enable that manufacturer to present the test results of his home country and, in accordance with the two Directives, every other member would be obligated to accept the testing evidence and permit the product to be marketed.

But mutual recognition of type approvals presupposes acceptance throughout the Community of testing procedures and of laboratories. Three years of discussion have not solved this problem. A directive that will resolve the conceptual issues is currently in the hands of the Council of Ministers and is expected to be adopted sometime in 1990. In practice satisfactory results may have to wait until the European Telecommunications Standards Institute (ETSI) is a more settled body, effective, and accepted (see the discussion of ETSI's founding in 1988 later in this chapter).

Meanwhile, the legality of the terminals Directive is under challenge by Germany, France, Belgium, and Italy in the European Court of Justice. The Directive was issued by the Commission without going through the normal procedure of getting Council approval (see earlier discussion in chapter two). Several members question this use of the Article 90(3), asserting in essence that the Commission is limited to issuance of Decisions on specific actions and cannot issue Directives on matters of statutory monopoly. As of March 31, 1990, the Court had not reached a decision. However, the Court's Advocate General released an opinion in February 1990 that the Commission had exceeded its authority in issuing the Directive. The Commission nevertheless continues to cite historical evidence on its side and to exude confidence that the Court will uphold its action and that an important precedent will be set.

The decision seems to be slated as a landmark in the Community's long effort to refine and make more effective the division of authority between the Commission and the Council. In practical terms, a decision
against the Commission is unlikely to halt opening of terminal markets, for much of the action is already under way. However, rewriting a Directive for Council approval, even when everybody agrees in principle, will require time and may end with a Directive less open than the original.

3.4.2 Revitalizing the Telecommunications Industry
Strengthening competitive forces in the Community has been a priority objective for many years predating the Single-Market program. The application of competitive rules has been pursued vigorously under the leadership of Lord F.A. Cockfield and more recently under Sir Leon Brittan. Treaty Articles 85 and 86 give authority to issue Decisions in specific instances of violation of Treaty Rules, and the Commission has become increasingly effective in bringing this power into play. In addition, the Commission issued a set of Guidelines for the application of the rules of competition in telecommunications, which are intended for use by Governments in developing legislation and regulation in domestic industry, as well as by corporations in determining international strategy.

The Guidelines approach leaves lots of room for variance of national criteria for competitive activity, and national governments are not prepared to yield authority on crucial issues. But the power of the Commission for overseeing the actions of national authorities is growing, for instance in a Council decision in December 1989 that gives the Commission the authority -- under Article 85 -- to vet large mergers in the member countries. Debate on this issue so far has mainly concerned the relative roles of the Commission and the individual governments. Now consideration is focusing more on substance with the UK pressing for lax rules on takeovers and mergers, and Germany and France for more stringent rules. The Commission's record has led many to expect more leniency in overseeing mergers and acquisitions, in part because of its tendency to stress the international competitiveness of European firms that are large enough for financial security and for high cost R&D that may have a distant payoff. The Commission, as one analyst
puts it, "will seek to permit mergers that are of a Pan-European interest."  

Another important step toward revitalization of Europe's telecommunications equipment industry is a Directive agreed by the Council in March 1990 on procurement by telecommunications and other public utilities. The action follows an earlier Recommendation in 1984 when the Council proposed that TAs should voluntarily open to competition at least 10 percent of the contracts tendered for telecommunications equipment.  

The objective of the Directive is to assure open and nondiscriminatory procurement of telecommunications network equipment and of those types of terminals where the TAs continue to exercise exclusive rights. Such action is essential for breaking past habits of awarding contracts to favored national firms. In 1985, for instance, Siemens had 60 percent of the central switching market in Germany, Alcatel and Thomson had 84 percent in France, and Philips had 75 percent in the Netherlands. Opening the bidding could lead to radical shifts in purchasing, for it is estimated in Italy only 1 percent of contracts are now won by foreigners, and even in the comparatively open UK market the figure is only about 5 percent. The Directive calls for Government agencies to follow commercial criteria and allow fair and open tendering when purchasing equipment. A "Buy Europe" clause is included in the agreed Directive which will allow buyers to ignore non-Community bidders whose proposals are less than 3 percent lower than the best EC bid. Although milder than some EC members wanted, the "Buy Europe" clause has been protested by the US. When issued, this Directive, like that on terminals, is expected to be under the Commission's authority to take direct action in the case of monopoly markets.  

The ultimate purpose of the Directive, however, is the revitalization of the telecommunications industry, not just the installation of a more efficient bidding process. This Directive is one element of a larger 1992 effort to achieve a reinvigorated telecommunications industry that includes programs for liberating capital movements, establishing common
rules on competition and corporate acquisitions, and for drawing up a legal framework for enterprises. An essential concern of the Commission is that with high R&D costs, opening up procurement procedures will expose Europe's central office switching firms to competition that they may be ill prepared to meet. Thus, it is essential for structural adjustment to take place as rapidly as possible to enable these firms to compete in open markets. The Community is pursuing complex objectives and these combined efforts are intended to reinforce the reform of telecommunications administration and produce an economic environment where European industry will become leaders in the global competition in high-tech telecommunications.

These 1992 programs are still in mid-passage, yet their meaning has already been anticipated by the marketplace and adjustments have been underway for at least five years. Indeed, the Chief Executive of France's Alcatel believes that most of the restructuring among the world's leading switching manufacturers has been completed. What remains, in his eyes, is consolidation of mergers and partnerships already consummated, as well as some further action in other ancillary areas of telecommunications.  

This view may reflect Alcatel's preoccupation with its own much improved status. It may also conveniently ignore the new entrepreneurial ventures into telecommunications infrastructure from outside the "usual suspects." Nevertheless, it correctly focuses on the numerous instances of reshuffling and restructuring in the past five years, illustrated by some key moves of the three leaders:

- Alcatel's takeovers and mergers in 1985 and 1986 of the Thomson group in France and the European portion of ITT, creating a technologically comprehensive corporation that has production and distribution units in Germany and Spain, as well as in France. These acquisitions consolidate Alcatel's technological base. The ITT merger also provides a marketing base in the US.
• Siemens' aggressive bolstering of its technological base through its joint venture with the UK's GEC (General Electric Corporation of the UK) in a takeover of GPT (GEC and Plessey Telecommunications), itself a barely consummated joint venture. This combination will constitute the world's third-largest producer of telecommunications equipment and is expected to lead to an integrated group between Siemens and GEC. Siemens' acquisition of Rolm from IBM and its joint venture with GTE (the General Telephone Equipment company of the US) strengthens the already robust production and marketing base Siemens holds in the United States. Siemen's acquisition of Nixdorf has given it new strength in computer manufacturing, though some observers are unsure and, thinking of others who have had trouble marrying telecommunication and computer production, are questioning how well the marriage can work out.

• AT&T's joint ventures with Philips of the Netherlands and Telefonica of Spain, its partnership with Italtel in Italy, and its buyout of Istel in the UK give the giant vital production and distribution bases in the European markets. AT&T calls its tie with Italtel a "global alliance" that it expects will win a large portion of the contracts in Italy's five-year telecommunications modernization, which could amount to $28 billion. The accord also gives AT&T a big foot in the door for 1992 unification.

• Several new players may complicate the plans of the present front runners. Cable and Wireless, for instance, is emerging as a growing contender, particularly because of its strength in international cable technology. Mannesman's success in getting a license for mobile operations in Germany may be a sign of its potential as a market leader.

These citations are illustrative of an intensive five years of corporate searching for strategic alliances, when every major telecommunications manufacturer in Europe and North America has taken on new partnerships. There is little sign that jockeying for position is ending. At least
five good reasons can be cited for expecting further activity. First is the likelihood of more ancillary acquisitions as major corporations seek to fill gaps in their technology or marketing base. Second is the certainty of misfits and falling out among the cooperation agreements, joint ventures, and mergers already negotiated. Third is the stimulus of new enterprise as liberalization of telecommunications and information services markets takes effect. Fourth is the expected movement of Japanese corporations, like NEC, Fujitsu, and Hitachi, who have been marketing from their home bases and are reported to be looking for suitable partners for establishing a solid presence in Europe by 1992 (see the discussion of Japan and EC’92 in chapter four). Fifth is the emerging regulatory environment in the Community that is fostering competition, exemplified by the Commission’s decision that permitted the GEC/Siemens/Plessey mergers to take place.

Will this feverish corporate restructuring produce the more vigorous telecommunications industry foreseen in the Green Paper? The Community has been seeking to improve the competitiveness of European telecommunications manufacturers in several respects:

- Increased production and sales, improved market position and higher earnings to pay for high costs of competitive R&D
- Stronger international marketing and distribution channels, and diminished reliance on national champion marketing
- Larger financial bases for periods when products reach obsolescence before new technology becomes available
- R&D capacities for producing commercially sound technology for emerging markets in broadband communications, high definition television, optical fiber transmissions, data communications, switches, and satellite communications, and
- Corporate management for market entry through acquisition.44

While the evidence seems to show considerable vitality among Europe’s telecommunications corporations, it remains to be seen whether the industry will fulfill the Community’s hopes. The Commission and others are expecting several years of cut-throat competition from which only a handful of corporations will emerge. The Commission is taking an active
role in trying to assure a competitive order in the European telecommunications industry; its Decision under Articles 85 and 86 regarding the GEC/Siemens/Plessey mergers, for instance, was a crucial step in permitting the merger to go forward. The Commission's forecast is for six majors to emerge as dominant players in the mid-1990s telecommunications industry: two each in Europe, North America, and Japan. Although the Commission's outlook for corporate warfare may be a bit overdrawn, it also points to a sense of confidence that the European industrial base will emerge in the 1990s with real contenders for global telecommunications. That would constitute a signal victory for the Commission's Single-Market strategy.

3.5 ESTABLISHING THE EUROPEAN TELECOMMUNICATIONS STANDARDS INSTITUTE

Setting of standards is a crucial part of the Single-Market program and the subject of a long-standing battle between the Commission and the TAs. The subtle struggle takes place mostly in offstage infighting that, nevertheless, reflects the vital role of standards in reforming European telecommunications.

What exists now is a confusing morass that is a barrier to intra-European communications, rather than the smooth functioning machinery that might open international doors. The Community has agreed that commonly practiced standards are needed and that the long hours spent on haggling over standards should be cut.

The Community's efforts to improve standards setting are an uphill struggle. It is working against existing systems operating independently, setting national standards without much regard for the trouble they might cause for transborder trade. The machinery favors domestic markets and producers, aggravating the Commission's difficulty in coordinating standards setting and establishing conditions for a Single-Market in communications.
For coordinating standards, the EC relies upon the European Conference of Postal and Telecommunication Administrations (CEPT) as well as the joint European Committee for Standardization and the European Committee for Electrotechnical Standardization (CEN-CENELEC). The latter's membership includes industrial firms, users, and trade groups as well as TAs. CEPT's members represent all of the West European TAs, and CEPT is the more influential body.47

The Commission seeks a stronger role for CEN-CENELEC and the interests it represents, primarily to ensure that user concerns are adequately answered. But neither CEN-CENELEC nor CEPT has the authority to perform the standard-setting discipline that the EC is seeking. Both rely on research and findings of their members, and function on the basis of working group meetings and part-time availability of experts from national standards bureaus. Neither has permanent staffing for investigations on its own or even for independent review of its members' work.48

While the Commission is continuing to work with these two organizations, it has concluded that new machinery is needed, machinery that is specifically designed to answer Community requirements. The Commission has been seeking greater budgetary resources for standard setting and putting its weight behind a new standards institution, the European Telecommunications Standards Institute (ETSI).49 But the makeup of ETSI and its role in European standards is the subject of a subtle, yet intense, struggle between the Commission and the TAs who regard ETSI as a potential challenge to their control over standards.50

Under an agreement between the Commission and CEPT, the latter began forming ETSI in 1988. ETSI reinforces at the same time that it challenges existing institutions. It is open to telecommunications users as well as producers, and to information technology producers and users. As ETSI gains in experience, it will likely dilute the power of the TAs who have dominated the CEPT approach to European standard setting.
The organization has headquarters in Nice, France, where it has its Secretariat, a Managing Director, a staff of ten, and numerous experts working under contract. The Institute is operating on a full-time basis, and the Commission expects it gradually to take over supervision of much of the standards and testing performed within the separate systems. This is a distant goal that requires substantial investment in laboratory facilities and manpower. Moreover, ETSI must discover how to integrate its standards setting function with EC policies for encouraging competition in telecommunications. The conceptual problems of reconciling obligatory standards and competition must be worked out and effectively implemented, so that ETSI is seen as a benefit and not a menace to the European telecommunications industry.

The current constitution and structure of ETSI reflect its development under CEPT’s direction. Membership is drawn from telecommunications administrations, manufacturers, user groups, network operators, and research bodies. CEPT has transferred its technical study groups to ETSI, retaining within its own organization the more powerful study groups on tariffs and other managerial subjects.

Aside from its Secretariat, ETSI’s organization consists of governing bodies that include a Technical Assembly and a General Assembly. The Technical Assembly performs only in a technical capacity, drawing up standards for submission to the General Assembly for approval. Membership in the Technical Assembly comes from many parts of the telecommunications industry. Membership in the General Assembly comes only from official bodies. Decisions in the General Assembly are determined by weighted voting.

The Commission has rejected the CEPT prepared Constitution of ETSI, however, because it considers the setup for the General Assembly as unsatisfactory. The Commission wants ETSI to be more representative of non-official interests, such as users, service suppliers, manufacturers, and private research bodies, and wants these groups to be involved in decision making. As designed by CEPT, the decision making is entirely in the hands of the TAs and Government officials, an arrangement the
Commission regards as not much improvement over the past and likely to turn into a weak support for a unified European telecommunications market. ETSI is now operating under a Provisional Constitution that is up for review in 1990. The Commission is likely to seek revisions at that time, including a reordering of decision making arrangements so as to give more weight to non-official participants in the governing bodies. While CEPT and the TAs have often accommodated the Commission's requests on standard setting, they seem ready to oppose substantial changes of this nature.

ETSI's role in international standards setting is of great interest outside the Community. While ETSI could lead to improved regional standard setting that could be detrimental to non-European producers, Community officials insist that ETSI will cooperate with, not undermine, the traditional role of ITU in recommending global standards. To this end, the Commission has sought membership status in the ITU. Though unsuccessful so far, the Commission agreed in 1989 to accept observer status. At the ITU Conference in Melbourne in December 1988, the Commission arranged for a statement in the Final Protocol stating that EC "States will apply the International Telecommunications Regulations in accordance with their obligations under the Treaty establishing the European Community."

This makes for a fluid situation for the immediate future. Yet, it is unlikely that ETSI's growth will be interrupted. ETSI looks like a promising contributor to the Commission's long-range strategy, becoming in a few years a reliable institution for standard setting. Staffing in the permanent secretariat may be too small and new to have a decisive role now. Yet, it at least provides a voice for community-wide interests whenever standards issues arise.

The Commission is anticipating that transborder implications won't be so easily bypassed when standards are being considered. When CEPT technical study groups meet henceforth, the TAs will be joined by a secretariat representative. ETSI represents a new order in European standards making.
3.6 ISDN AND BROADBAND COMMUNICATIONS: A TROUBLED BEGINNING

Another long-range aspiration of the Community -- getting a jump on future technologies -- is encountering troubles of a different variety. For the past decade the Community has been looking for ways to gain a head start on technologies so that its industries would be able to take the lead when a breakthrough reaches the point of commercial application. Broadband communications in Integrated Digital Systems Networks (ISDN) was identified early on as a technology of great promise; it holds out the prospect of significantly improved commercial efficiency in a system that permits the full range of communications (voice, television, data processing, and so on) through a single channel. Broadband does this by digitizing transmissions and utilizing high-capacity media such as satellites and optical fiber cables.

While the best mode of exploitation is a subject of intense debate, particularly in regard to matching "uses" with the high cost of installation, broadband is widely considered an important technology of the future. It is already being employed in private networks of communication intensive corporations that are willing to pay the high cost. Although offered in some circumstances in public networks, broadband service is not expected to be in widespread use for several years, in part because standards for interconnectability are not yet established and because the demand for public service does not appear to justify its high installation costs.  

The Community's troubles with integrated digital systems arise from trying to hasten their widespread usage in public systems. Although the Community recognizes the need for patience with broadband, it is promoting development of an interim narrowband ISDN that several European TAs believe is feasible for public service. Narrowband systems convert copper wire lines to digital operation through the addition of special software and electronic equipment, thereby sidestepping the enormous expense to public customers of laying optical fiber lines. Narrowband ISDN provides a limited line of integrated services, including voice, data processing, and teletext, but not television.
Speed and quality of transmission are improved over existing analog, but they are not up to broadband standards.  

Many commercial users see little point to narrowband, as it offers only marginal improvements over what is already available at lower cost. These users doubt the practicality of committing to a system that requires substantial investments on their part for an "interim" technology that will be obsolete very soon. Broadband enthusiasts even suggest that because of limitations in upgrading existing lines, it makes sense for users to leapfrog narrowband ISDN and move directly to broadband systems.  

But the Commission is actively supporting decisions made by several national TAs in the mid-1980s on narrowband ISDN, which the Commission declared is a "major step towards general Integrated Broadband Communications." A Council Recommendation in 1986 called ISDN an "opportunity to raise Europe's networks to higher levels of quality and interconnectability." The Council asked EC members to coordinate national ISDN programs and offered abundant details on services, standards, interfacing, tariffs and other aspects of establishing an ISDN network. A time schedule in the Recommendation on narrowband set 1993 targets of 5 million ISDN lines and an ISDN access mark of 5 percent of main lines.  

Despite the initial interest of TAs in narrowband ISDN, the Community's program has slipped significantly in implementation and in development of unified standards. The targets set in 1986 are not likely to be fulfilled. France Telecom has the most active program, promoting under subsidy a variety of partnerships for new ISDN applications in banking, insurance, electronics, real estate, and others. Elsewhere, the public programs are moving slowly. British Telecom has cut back on implementing its system, claiming that there is no market for narrowband ISDN, and is turning instead to offerings that can be linked through high-capacity leased lines to a private system. Germany's Telekom has launched ISDN on schedule in eight major cities, but the Gartner Group of economic consultants says that unless the schedule is speeded up,
completion will take thirty years. Several TAs, such as in Italy and Spain, said they will not meet their targets. Belgium and Italy have set up pilot projects, but they don't expect to have the services in operation before 1992.

The Commission is taking steps to correct the slippage. Its former Director of Telecommunications, Tjakk Schuringa, stated "the main problem is that the various pilots in the member states are still based on non-harmonized standards." Patterning its effort on an earlier success in putting a troubled mobile communications program back on track, the Commission in 1988 led administrations in France, Germany, the UK, and Italy in setting up a special group for interconnecting their ISDNs from 1990 onwards. They have drawn up a Memorandum of Understanding defining a minimum set of common features and services for ISDN systems. The Commission has been seeking additional participation in the Memorandum and has asked ETSI to assume responsibility for the ISDN standards. The Commission has also stepped up efforts to define international ISDN standards in the International Consultative Committee on Telegraph and Telephone (CCITT) of the International Telecommunication Union (ITU).

The Commission's attempt to rejuvenate ISDN standards making may get the program moving. But the TAs still face fundamental marketing realities that don't appear readily correctable. Their "supply-oriented" strategy is not generating markets. Meanwhile, enterprises that might build their own networks are neglected. At the same time, the small enterprises toward whom public ISDN is directed do not appear to be responding. Other TAs may still adopt the "pro-active" approach of France Telecom. But the EC's hopes for public ISDN may remain unsatisfied until the broadband effort can be implemented.

For its long-term ISDN aspirations, the Community is placing its reliance largely on the Research and Development in Advanced Communications (RACE) Program. The Council approved RACE in 1985 and two years later committed ECU 1.1 billion ($1.4 billion) to its program, half from EC members and half from industry. With collaboration from
ETSI and CEPT, RACE is charged with defining the technical foundation for Community broadband communication standards by 1992. It is intended to bring the full range of broadband network technologies to a form that can be implemented, including the specification and definition of network architectures, standards, protocols and interfaces.\textsuperscript{70}

RACE is expected to mobilize and coordinate the R&D resources of Europe’s telecommunications firms and network operations. But in seeking what some analysts believe may be an "overspecified system, RACE could produce an excessively costly technology that does not adequately and expeditiously answer any communications needs.

In RACE, the Community is confronting three familiar questions for decision and implementation: Is RACE yet another European technology exercise, this time on a Community wide basis, that will not be translated into commercial value? How can technology cooperation be established among TAs that have conflicting interests? How can a balance be established between public service and the need for competition in the market place? These issues have been in the forefront of the narrowband ISDN program. They will surely arise again as broadband ISDN advances to a time for decision and implementation and becomes a high level and contentious policy question in the 1990s.\textsuperscript{71}

RACE is a well-funded project that appears to be on track. It is a program for defining technical and scientific concepts, however, not a project leading directly to binding decisions or implementation.
NOTES


7. Personal communications. See also Nicholas Garnham, "Controlled Competition In The UK," InterMedia, Autumn 1988, Vol. 16, Nos. 4-6, pp. 22-23.

8. See Note 4, The Telecom Mosaic, pp. 411-418. See also Note 5. Also, personal communication.


10. See Note 12.

11. Personal communication.


13. See Note 12, "From Telecommunications To Electronic Services", pp. 508-512.

14. See Note 5. Reform Of The Postal And Telecommunications System In The Federal Republic Of Germany.
15. Personal communication.


18. See Note 17.

19. See Notes 2 and 3.

20. See Ungerer and Costello, Note 5, p. 201.

21. See Note 5, p. 200.


24. See Note 18.


30. See Note 5, Ungerer and Costello, p. 192.


33. See Note 5, Ungerer and Costello, p. 196.


45. Personal communication.


48. See Note 47.

49. See Note 5.

50. See Note 2.


52. See Notes 5 and 26.

53. See Note 5.

54. See Notes 46 and 2.


56. See Note 5, Ungerer and Costello, p. 49, 76.


60. See Note 5.


67. See Notes 5 and 38.

68. See Note 1, pp. 293-298. See also Note 36.


70. See Note 65. See also Note 5, Ungerer and Costello, pp. 153-160.

71. Personal communication.
CHAPTER FOUR

EC'92 AND THE INTERNATIONAL COMMUNITY

The Single-Market program is recognized the world over as an epochal event that requires reassessing existing arrangements for dealing with the new Common Market. The Community's plan excites international interest because a more unified Europe holds out a promise of economic opportunity as well as strengthened and more tranquil assurances of political stability. While the prospect of easing world tensions through the newly energized institutions is tantalizing, movement toward this objective will likely depend heavily on how the Community and the rest of the world work out their new economic relationships during the early 1990s.

A Single-Market of 325 million consumers attracts investors no less than it appeals to merchants. Even now, the Community is home base for one-fourth of world trade. And with the Single-Market spurring it on, the new Europe could add two or more percentage points of growth to world trade. New international markets of $200 billion is what is sparking the intense interest in Europe's principal trading partners. For them, EC'92 is an opportunity and a challenge.¹

That appeal is qualified, however, by concerns that inward looking policies could restrict the Single-Market benefits, or impose restraints under the guise of "reciprocity." While Community business and government leaders believe the EC is an open economy, less protected than other areas of the world, and have repeatedly declared their intent to follow open-market policies, they have not quieted all doubters. The former US Ambassador to the EC has asserted that Community officials themselves have added to fears of Fortress Europe by their tough talk about reciprocity.² Most non-Community businessmen have adopted an attitude of realism based on expectations that after 1992 marketing will be less restrictive for insiders than for outsiders and, therefore, it will be easier for them if they install a production base in Europe now and don't have to rely on moving goods into Europe from home territory.
Until 1987 few outsiders paid much attention to the prospective opportunities offered by the 1992 program. Since then, Brussels has been under siege by government officials and foreign businessmen trying to line up deals and position themselves for a dimly seen post-1992. But establishing a common external policy has always been a most contentious process for the European Community. In practice, the EC has put off clarifying external policies for the Single-Market program, while trying to get its house in order. Common policies are still unclear, particularly in the face of a rapidly evolving political scene in Eastern Europe. Policy options are becoming more evident and more specific -- but slowly. This summary of Community relations with the European Free Trade Association (EFTA), Eastern Europe, East Asia, and the US suggests that the issues and stakes of EC'92 are beginning to come into focus even though many aspects of the prospective relationships remain murky.

4.1 ANXIETIES IN THE EUROPEAN FREE TRADE ASSOCIATION

The Single-Market decision sent a shock wave through EFTA members, who see it as a threat to trade and investment ties that have helped them become the world's richest bloc of nations. EFTA members are sprawled along the borders of the Community and, while some have large territories, their total population is only 32 million, one-tenth that of the EC. Per capita income of about $20,000 is 50 percent higher than the EC average and unemployment throughout EFTA is lower than in the EC. EFTA is an odd sextet: two members belong to NATO, and the others are varying shades of neutral. What they have in common is their prosperity, smallness, and reliance on international trade; they earn about 30 percent of their GNP from trade, half of which is with EC members. They are deeply dependent on their economic ties to the Community and believe the Single-Market is likely to bring radical changes in that profitable relationship.3

---

* EFTA members are Austria, Finland, Iceland, Norway, Sweden, and Switzerland.
When it became evident that the Community was serious about 1992, EFTA's members began their own equally serious inquiry into their relationship with the EC. For thirty years EFTA's members have traded with the EC on a tariff-free basis. They have had preferential access to the larger European markets without having to pay for EC's costly agriculture and regional programs. And they have enjoyed political options, including neutrality in foreign affairs, that boosted their growing affluence. The Single-Market program poses a difficult dilemma for EFTA because in strengthening the bonds within, the EC is widening the distinction between members and nonmembers. This implies to EFTA that its members have to move closer to the EC if they want to keep the cozy benefits of the past. But closer alignments could entail lessening of the independence and international neutrality that these nations cherish. As a result EFTA has sought a new relationship for its members and, indeed, Austria has applied for membership in the Community.

While the Community has taken an outwardly positive stance towards EFTA, it did not respond immediately to EFTA's early suggestions that the past bilateral relationships might be converted to Community-wide agreements. Under insistent pressure from EFTA, Jacques Delors, the EC Commission President, agreed in January 1989 that the two groups could begin exploring a new structure. EFTA's response was a summit meeting in Oslo that considered, among other things, a Swedish proposal for a customs union with the EC. The session in March 1989 did not accept the Swedish proposal -- probably because of Switzerland's objections -- but EFTA did agree to create "a more structured partnership with the EC with common decision-making and administrative institutions." EFTA's leaders also decided to strengthen the organization's internal decision making processes and to allocate more resources to the negotiations with Brussels.

The EFTA Declaration led to arrangements with the EC to begin discussions on their future relationships. These discussions in 1989 were fruitful and resulted in an agreement that formal negotiations would take place during 1990 on a "customs union" arrangement.
While individual EFTA members are deeply interested in the political fallout, their principal focus in negotiations with the Community is on economic issues, including telecommunications reform. EFTA members have telecommunications systems that are technologically comparable to the best in the Community.\(^7\) EFTA is involved in much of the EC's planning for telecommunications. Standard setting is in CEPT, which includes EFTA and EC members, and the EC's new ETSI organization (see chapter three) is open to EFTA. Members of both EFTA and the EC participate in the ITU. Other European communications units -- the European Space Agency, the European Telecommunications Satellite Organization, and the Council of Europe -- include both EFTA and EC.\(^8\) Indeed, EFTA's telecommunications systems as well as its industry are closely integrated with those of EC members. It is of concern that the close integration might be disrupted by the Single-Market program that gives EFTA its objectives in the coming negotiations, where EFTA will in effect be seeking integration with the EC telecommunications systems comparable to that of the EC members.

Moreover, the EFTA countries have been undergoing internal reforms in telecommunications comparable to EC members. As the EC moves toward more open telecommunications regulation and greater leeway for competitive services, EFTA's members should be well-placed to reach an understanding with Brussels on mutual extension of open marketing of telecommunications services and equipment.

A major interest for EFTA is EC policy on equipment, for some of their companies are important producers of terminals as well as switching and transmission supplies. Ericsson, a Swedish multinational, is a major supplier of central office switching equipment in Denmark, Spain, Italy, and the Netherlands.\(^9\) It has a joint venture with the French telecommunications firm, Matra, in a partnership that has taken over CGCT, one of the principal suppliers of central office equipment to France Telecom. EFTA multinationals are staking out positions in the Community for a foothold as the internal barriers come down.\(^10\) Thirty-five of Norway's top fifty companies are already operating in the Common
Market. And the Norwegian business confederation has begun a concerted drive to seek additional corporate alliances in the Community.\textsuperscript{11}

The Community has shown clearly that continuation of the "special relationship" means additional obligations for EFTA. The Nordic members exhibit confidence that a "customs union" can be negotiated by mutually opening up in one area after another. The six are looking for hard bargaining in the coming months and are concerned about holding together in negotiating for new ties with the Community. But the negotiations have taken on a new coloration with the collapse of the Soviet empire in Eastern Europe. Neutralism has to be redefined by each EFTA member and the cost-benefit analysis of "customs union" compared with EC membership reassessed. The 1990 negotiations are sure to be an demanding exercise in diplomacy and statesmanship.

4.2 JAPAN AND EAST ASIA: TRYING TO BEAT 1992

Asians feel much more than others the real and imagined perils of the Single-Market program. They are trying to build up a new and expanded relationship, rather than restore or protect an historic one. They approach the Single-Market concept from a perspective different than that of EFTA or East Europe. Their outlook is that of an outsider trying to break into a market where its trading methods are challenged, and its inability or failure to provide access to its own markets is under attack.

For three decades, Asians have been the world's growth leaders, relying heavily on export-led expansion, and selling mainly in the US and Canada. The North American and European markets have comparable purchasing power, yet Japanese trade with the former is more than double, and investment more than two-and-a-half times higher than in the latter.

All of East Asia senses a near-saturation point in North America, and in recent years has been turning to the other area of high purchasing
power, Europe. But the Europeans have been slow to recognize the opportunity for them and have tended instead to see Japanese forays in particular as a threat to European industries. The Asians have met growing resistance.\textsuperscript{12} The antagonism focuses on Asian single-mindedness in driving for export markets, coupled with a commercial strategy that gives first priority to market share even if it means short-term losses. Japanese companies practice an aggressive formula for trade and investment, and the other Asians -- particularly Korea and Taiwan -- have adopted similar commercial habits. Their strategy has quickly produced important inroads into European markets. Quick success, however, has confirmed for many Europeans a perception of an Asian proclivity for ruthless competition and has led to widespread resentment and animosity.\textsuperscript{13}

The Single-Market program appears against this background of rising hostility between Europe and the East Asians. In European eyes, Japan is the chief offender. Other East Asians, especially Korea, have had occasional trade actions brought against their aggressive trading techniques and have had complaints about their "heavily protected markets." Japan is the main target of Europe's hostility and of its adverse trade actions.

Large and steadily rising trade surpluses in the 1980s are responsible in great measure for the belligerent atmosphere. By 1987, Japan's exports to the Community had risen to $42 billion, compared to virtually static imports of $16 billion. No less disturbing to the European psyche have been conspicuous inroads into cherished economic sectors, such as automobiles, electronic goods, and especially high-tech products. Japan's greatest error, perhaps, was in selling machinery for manufacturing croissants of good quality. Several EC nations have given way to pressures to impose quotas, harsh tariffs, voluntary export restraints, and dumping penalties against Japanese products.

Japanese industry has responded to the mounting list of trade actions by moving production to Europe. It hoped to avoid the restrictions on trade by manufacturing the same products in Europe. Even before the
Single-Market program gave rise to new fears, Japanese multinationals were investing in manufacturing and assembly facilities and lining up joint ventures and other associations with European firms. Among the investors have been Japanese "merger and acquisition" specialists who, since moving to Europe, have become adept in guiding Japanese multinationals in designing investment strategy for the European market and are starting to sell their services to Americans and Europeans.¹⁴

EC’92 has greatly accelerated the move to Europe. The Asian assessment of 1992 is both hard-headed and ambivalent. Asians do not expect the Single-Market will be much exposed to external competition and figure that it is prudent to base themselves in Europe before 1992. They are impressed by signs of vitality in an area that their businessmen have been inclined to write off as an unpromising, low-growth region. Europessimism has given way to Euro-optimism, and Japanese companies have stepped up the pace of investment, with 411 manufacturers in Europe in 1989, three times more than six years earlier.¹⁵

The Japanese, and to a lesser extent other East Asians, are rushing to get into operations before 1992 because they expect new walls to be erected -- especially against Asians. The prospect of marketing in all of Europe from a single base is an important enticement, an attraction that is magnified by the huge cash treasures the Asians are accumulating. Increased Asian investment basically reflects high domestic savings ratios and the recycling of global earnings and trading surpluses -- plus the greatly enhanced value of the yen and other East Asian currencies.¹⁶ Cash hoards are increasingly used for mergers, buyouts, and acquisitions as well as direct investments -- all intended to give the Asians a strong position if 1992 should close Europe to new outside investors.¹⁷ Their experience with fluctuating exchange rates, moreover, has convinced many Japanese industrialists that moving production to the market can be an effective guard against shifts in currency values, which can change a comparative advantage to a losing proposition -- overnight.
By far the favorite of Asian investors has been Britain, the recipient of more than 40 percent of Japanese capital outlays in the 1987-88 period. The Thatcher Government has courted Asian investors, looking for their capital and production know-how to relieve the high levels of unemployment and stimulate rebuilding of British industry. "Encouraging Japanese investment has been a part of the basic industrial strategy," according to the Director of Chatham House, a prominent think tank in London.18

British success has caused others with high unemployment to reconsider Japanese investment. "It's better to have Japanese investment in France than unemployed people," France's Minister of Industry has remarked, adding "it is essential that we attract Japanese investors to France rather than have them go to neighbouring European countries."19 Italian and Dutch officials have also given encouraging signals to potential Asian investors. Despite such inducements to bring Asian investors into Europe, Asian investment has often elicited demands for counter action. As 1992 approaches, the action has shifted from the national governments to Brussels. There, according to the Far Eastern Economic Review, "a Tsunami-like wave of hysteria is building up in the European electronics industries towards both Japanese and South Korean investment."20

Many of Japan's European competitors claim that if no action is taken, the Japanese will soon dominate key sectors of the economy. They are pressing to have national protection extended into a Community-wide scenario. The head of the Brussels-based Coordinating Council of European Automobile Manufacturers asserts that "we need transnational solutions."21 Protectionist-minded Europeans want the Commission to place a lid on the grants, subsidies, and fiscal attractions that governments are extending to Asian investors. A first step is a rule that came into force in 1989, which requires all government incentives offered to investors in automobiles to be cleared by the Commission.22

Another action favored by some officials and labor leaders calls for stringent rules of origin requirements. Local content has been set as high as 80 percent. One consequence in the auto industry has been
establishment in Europe of Japanese suppliers, rather than greater procurement from domestic concerns. Stringent local content rules have compelled Japanese companies to bring a full industry structure to Europe, not just those selected portions that are most convenient. Job seekers have benefited from the local content requirements, but the European auto industry has not, and output of the smaller car makers has continued to sag.23

Rules of origin requirements have also been applied in high-tech production on the basis of the Commission's analysis of Japanese investments in the US. The Commission's study shows that only a very limited portion of the R&D work is performed in the US by Japanese high-tech companies. Because the high-value-added operations are performed in Japan and not in the US, Americans lose in two ways, according to EC analysts: they don't occupy the high-paying jobs, and they don't have access to Japanese technology. To avoid this result, the Commission has sought to make sure that Japanese technology is fully exposed to European personnel and that high-value-added portions of the production cycle are performed in Europe. This applies particularly to the research and development and the design and architectural formation of technologically advanced electronic circuits.

The Commission, accordingly, has come up with a novel interpretation of rules of origin that are applicable primarily to Japan and Korea. The rules require semiconductor producers to have the "most substantial" operations take place locally. Such "clarifications" of the rules make it necessary for the Asians to set up research centers immediately and move complex production plants for wafer fabrication to Europe. These actions necessitate hiring European scientists and engineers, bringing to Europe additional investments of upwards of $200 million for each installation. Although other factors might have been more important in making the investment decisions, several Japanese companies -- including Fujitsu, NEC, Toshiba, and Hitachi -- are setting up wafer fabrication units in Europe that comply with the EC definitions.24
The 1992 reforms in communications may add more troublesome issues to the EC-East Asia agenda. The principal source of many telecommunications problems lies in perceived asymmetries between the two systems -- for example, the Europeans regard Asian markets as much less open than their own. The Green Paper reforms will probably accentuate the perception of asymmetries.

Japan has gone through an extensive overhauling of its telecommunications system, opening to competition some services, but under controlled conditions. Motorola has a license to install and operate a mobile system. A consortium offering international service includes Cable and Wireless and Pacific Telesis. From a technical point of view, telecommunications arrangements between Japan and the Community could be relatively trouble-free, for the degree of liberalization is roughly comparable. Given the heated environment of the EC-Japan relationship, however, any prediction of a smooth transition to EC'92 is likely to prove premature.

In other parts of East Asia, telecommunications systems are closely regulated, perhaps even more so than the pre-reform PTT regimes in Europe. Two exceptions are Singapore and Hong Kong, where competition is more open and trade in services and equipment is relatively unencumbered, though others, like Thailand, Malaysia, the Philippines and Indonesia are gradually loosening their systems. But Korea and Taiwan, the East Asians most likely to have important dealings with Europe, have rigidly regulated systems that have not been revamped greatly under assault by the US.

The most difficult questions for the EC-Asia relationship are likely to come from liberalization of equipment markets. Japan has several important producers, and the other East Asians are making many types of terminals and beginning to turn out transmission and central office supplies. The Asians are anticipating the more open European markets, and much of the increasing investment in Europe is aimed at exploiting these opportunities in telecommunications equipment.
The Asian domestic markets, however, are tightly controlled. Japanese liberalization policies have not shown any pronounced opening to outside suppliers, though some increase in outside contracting has taken place since 1985. Other East Asian nations exercise even tighter restrictions over marketing of foreign equipment. This is especially true in Korea and Taiwan, where domestic producers are still in a pre-competitive stage of development, and telecommunications strategies call for promoting joint ventures to produce switching and transmission equipment.

Thus, liberalization of the European equipment market is likely to add an important synchronism to the Asian-Community relationship, yet another major source of grievance to an already long list. Improved access to Asian markets is a major objective of Community policy, and the Commission has advocated "balance of benefit" and "reciprocity and mutual advantage" in discussions with the Asians. But policy making to this end has been difficult and success has been quite limited. The Commission's efforts to gain improved access have invariably led to European frustration and Asian irritation.

The access question poses a difficult dilemma for Community planners. If satisfactory access to Asian markets continues to be denied, the EC will be faced with rising demands for clamping down on Asian companies in Europe. The cost could be significant in terms of loss of investment, inflow of capital, job openings, and technology transfers in managerial and production skills. However, many adjustments being forced on Asian investors are changes these companies are likely to make in any event. The shift in national priorities inside Japan, for instance, plus the high value of the yen, mean that companies that thrived in an export-oriented era must search for new foundations for the long term. Moving operations to Europe or North America makes sense to many Japanese industrialists, even though they might prefer to do it without being prodded.

Thus the Europeans realize that they can expect a much greater Asian economic presence in the future, and feel the pressing need for better
mechanisms for dealing with the ensuing problems. They have been annoyed with what they consider Japanese unresponsiveness to their proposals for bilateral discussions. Prime Minister Takeshita, for instance, did not answer a proposal put to him during a 1988 visit to Brussels. A more promising note was sounded in contacts with the new Prime Minister Kaifu and some Europeans have been cheered by indications that the Japanese, safely around the January 1990 elections, may be more forthcoming in dealing with European issues. Otherwise, sentiment for tightening the screws on the Japanese -- and, by extension, on other Asians -- may well continue to grow.

4.3 THE US FONDERS ITS NEW EUROPEAN COMPETITORS

The official US position on the Single-Market leaned toward skepticism for many months. But a pronounced shift occurred in mid-1989 as the incoming Bush administration assumed a relaxed attitude towards potential problems and focused more on the potential benefits. Corporate America looks on the Single-Market as bringing a fundamental change to the global economic landscape. They share East Asia's fear of the protectionist potential in EC'92; corporate America is no less bothered by the clearly articulated premise of European statesmen that the benefits of the Single-Market are to go to Europe. But they also are more receptive to the Single-Market concept and have even taken a certain pleasure in watching events unroll. The difference between the American and Asian reactions rests on history and US sentiment toward a Common Market that is a direct descendant of the post-World War II economic cooperation that Americans advocated and supported. Both the US official and business communities have viewed EC'92 as an auspicious move, even while they inspect the fine print and prepare to go to the mat over specifics.

The US has gone to the mat with the EC many times in the past. Sir Roy Denman, when departing Washington after seven years as EC Ambassador, recalled his own periodic "wars" over hormones in meat, multilateral trade talks, agricultural subsidies, steel quotas, and the Soviet gas
pipeline. These episodes reflect the extensive ties of the US with the Community. Trade turnover was $160 billion in 1988, cross-investments are more than $300 billion, and one-fourth of US annual exports go to the Community. The Single-Market program raises the stakes on both shores of the Atlantic, particularly in high technology, where the EC is concentrating its attention. One widely quoted forecast predicts that the global information technology market will rise from $500 billion in 1988 to $1 trillion by the mid-1990s. Europe is expected to account for a large fraction of this increase, and the Community alone may be investing more than $1 trillion in telecommunications and the processing networks over the next twenty years.

Because of the high stakes, the US government and business community have examined the 1992 program in detail. The result, according to the State Department, is that "we like what we see happening in Europe -- it is much what we would do given the same circumstances." Such endorsements are often overmatched, however, by reservations about specific features of the program, its timing, or its implementation. Carla Hills, the US Trade Representative, has considered it necessary to remind the American public every few weeks that in EC'92 "there may be tenets of protectionism raising a not-too-attractive head." More than two-thirds of American executives agree with her, according to a 1989 survey showing a widespread belief that the Community will erect major trade barriers as the program goes into effect.

Two donnybrooks over Single-Market issues -- the question of applying local content and original source rules, and the question of reciprocity -- show that these are not idle fears and that the Community is willing to deal with them.

Local content is a simple term for a complicated issue. The US Trade Representative has said that semiconductor exports of US origin are being restricted by Brussels’ definitions of rules of origin. US manufacturers sell nearly $4 billion of their products a year to Europe, almost half of the latter’s consumption. Moreover, the European market
is growing rapidly, rising 31 percent in 1988, compared to 25 percent in the US and 13 percent in Japan. Open access to the European market is important, but sales have slipped in 1989, attributable in the US industry's eyes to the new rulings by the Commission. Although the extent of sales losses so far has not been great, the US Trade Representative's office believes that the rulings are based on definitions that could be employed in a protectionist manner in other situations, when it would have a much greater impact on American interests.31

Rules of foreign origin that US chip makers call "ambiguous" have been applied to US-produced semiconductors and some office products containing semiconductors. The new criteria are based on technology, rather than physical or value measures. The Commission has ruled that for these high-tech products, origin and local content are determined by the "most substantial" production, not added value. For semiconductors, "most substantial" production is the diffusion process and wafer fabrication. Products assembled from the chips, such as circuit boards or equipment containing the circuit boards, do not qualify under the Commission's ruling on local content.

These rulings do not directly affect a large segment of the US semiconductor sales in Europe. Companies such as Motorola and Texas Instruments have substantial fabrication operations in Europe for supplying these markets. So far, the new rulings have been applied primarily to Japanese-owned firms in the US and firms that assemble Japanese chips on circuit boards that are used in office equipment such as facsimiles machines, computers, and copiers. The ruling has been applied, for instance, to Ricoh of Japan on its sales of photocopiers. The Commission imposed a dumping charge on Ricoh's photocopiers in 1985 when the US-Japan agreement on semiconductors left Japanese manufacturers with surplus production that they offered at bargain basement prices in Europe. The extra duty of 20 percent was initially levied on products exported from Japan.
The ruling was later extended under the new definition to products from the Ricoh installation in the US. The Commission claimed that the circuit boards used in the photocopiers involved "no substantial production," as they were assembled from microchips produced in Japan. Despite objections from Germany, the UK, the Netherlands, Ireland, and Denmark, the Commission’s ruling has prevailed and the 20 percent dumping duty is levied against photocopiers from the US as well as from Japan. And the Commission has begun applying the ruling in other instances involving other Japanese firms that have manufacturing facilities in the US.32

The US has interpreted the EC action as discriminating against its high-technology production. Americans in the industry see this action, as in the semiconductor case, as an example of very aggressive and highly imaginative use of GATT anti-dumping provisions to achieve a goal.33 Carla Hills has said that the complicated rules of origin damage the US unfairly. Japan's manufacturers are shifting production to Europe and reorganizing production to utilize chips made in Europe. According to Hills, "we are finding American circuit boards being designed out because they aren't made in Europe." She has taken the issue into negotiations with the Commission. If the definition of local content were to be generally applied, US semiconductor manufacturers would have to make substantial investments in European plants, perhaps more than $200 million in each case, and companies unwilling to make such large investments would be excluded from the market.

When the US Trade Representative raised this question in Brussels in September 1989, the Commission offered assurances that the Community would not discriminate against US producers. They told Hills that semiconductors made in the US would be given "national treatment" in accordance with GATT rules and agreed to technical discussions to make sure that these principles of non-discrimination will be applied in customs procedures. The American semiconductor manufacturers affected have welcomed the reassurances from the Commission, but have expressed only guarded relief -- on the reasonable assumption that the issue may well arise again.34
The question of "reciprocity" has also been disruptive to US-EC discussions on the Single-Market and is likely to recur often because it is an issue that has many faces. The issue first came up in a 1988 flap over banking licenses. In the new Single-Market Europe, banks will be permitted to operate under a single license that entitles them to conduct business in any part of the Community. The Commission felt that this new privilege could be used to gain leverage for prying open Japan's banking sector, which is strictly limited to European banks even though Japanese banks are active in centers such as London. To give themselves the leverage they needed, Brussels' officials decided to make Europe-wide banking licenses available on a basis of reciprocity to banks from countries where European banks have "equal rights."

As first conceived, the reciprocity ruling would have barred US banks from Europe unless substantial legislative revisions were made by the US Congress, and possibly also by some of the State legislatures. Alarm bells rang when the reciprocity rule became accepted language within the Commission and seemed clearly on its way to becoming policy in an official directive. The US international banking community swung into action. Members of the Federal Reserve Board and the US Trade Representative's office rose to warn about the dangers implicit in the EC's draft legislation. An intense lobbying effort was begun in Washington and London, as well as in Brussels.

The heart of the matter was a carefully crafted explanation to the Commission of the factual circumstances for banking in the US (for example, that many banks are governed by state law and federal statutes do not permit mixing of commercial and investment banking, as European law does). The Commission agreed and turned to a concept of reciprocity as a "discretionary" power and redefined "reciprocal treatment" as "national treatment," a GATT concept that is favored in American circles.35

The banking directives cover one of the most complex issues on the US-EC agenda and will not be settled easily. But Sir Leon Brittan, the
Commissioner for Financial Services, now says that the EC is simply asking that other countries "not discriminate against our banks merely on grounds of their nationality. It is reasonable to insist on non-discrimination and I do not believe that this should present any problems for the U.S." Reciprocity, however, remains Community policy, for it gives the Europeans leverage it needs to negotiate market access in Japan. But the EC in 1989 agreed to adopt national treatment as the norm for banking and financial services, thus removing a major US objection.

In contrast to the heat engendered by "reciprocity," the Green Paper on telecommunications typically gets unusually high marks from official and corporate America. Indeed, these proposals are actions Americans have been urging on the Europeans for many years, and their most frequent complaint is that the EC program ought to be speeded up. These views are evident in an official note to the Commission written in 1987 soon after the Green Paper was released. With a general reservation in favor of open treatment of non-EC members

anything less than truly international competition would fundamentally compromise these Green Paper objectives and would prevent European industry from taking full advantage of the rapidly evolving innovations in telecommunications equipment and services

the US note is a ringing endorsement. The principal reservations in the note suggest that the EC conduct "open procurement" under the GATT code, that testing for type approvals have strict limits and accept data from US laboratories and manufacturers, and that the EC should define clear boundaries between "reserved" and "competitive" value-added services. Beyond the US official views, the Commission has sought and received reactions from the US business community. A multitude of Americans have been tracking the follow-up action on the Green Paper, and commenting on the directives and proposed directives described earlier in this paper. The US Council for International Business sent a lengthy comment that led off by expressing its general agreement with the Community's
objectives: "We are pleased that the European Commission strongly endorses the need for a competitive market place for telecommunications services and equipment." 38

In addition to expressing its general satisfaction with the Green Paper, the US private sector has also made clear to the Europeans its principal concerns about telecommunications reform. The stakes are large and the Americans have grown increasingly vocal about the hindrances they encounter in Europe's marketing and telecommunications structures. They see the reforms as an opportunity to correct specific obstructions, which they regard as harmful to all users of telecommunications services in Europe, as well as to potential European entrepreneurs. Liberalization of telecommunications in EC '92 is a chance to remove intra-European barriers that hinder US no less than European corporations.

One damaging restriction has been that imposed by European TAs -- particularly in France and Germany -- on use and resale of leased lines, a costly restraint that US financial interests, such as Manufacturers Hanover Trust, Citibank, and American Express would like to have removed by the EC. A second is the technical specifications and contracting procedures for infrastructure and terminal equipment; they frequently make it impossible to bid on contracts, raise the cost of getting new products onto market, and often prevent effective installation of local networks. These restrictions are most damaging in Italy, Germany, France, and Spain, and lifting them is of particular interest to companies such as IBM, General Electric, and AT&T. A third restraint is on access to the telecommunications infrastructure and limits on competition in value-added services. This obstacle to trade has been practiced in France, Germany, Spain, and Italy, as well as the smaller EC countries and has been harmful to American companies such as Electronic Data Systems, AT&T, American Express, MCI, Control Data, and General Electric.

But the American interest in telecommunications reform goes beyond complaining about restrictions. US firms are also raising significantly
their corporate stakes in Europe. A corporate move to Europe is underway that was engineered partly to take advantage of the opportunities afforded, partly to avoid being shut out after 1992, and partly as a business strategy.

IBM joined with Siemens and Bell Atlantic Corporation in 1988 in a marketing alliance for entering the emerging European market for computerized telephone services. The alliance is intended for cooperation in promoting new markets and will not necessarily lead to joint marketing of services to these countries. General Electric announced in 1989 the signing of a new telecommunications contract with AT&T, British Telecom, and France Telecom to build an information service network that will link GE offices worldwide via high-speed lines for transmitting voice, data, and video signals. The three telecommunications companies will design, build, and manage the network for GE.

AT&T is spending $200 million on a microchip plant in Spain. It has entered into strategic alliances with Italtel of Italy, Philips of the Netherlands, and Istel in the United Kingdom (see chapter three for discussion on AT&T competition with Siemens and Alcatel for the switching markets in Europe). AT&T has been a major player in Europe for less than ten years, but has established corporate headquarters in Brussels for European-wide activities and is now legally incorporated in most EC countries. Although AT&T is actively competing in equipment markets, manufacturing, design, and to some extent in value-added services, it is not competing in basic voice or private line service.

While dollar figures are chancy on the American corporate move to Europe, it is evident that the trend is upward. A Business Week estimate based on Department of Commerce data, for example, shows overall US investment in the Community soaring from about $75 billion in 1984 to more than $125 billion in 1988.

Many persuasive indicators show growing US corporate investment in the new Europe, investment that is half expectation that telecommunications
reform will work and half hedge that it won't. In pursuing these interests, Americans have tended to regard the Commission as a tactical ally. Indeed, some have expressed pleasant surprise that the Commission has pressed its liberalization proposals so forcefully.

The American business community, however, is showing concern about the troubles of the Commission in getting its Directives on liberalizing information service markets and on opening markets for terminals enacted into effective national law. The struggle within the Community over telecommunications reform appears to be heading to a climactic stage in early 1990, and both US officials and the American business community are unsure about the ability of the liberal forces in Europe to prevent dilution of the Green Paper reforms. Despite their joy in the reforms, Americans in the telecommunications and information services trade foresee new and difficult issues for themselves in the coming decade.

4.4 US-EC TELECOMMUNICATIONS ISSUES IN POST-1992

In a December 1989 speech, the U.S. Secretary of State, James Baker, addressed the question of how to deal in the long term with US-EC issues arising out of the Single-Market program. He called then for the two sides to "work together to achieve, whether in treaty or some other form, a significantly strengthened set of institutional and consultative links." When President Bush met with the President of the European Council, Irish Prime Minister Haughey, in March 1990, the two agreed that high-level meetings would be held semi-annually.42

Americans in the telecommunications and information services also foresee a major long-term issue in determining how to deal with trade and investment questions when the Single-Market becomes a reality, and the telecommunications issues of the past are magnified and new ones are added. As European producers show more muscle and become more active in American markets, as the East Asians continue penetrating the high-tech markets in Europe and North America, and as American companies become more actively engaged in the European economy, the battle for markets
will escalate in scope and intensity. Both the US and the EC face the same policy making dilemma of how to prepare for the telecommunications encounters of the post-1992 era.43

For the past forty years, the US has been the world’s leading proponent of international institutions for dealing with trade and economic issues. GATT has been the cornerstone for US policy that has aimed at open and unobstructed trade that would benefit all nations. GATT has been upheld as the fairest way to develop rules and guidelines and the most effective means for handling disputes in international commerce. In negotiations over four decades, GATT has succeeded in reducing barriers to trade throughout the world, creating an environment where international trade has become a much more powerful tool for economic expansion and stability. The Uruguay Round, begun in 1986 and expected to culminate in 1990, is intended to bring services trade, including telecommunications, under the GATT umbrella for the first time.44

The US and the EC have stakes in the Uruguay Round, which both have advocated as leading to a framework of legal rules for telecommunications trade and investment. Yet, it is increasingly clear that GATT’s umbrella will not be adequate for the complex telecommunications and high-technology issues between the Community and the US. The Uruguay Declaration that set the Round in motion sets services apart from other subjects in the sense that governments take part as interested parties rather than as GATT members. Moreover, the Declaration calls for promoting "the development of developing countries" as a principal objective of the negotiations.45

While these considerations have a definite place in a GATT that has a large percentage of developing country members, they detract from efforts to focus on issues of foremost importance in telecommunications. Four years of the Uruguay Round have shown seemingly clear limitations in dealing with the telecommunications issues in an institution of widely diverse economic capacities, where the "real" telecommunications issues for countries such as the US and the EC are "unreal" for countries such as India and Nigeria. A GATT code on telecommunications
is bound to have reservations and disclaimers entered for no other reason than uncertainty about the consequences of agreeing.\textsuperscript{46}

Perhaps more important than substantive GATT code deficiencies are the defects on the operational side. Because US business generally supports GATT and the open trade system it stands for, their complaints are usually directed at its ability to make good on its rules. Congressman Sam Gibbons puts the case much more vigorously: "The GATT procedure takes too long and does not work very well."\textsuperscript{47}

An influential number of US executives have been suggesting that a bilateral US-EC agreement is a necessary counterpart to the anticipated GATT framework. The US-Canada Trade Agreement is cited as a precedent along with a number of special agreements with Japan. Neither the US nor the Community has approached issues of international telecommunications as calling for an either/or response. On both sides of the Atlantic, bilateral and multilateral agreements are regarded as mutually supportive.

The US Congress also likes the concept of the bilateral agreement. The Omnibus Trade and Competitiveness Act of 1988 provides a specific base for negotiating a telecommunications agreement with the Community. The Act authorizes the US to negotiate bilateral or multilateral agreements for gaining new or improving existing market opportunities. It also establishes broad objectives for the US and stipulates "specific negotiating objectives." The list bears a close resemblance to the Green Paper program, if objectives of international concern such as national treatment and disputes settlements are added.\textsuperscript{48}

But several questions might well be asked about a bilateral telecommunications agreement with the EC. A bilateral agreement could fill a gap on the institutional map for orderly conduct in international telecommunications. It could represent a major initiative in US foreign trade policy and therefore warrants close examination.
First are questions about substance. What can a bilateral agreement do that is not being done under present arrangements with the Community? Do the US and the European Community have sufficiently broad common interests to justify a comprehensive arrangement comparable to the US-Canada Free Trade Agreement?

Second are questions regarding other US commitments. How and where would US-EC agreement fit under the GATT umbrella? What would be the implications for interests of the US in East Asia and North America? Should the US enter a series of bilateral agreements? If so, in what order should they be transacted?

Third are questions about implementation. Can effective implementation be anticipated from the European Community when it is dependent on enactment of legislation in twelve independent and sovereign nations? The political process underlying telecommunications issues has been the principal theme of this examination of EC'92. A bilateral US-EC agreement is no exception. In both the US and in each of the twelve members of the Community, as well as in Japan and other trading nations of the world, a US-EC treaty would be regarded as a momentous step, attracting intense interest in the general public. Serious consideration of the proposal should anticipate a full public debate on the subject in Europe and in the United States.
NOTES


5. See Notes 4 and 12.


8. The Council of Europe is located in Strasbourg, France, and is not a part of the European Community. Its 21 members are from Europe. The Council is primarily concerned with social and human rights issues, especially those relevant in broadcasting and television. The European Telecommunications Satellite Organization (EUTELSAT) provides satellite links for routing international telephone traffic within Europe. Its satellites also provide television transmission within Europe, which has come to overshadow its telephone functions. CEPT members are members of EUTELSAT. The European Space Agency (ESA) is a loosely organized grouping for cooperation in design and launching of satellites and space vehicles. ESA's principal accomplishments have been with the Ariane system.

9. See Notes 8 and 11.


19. Ibid.


21. See Note 44.


25. Personal communication.


27. See Ungerer and Costello, pp. 88-100.


33. Personal communication.


37. See Note 36.


41. Personal communication.


45. See Note 44.


CHAPTER FIVE
BUILDING NEW FOUNDATIONS FOR EUROPEAN-WIDE COOPERATION

Erosion of the Soviet Empire has changed the geo-political map of Europe. The scope of the Single-market no longer need be confined to Western Europe when Governments in Eastern Europe and the Soviet Union are undergoing economic and political reform at home and redefining relations with other nations abroad.

These long awaited though unanticipated events have altered the basic tenets of international policy and national security throughout Europe. They have set off an intensive debate among Europe’s leaders about how the Community should respond to the new European politics.

Community policy for the new Europe is only dimly outlined and may remain this way for many months. But the Community has already begun a long range effort to rebuild the institutional foundations for economic cooperation with its Eastern neighbors. Central to the effort are telecommunications systems and their supporting industry.

5.1 THE ARCHITECTS OF CHANGE

The architects of the new Europe live on both sides of a fast disappearing Iron Curtain. East Europeans and the Soviets, just as the Europeans of EFTA, recognize the value of commercial and financial relations with the European Community. Unlike EFTA, the Eastern economies have spent the last half century in virtual isolation from the West. One result is sterility in Community trade with the East; in 1988 it amounted to less than 5 percent of overall EC foreign trade, and its exports to the East were less in real terms than a decade earlier.¹

Now, both the East Europeans and the Soviets want to change the economics that their ideology has created. They see linking up with Western Europe as a crucial part of reversing the economic stagnation of recent years. But the road to reform has many booby traps and reformers
have to move carefully to restore commercial and financial pathways and overcome forty years of isolation. Domestic politics in the East most often necessitate gradual reform, though the pattern is different in each country. Even ardent free marketers in East Europe see the necessity for a pragmatic approach to the overhaul of an entire system. Vaclav Klaus, the Minister of Finance in the Czech Government set up in early 1990, is an avowed exponent of privatization and open international markets. He advocates an "evolutionary approach" carried out in "small practical steps and stressing marginal changes" because, he says, "it is not true that as soon as public sector institutions are dismantled or weakened, the private sector will rush in to take over these activities."²

Prudence and caution are evident also in the Community. Even before the Berlin Wall was brought down, the Community had begun to think and talk about a closer association with the East. Much of the initial action was verbal. Officials in Brussels began speaking in 1988 of a broad "vision" of an undivided Europe and the French among them revived Charles de Gaulle's appeal for a Europe united "from the Atlantic to the Urals." With less eloquence and more geography, Brussels turned in 1989 to a geo-political map of concentric circles, with the Community's core nations at the center of a Europe tied together through descending levels of political commitment from those on the periphery. The eternal debate over "deepening" the Community through new commitments to such objectives as monetary union, versus "widening" it through new accessions began in 1989 to encompass the changes underway in the reforming states in Eastern Europe.

Yet the Community early on began to relate its rhetoric to action on a tangible body of institutional arrangements that would be needed for Europe's bankers and industrialists to deal assuredly with the East. If a twelve-nation Common Market could be built successfully "brick by brick," then bridges linking a European-wide market could also be built "brick by brick." The EC set out to develop a network of institutional foundations that would serve the interests of its members and, at the same time, encourage economic reform in the East; the new arrangements
would enable these countries to move away from stifling systems of the past, toward structures more congenial to the Community's entrepreneurs.

5.2 INSTITUTIONAL FOUNDATIONS FOR A MARKET CULTURE

In the 1988-90 period, the Community negotiated new or renewed trade and cooperation agreements with each of the East European nations. If past agreements had been pro forma, recent ones have covered a wider range of cooperation and high technology exchange, including telecommunications, and have offered progressively greater EC concessions to reward reform. They now include provisions and safeguards needed in open international market trading. Indeed, the greater complexity of the agreements has made it necessary for the Commission to staff up on East European specialists as well as other professionals to handle the greatly increased work load.

The Community negotiated its first pact with the USSR in 1989 and Soviet Foreign Minister Eduard Shevardnadze traveled to Brussels for its signing. The agreement covers trade, commercial, and economic cooperation over a wide range of industries, including communications. Under the pact, the Community agrees to ease and gradually phase out European quotas for Soviet industrial products. Brussels evidently does not expect the pact to affect Soviet exports much immediately, as the USSR's exports are mainly fuels which already enter tariff and quota free. Easier access to European markets may improve prospects for the Community's joint ventures in the Soviet Union that will rely on exports to earn their hard currency profits. An important institutional feature of the pact is its provisions on non-discriminatory treatment and commercial safeguards. They introduce protective principles needed for market oriented commerce and are taken from the GATT. These clauses are also an aspect of the pact that the Soviets regard as a plus mark that will help advance their eventual entry in GATT.³

Another prominent element in the agreement is the expansion of high technology trade and information and technological exchanges. To
succeed, Foreign Minister Shevardnadze said when he signed the document, "CoCom's position has to be softened...as a first step." In this agreement, as in others with the East, the Community has stipulated that it expects "reciprocity," which apparently means that if the Soviets fail to maintain imports from the EC, the Community might impose restrictions on Soviet products.

The new agreements are designed to reward reform in the East. In 1989, for instance, the Community sent a special Ministerial delegation to Poland and Hungary to follow up proposals for more extensive coverage. The agreements with both countries were later redrawn to eliminate quotas on EC imports of specific industrial and farm products. The concessions were made in spite of objections from several EC members about the adverse impact on their own home industries. The EC also extended to Poland the same preferential trade treatment normally awarded to developing countries. Another new agreement is scheduled to be negotiated with Czechoslovakia during 1990. It will replace one negotiated in 1988, prior to the change in regime, and will likely include concessions such as those extended to other reforming East European nations.

The first ever agreement between the Community and East Germany was approved just prior to the elections in that country on March 18, 1990. The Communist regime evidently considered the agreement as a mark of status and hastened its ratification as a last minute effort to improve its standing in the voting. In fact, negotiations were begun well before the Berlin Wall was knocked down, and the agreement is now expected to be operative only until the coming unification of East and West Germany makes it irrelevant. The Commission regards the agreement as having a relatively minor effect on the conditions under which East Germany trades with the Community. Throughout the life of the Treaty of Rome, East Germany has had preferential access in trade with the EC. Under a special Protocol appended to the Treaty, West Germany's trade with East Germany has been treated as "intra-German" commerce. Many East German products in practice flow through the Community as freely as West German products, a flow that the European Court of Justice
determined in January 1989 could not be interrupted by EC members except in very specific circumstances of injury. This kind of trade presumably will continue to provide East Germans more advantageous entry into the Community markets than that governed by the new EC-East German pact. The agreement was one of the final actions of a dying government and will probably have little relevance a few months after its signing.

As unification proceeds and East German industry realigns its production to market forces, much greater trade is expected to be generated from the East, reflecting in part its low wage work forces. In time, the investment buildup that seems clearly in store for East Germany should also enhance its export flows. Some EC members fear that this will mean flooding the Community with goods and services that are, as one Member has stated, "produced in circumstances out of line with the Community's agreed competitive structure." This could result, for instance, from corporate mergers with East German producers that give the Community partner excessive market power. One possible solution suggested by the Commission is an "administrative border" that the unified Germany would employ to prevent "excesses" from occurring -- much as the Federal Republic has done in the past. The Commission has conceded that both East and West Germany may look with disfavor on a formal undertaking. On the other hand, the Cartels Office in Bonn has begun to look into takeovers in East Germany and has already cast doubt on one proposed merger by a West German insurance firm.

In addition to the new trade and cooperation agreements with the East, the Community has given much attention to arranging for finance of Eastern restructuring. The Community has been asked to coordinate much of the internationally generated aid to the East -- principally to Poland, Hungary, and Rumania. The first task has been to arrange for shipments of relief goods. A 24-nation consortium that includes the US and Japan as well as the EC agreed to a $1 billion funding in July 1989 for Poland and Hungary. In November 1989, the EC summit approved a $1 billion stabilization fund for Poland and a $1 billion bridging loan for Hungary. In addition to funding from the Community's budget, EC members have given direct support to the East, the largest part of which is West
German aid to East Germany. The estimated $3 billion annual tab for incorporating East Germany into the Community (reflecting the cost of regional and social funds and the Common Agriculture Policy payments that East Germany will be getting as a part of the Community) will be covered 80 percent by the West German Government.  

Relief aid and short term assistance alone contribute little beside time toward the ultimate objective of getting the East European economies moving and making them self-supporting. A more permanent product of the Community's Eastern policy is the new European Bank for Reconstruction and Development. This Community proposal evolved out of the twenty-four nation effort to support restructuring requirements in East Europe. Although a few details about the Bank remain to be negotiated, US Treasury Secretary Brady stated on March 20, 1990, that he expected "to get this job done" before a July 1990 summit. The Bank is expected to begin operations by mid-1991.

The Bank primarily will provide financing for the private sector, including privatization of ex-state enterprises such as telephone service companies slated for private operations. It is expected to have paid-in capital of about $12 billion, with the US putting in 10 percent and the major Europeans each providing 8.5 percent of the capital. Members of the Community will hold 51 percent of the shares. The Soviet Union is expected to participate with a 6 percent shareholding of the Bank's capital. The proposal is the initiative of the French Government, which along with other EC members sees it as an important institutional foundation for the "New Europe" because it includes the USSR as a major contributing participant in European reconstruction.

Initially, the proposed bank met resistance from several nations who believed that it would duplicate project financing by the European Investment Bank and the International Finance Corporation. These objections have been overcome. Several European capitals are contending for the Headquarters office and the Presidency of the Bank. A difficult sticking point has been the extent to which the USSR will be permitted to borrow from the Bank.
At the same time that East Europe and the USSR have been strengthening the foundations for economic relations with the Community, they have also extended their contacts with other European and international bodies. The Organization for Economic Cooperation and Development (OECD) has been approached by several of the Eastern European nations and the USSR. Czechoslovakia has requested membership in OECD, rather than the associate status sought by Hungary and Poland. According to the OECD, the Soviet Union sent a 10-man delegation to Paris to “explore developing a relationship with OECD.” These contacts have led to further exchanges involving OECD expertise in statistics, tax reform, and energy policy. OECD has helped Poland in drafting its laws on competition and monopoly.

The East Europeans and Soviets have also approached the Council of Europe (COE) regarding membership. All of the Eastern nations are expected to be added to this twenty-three nation organization, which is located in Strasbourg, France, and is highly regarded in Europe for its championing of human and democratic rights. The importance that the Soviets attach to the COE may be shown in the fact that Soviet President Gorbachev addressed a major speech on human rights at one of its sessions during his trip to France in July 1989. The COE later invited the Eastern nations to send Ministerial representatives to take part in an extraordinary meeting in Lisbon in March 1990. At that time the COE decided to increase substantially its activities in the East and to allocate a special fund in its budget for that purpose.

The Community has also considered as important to its own interests the efforts of the Eastern European and Soviets to become a part of the global market "establishment." Thus, the EC has encouraged the East in joining and taking an active role in the three principal institutions underlying the international market place, the World Bank, the International Monetary Fund, and the General Agreement on Tariffs and Trade (GATT). The EC has supported the Soviet Union’s request for "observer" status in GATT and has lobbied others, including the US, to approve the Soviet request. Such support is likely to pay off in the near future as domestic reforms in the East make it increasingly
possible for these countries to make meaningful commitments to the principles of these organizations.

A key relationship for East-West European cooperation in telecommunications is already in place. All of the East European nations as well as the USSR are members of the International Telecommunication Union (ITU), and take part in the development and administration of recommendations for telecommunications standards. ETSI, the new European standards making institution established by the European Community, is open to Europeans who are prepared to accept its principles (eight non-EC countries are already members of the organization). Joining ETSI is a step that the Eastern nations may not be ready to take immediately, but may feel necessary as domestic reform and restructuring of their telecommunications systems proceed.

5.3 MODERNIZING TELECOMMUNICATIONS IN EAST EURPPE AND THE USSR

Economic reform varies from one Eastern country to another, yet is still in an exploratory stage everywhere. European industrial and financial interests, nevertheless, are responding with considerable interest as evidence accumulates that makes Eastern reform and market orientation look like an irreversible trend. European industry sees the East as a prospective market of great promise and has responded to signs of change with record numbers of new investment and trade proposals.

Even before the political upheavals of 1989, when Communist Governments were still at the helm in Eastern Europe, several of them were altering their internal rules governing trade -- easing conditions on joint ventures, for example, and lifting some restrictions on repatriation of earnings. Records of the United Nations Economic Commission for Europe indicate that more than 3,000 joint venture agreements were signed in East Europe and the USSR during 1989 -- compared to less than 200 in force at the beginning of the year. These figures, though not well defined, are indicative of the receptive attitude of the world business
community toward the economic prospects that might be expected from reform in the East.

Such figures have to be interpreted in the light of the uncertain pace of reform. For many western businessmen, trade and investment initiatives in the East are mainly a hedge against being left out if reconstruction goes well. Uncertainty is a paramount consideration for them and between commitment and payoff a substantial number may allow initial agreements to fall by the wayside. The political changes in 1989 and the growing determination in the East to turn to market economies are reducing the risk. And Europe's businessmen have begun a steady trek to take advantage of opportunities that they envisage arising out of the enormous requirements of reform and restructuring. Yet it may be a while before the procession eastward begins to turn the optimistic expectations into substantial commercial results.

Many of the sales contracts and joint ventures are in telecommunications, an area of great deficiency and potentially strong demand in every country in the East. The availability of telephone service, for instance, is among the lowest in the industrialized world. Czechoslovakia is the best off, with 12 telephone lines per 100 inhabitants in 1985; the USSR and East Germany have only 10, and Poland and Hungary have even fewer, only 7. These numbers can be compared with West Germany, which had 42 telephone lines per 100 persons, or with Portugal, one of the poorest EC members, which had 14. Levels of investment in telecommunications show similar signs of neglect; in 1986, Poland spent $6 per capita on its system, Czechoslovakia $9, East Germany $26, and the USSR $31. In comparison, West Germany spent $96 per capita, France $82, and Greece $29.12

It is, therefore, with good reason that telecommunications has been given high priority in Eastern restructuring. The Soviet program is the longest standing. It was begun in 1985 and revised later when President Gorbachev incorporated it in his Perestroika program. It envisages modernization that calls for doubling the system by the mid-1990s, with expenditures rising from about $7 billion in 1986, to about $12 billion
in 1990, and $15 billion in 1995 -- though a financially strapped Moscow may not be able to fulfill these targets.

The Soviet plan, two American authorities on communications conclude, shows that "Gorbachev is intent on moving toward a Soviet version of a Western based information economy." The plan was originally aimed at modernizing military and government systems and has moved progressively toward improving commercial and public telecommunications. Emphasis is given not only to high capacity digitization of central office and transmission systems that will improve the quality and capacity of the public system, but also to computer networking usages, data processing, value-added services, and home communication services that are of primary importance to industry and banking. Alongside upgrading of telecommunications, the Soviets are undertaking an ambitious program of computerization in all parts of the economy, including education and training for a computer literate society.

Yet while the broad plan was laid out in 1985-86, many of the basic decisions for implementing it have been slow in forming and several key contracts for imports of foreign technology are still in negotiation. Soviet communications, as other industries, is run as a state monopoly and debate over reorganizing is slow in coming to resolution. Proposals have been made to introduce a modicum of independence from the Ministry of Communications. The Chairman of the Telecommunications Sub-Committee in the Supreme Soviet, in particular, has urged that several factories should be taken from the Ministry control and that licenses for providing telecommunications services should be sold to other independent organizations. These proposals have been coldly received by the Communications Ministry. The Telecommunications Sub-Committee has a formal paper underway that is expected to flesh out the proposals and present them for consideration in June 1990.

The Soviets expect to manufacture internally the lion's share of requirements for their telecommunications plan, relying on import suppliers only when domestic technology is deficient and looking to home grown technology and production where Soviet competence is high, as in
microwave and satellite communications. Prospects for export expansion that is essential to pay for Perestroika, moreover, are bleak, which necessitates a tight budget for everything and continued reliance on home technology whenever possible. Imports are evidently expected to amount to no more than 3-5 percent of overall outlays even at the height of the program, and to taper off as domestic capacity and technological capabilities improve. Because of the large size of the program, even this small percentage represents a huge market for foreign exporters, ranging from $500-750 million annually and probably from 75-90 percent of the telecommunications market in the East.

The Soviet strategy would also suggest that the growing demand for telecommunications imports will be predominantly for plants and factories, rather than line and transmission equipment, and will be filled more by joint ventures and similar production arrangements rather than import contracts. Of course, the Soviet strategy could be radically altered by a political decision to move more extensively into a market culture.

Competition for contracts is intensive among the Japanese, European, and North American manufacturers of the switching and transmission technology and equipment that the USSR is seeking. Soviet contracting so far is mainly for high technology factories and the requisite know-how to administer and operate the new plants. Community companies have won a large share of contracts to date, often in combination with one another, or in joint ventures with North American or Japanese suppliers. The following illustrate the variety of arrangements and technologies in recent contracts:

- Telefonica, the Spanish telephone company, has agreed to build a factory in the Urals for producing upwards of 200,000 handsets annually.

- Alcaltel of France has a $2 billion agreement for installing its switches in the Moscow telephone system and is negotiating a joint venture that will manufacture digital exchanges outside of Leningrad.

16
• Germany’s Siemens has entered an agreement to supply 300,000 personal computers to the USSR and is negotiating a joint venture with the Soviet Postal Ministry to manufacture digital switches in the USSR. 17

• Eight western companies, including US, Japanese, and the Community, are proposing to join with the Soviet Union’s Ministry of Posts and Telecommunications to lay a fiber-optic cable across Siberia and Central USSR. The $500 million cable project will give the USSR badly needed international lines, and link Japan and Europe for the first time by terrestrial communications. 18

East Germany is a late comer in telecommunications system modernization. While modernization will require several years, East Germany may well lead other Eastern nations in a very short while. Economic unification with West Germany is well on its way, and joining the two telecommunications systems is high on the priority list. West Germany’s Minister of Communications, Christian Schwarz-Schilling, has described the shortage of proper telecommunications links as the biggest practical problem in merging the economies of the two German states. West German businessmen conducting business in East Germany are lost without their fax machines and frustrated when they can’t check in with the home office at will. They are asking for immediate action. Schwarz-Schilling estimates it will take 5-7 years to bring East Germany up to the West German level and cost about $13-19 billion. 19 An all-out effort is intended to double traffic capacity between the two areas by the end of 1990, by relying as an interim measure on mobile phone areas connected by satellite. 20

Much of the systems improvement is expected to come through industrial alliances as West German firms, and to a lesser extent other Community companies, buy into or form joint ventures or production agreements with East German concerns. In anticipation of the impending breakup of the "Kombinats," the vertically integrated conglomerates that have dominated Communist East Germany, West German industrialists have been lining up with those segments of the Kombinats that look most promising. They expect that when the complicated legalities of dissolution are unsnarled and legislation is enacted, it will contain grandfather provisions that will operate in their favor. 21 Fast action is desirable on both sides;
an agreement, joint venture, or letter of intent signed now provides financial relief that is badly needed by the East German concern and, at the same time, puts the West German company in position for gaining control of the East German property when the legalities of unification are settled.

Several important joint ventures and tentative takeovers are directly associated with modernizing telecommunications in East Germany. The West German Government has encouraged them as a practical way to ease the adjustment process, avert unemployment, and get the East German economy quickly on the road to recovery.

- One key merger brings Standard Elektrik Lorenz AG (SEL) of Stuttgart together with four East German telecommunications firms, in a jointly-held company for developing, manufacturing, and marketing telecommunications equipment and technology. The majority of SEL is owned by Alcatel of France. The SEL-East German joint venture will build a plant in Arnstadt for producing the SEL digital switch, of which Deutsche Bundespost will take equipment for 900,000 telephone lines a year. The Arnstadt installation will have a higher production capacity, however, which it expects to market in other parts of Eastern Europe where the East German concerns have been selling in the past.22

- Siemens A.G., Germany’s largest telecommunications company, has signed contracts to build telephone exchanges in six East German cities. Applying Siemens EWSD technology, the exchanges will be usable for telephones, facsimile, and data communications work. In each city, Siemens will build a total of 30,000 individual telephone lines and 18,000 long distance connections in the six cities, which will be linked through an overlay network. Siemens has also entered a tentative alliance with VEB Robotron, East Germany’s electrical conglomerate for producing power transmission cables.23

Other East European countries have less promising prospects for near-term improvement in telecommunication systems. They lack the assurance of a steady and rising flow of capital that East Germany can anticipate from unification. Western investors can enter commitments in East Germany with some assurance that the legal conditions under which they will operate will be the same as in West Germany. Investors in other parts of Eastern Europe have much less confidence in the circumstances they will face down the road, particularly concerning financial questions such as repatriation of earnings.
Poland and Hungary are debating badly needed upgrading of their communications sectors, considering plans for spending substantial sums of money for modernization. Hungary has plans, for instance, to invest $6-7 billion in its telephone network during the 1990s and has already taken steps toward introducing competition. Poland is also looking into a sweeping program that could entail splitting its PTT into separate television, postal, and telecommunications enterprises, and licensing new companies to provide competitive telecommunications services. The plan is estimated to cost $14 billion, but it has uncertain prospects for approval when the Ministry of Communications puts its case before the government in the early months of 1990.

Poland and Hungary have serious financial problems that may prevent desired allocations of funds for telecommunications. Both have large hard currency debts; Poland owes $39 billion (or $1,030 per capita) and Hungary owes $18 billion (or $1,800 per capita). Their indebtedness is offset to only a minor extent by promises of special assistance that the two countries are receiving. The US, for instance, approved $837 million for new business ventures for the two countries, the EC has offered a $1.1 billion line of credit through the European Investment Bank, and Germany has added another $1.6 billion in credit guarantees for industrial projects. Poland is expecting to sign a $100 million loan from the World Bank later in 1990 for modernizing its long distance and international telephone system.

Telecommunications requirements, however, have to compete with other pressing needs, and the funds in prospect are greatly exceeded by the "high priority" requirements in every sector of the economies. Making the transition from wildly inefficient central planning systems to modified market systems, moreover, is not running smoothly in either country. Both governments are having trouble in putting telecommunications programs into effective action.

Czechoslovakia may have somewhat better prospects, for it has a fairly low hard currency debt and is credited by Western observers as having the most competent telecommunications personnel in the East.
Czechoslovakia's Communist government, prior to being toppled in December 1989, had embarked on a telecommunications buildup, for which it had tentatively allocated about $1 billion for 1990. It is presumed that the new government under President Havel and a savvy group of market-oriented economic managers will follow suit. In mid-March 1990, the debate in Prague was still going strong over economic policy, though it appeared likely that extensive reforms would be made towards a market economy.

5.4 THREE PROBLEMS

Thus, despite the great interest in East Europe and Soviet telecommunications, actual movement of European industrialists into these markets is proceeding more slowly than the rush to seek contracts -- though East Germany looks to be exceptional. Many prospective investors are hesitant in following through on commitments and letters of intent. The USSR has even felt it necessary to threaten action against Western companies that have fallen behind in putting up investment funds in accord with their capital commitments in joint ventures. The Soviet warning was generated after a survey of 30 joint ventures that in 1989 showed that nearly one-third of the foreign companies were delinquent on their commitments.\textsuperscript{26}

But foreign industrialists who fall behind often do so because of their own frustration over obstacles they confront daily, not just in Moscow, but also in East European countries that are more advanced in reform policy. Three impediments appear to be principal explanations for slow performance.

First is the bureaucratic overhang, especially important in Poland and Hungary, but no less evident in the USSR. After many decades of economic decision making by passing the buck, the red tape abounds even after basic determinations have been made that seemingly overcome it. Even solidly supported legislative reform cannot in itself reeducate habits of a lifetime. Neither can factories and plant managers geared
for producing a COMECON quota shift to a market demand mode overnight. Mundane accounting systems are resistant to a market culture, preventing comparable measures of value or production costs. An Italian executive, who remains enthusiastic about his prospects, nevertheless says of state company accounts he sees in Hungary, "you slog through a nonsensical set of numbers, then sit down with your own auditors and reconstruct the balance sheet." Although Poland has made the strongest commitments to market-driven policies, investors there are still entangled in carryovers from the past. An OECD report on the Polish economy that was prepared for discussions in Warsaw in January 1990 spelled out the costs of overhang. The report highlighted, for instance, the need for much greater decentralization of decision making so that companies would be able to find for themselves the most efficient and innovative operational modes. Further changes will be needed, the OECD report advised, in Poland's legislative and regulatory framework. Critical problems are regularly encountered by Western investors trying to get a joint venture off the drawing board and into production. Despite improvements in conditions for foreign investors, the Polish legal regime forbids foreign ownership of real estate and requires all leases to be officially approved. Repatriation of profits that may be permitted in principle is precluded in practice by regulatory curbs on hard currency accounts in Polish banks.

Second is the unavailability, except in rare instances, of reliable local sources of supply. Established producers in East Europe and the USSR are generally huge vertically-integrated enterprises that produce their own requirements, a primary cause of Eastern inefficiency. Supplier networks that are a staple of Western and East Asian industry, and relied on for dependable delivery of high standard components and other inputs, can't be found in the East. The only way for organizations to ensure supply of essential input is to produce the input themselves.
The head of Alcatel's international trade division cites this in explaining why a factory sold by his company ten years ago has never achieved its production targets. Built under Alcatel license to manufacture digital exchanges, the plant is still unable to produce the one million lines a year called for in the contract specifications. This executive explains that "one of the hardest things is finding suppliers who will make components to the exact specifications you need and will deliver them exactly when you need them."  

Difficulties in lining up local suppliers through existing channels present Western investors with two unattractive alternatives. They may arrange to import the necessary supplies and components from abroad, or they may build up their own supply sources from within. In either case, the investor has a rough bureaucratic gauntlet to run. In a rare exception, McDonald's chose the second route, developing an extensive supply chain before finally opening for business in Moscow in 1989. But it required ten years of slogging through the Soviet bureaucracy and a far bigger investment than the company had originally intended. Many Western investors in 1990 are holding up action to see what further changes may be made. They are playing it by ear, hoping that matters will improve and they will be able to function eventually with a combination of imported and local suppliers.

The third impediment is the CoCom (Coordination Committee for Multilateral Export Controls) restrictions imposed by Western nations on technology transfers to the Soviet Union and its allies. The focus of telecommunications advance in the East is the need for technologically advanced systems and software. These are closely controlled under the CoCom agreement entered into by seventeen nations consisting of NATO members, minus Iceland, plus Japan and Australia.

The CoCom arrangement was created 40 years ago when the Iron Curtain was being drawn across Europe. Its purpose is to prevent the sale or export of products or technology that could be used to advance Soviet or Warsaw Pact military capabilities. Under the CoCom procedure items that are placed by agreement on an embargo list cannot be exported to the East
without special approval, and each member is expected to make sure that its industry respects the embargo. For items of direct military application, it is conventionally assumed that listed items will not be approved. For "dual use" goods and technology, such as telecommunications, there may be considerable dispute as to whether specific items should or should not be approved. CoCom disputes are complex, but come down to two questions concerning 1) which telecommunications products and technology should be on the list, and 2) what should be the procedure for approving items that are on the list.

Controversy over telecommunications, as well as other dual-use items, is of long standing, with the US from the beginning pressing for tighter restrictions than others and pushing for stronger enforcement measures than other countries believe are necessary. Disruption in the Soviet empire has exacerbated the controversy. All of the CoCom members agree that the changing European scene necessitates revision, but disagree on what and how the changes should be made. Several European Governments argue that the strategic arms limitations have made many dual use technologies less threatening to Western security. They reason, consequently, that with the decline in Soviet power economic criteria should be given more weight in order to permit financially gainful investments and sales. Germany is the most ardent advocate of radical change, and has gained considerable support from others in the Community. The parliamentary assembly of the Western European Union (which consists of European Community members, minus Greece, Denmark, and Ireland) issued a scathing report in December 1989 calling the CoCom controls "a relic of the cold war" and proposing a complete review "to encourage maximum opportunities for trade."

Immediately at stake are several of the contracts previously referred to in this paper, e.g. Alcatel's contract for a switching factory in Moscow, Siemens sale of systems to East German cities and to the Soviet PTT, and the consortium for building the optical fiber cable across the USSR. Another is a US West joint venture with Magyar Posta, the Hungarian telephone monopoly, for building a cellular telephone network in Hungary. In addition are proposals that all of the world's major telecommunications companies are still formulating in East European capitals.
CoCom controls have been eased in some cases -- e.g. to allow Siemens to export its basic digital switch, the EWSI, to the Ukraine and Hungary. But it has denied approval to one of the Alcatel contracts with Moscow. Some Europeans have charged that the Americans are more lenient on items where they have a sizable advantage, such as large capacity computers, and stricter when their commercial interests are less clear. Easing of controls, moreover, often involves downgrading of technology, so that the Western exporter is not allowed to sell the more profitable item originally specified.

Throughout 1989, the Europeans were pressing with increasing urgency for more liberal treatment of Hungary and Poland, as was done for China a few years ago. This argument has not been finally resolved, even though the US has become isolated and is usually outvoted on the key questions, according to officials attending the meetings, by votes of 16 to 1. Since unanimity is required for an approval, many key questions remain unresolved.34

At a CoCom meeting in Paris in February 1990, the Americans seemed to show greater flexibility. The US tabled a twin track plan under which methods of vetting sensitive exports would be streamlined immediately and a complete investigation and report would be prepared by the US for presentation to the next meeting in May 1990. A key part of the US proposal would permit Hungary, Poland, and Czechoslovakia to be treated according to a different set of rules than other Warsaw Pact nations.

Other CoCom members are skeptical about practical aspects of enforcement of the complex system envisaged, and continue to push for a more liberal treatment of the USSR as well as the three East Europeans. The US has begun technical exchanges with the three Eastern governments on setting up control systems that will prevent the technology from leaking to Moscow. The US fears that its own allies may break from CoCom and is seeking to devise a system that will keep the organization intact and keep the lid on sales to Moscow. The investigation and report Washington proposed in February is underway in the expectation that it
will serve as the basis for discussion at the meeting in May and high level consideration at the CoCom annual meeting in July 1990.

This description of three problems is not exhaustive, yet it suggests the enormity of the task of reestablishing economic ties across the old Iron Curtain. Giant sized problems do not nullify the effectiveness of the evolving institutional foundations for European cooperation. They are evidence that what has been done is both modest and uneven in relation to the hopes for a new Europe, and that the foundations for commerce and investment still have a thin base. The Community's policy of building the new Europe "brick by brick" is working against formidable political problems in the West as well as the East. Clearly, a "New Economic Europe" cannot outpace political and security policy in the new Europe. It will take a while before a more unified European-wide economy matures beyond its present modest beginning.
NOTES


24. See Note 12, *The Economist*.


CHAPTER SIX
THE EMERGING PROBLEMS

In spite of public upstaging by the collapse of the Soviet empire, the Single-Market policies are moving ahead. Internal market unification in telecommunications is making solid progress. The EC has managed internationally to allay, though not to erase, fears of a Fortress Europe. The Community has also had definite success in making the first steps toward building institutional foundations for commercial and financial relations with Eastern Europe and the USSR.

6.1 REFORMATION OF TELECOMMUNICATIONS IN THE COMMUNITY

At mid-stream the European Community appears to have resolved key questions lying at the heart of telecommunications reform. The core of Single-Market policy in telecommunications is liberalization of administration and operations and establishing competitive conditions in production and marketing of equipment and supplies. It can reasonably be concluded that the policy framework is in place for national reform and transition into a Community-wide market for services and equipment.

But the job is far from completed. While a policy framework may be fairly well-defined, many of the details for carrying out national reform have yet to be achieved. Agreement has been reached on Directives for administration and operation and the two key Directives (market liberalization and ONP) are expected to be issued in about July 1990. To make them effective the Directives have to be translated into uniform national law and regulation. How the national laws and regulations deal with non-Community service suppliers and telecommunications operators is a matter of special importance. At present, national legislation and regulatory order are inconsistent within the Community, and in many cases inconsistent with the principles of the forthcoming Directives. Moreover, Member Governments have tended to be lax in implementing even agreed upon reforms and have sometimes deviated materially from Community agreements.
Sorting these matters out will occupy the Commission, the national authorities, and the administrations for several years to come. A key question concerns regulatory responsibility over the emerging system, particularly the division of responsibility between Brussels and the member countries. Although most members have already separated, or are expected to separate soon, their regulators from their operators and administrators, the results differ from one country to the next, and there is no consistent definition of regulatory authority. This situation looks like one that will have to be decided pragmatically as the Commission and European Court of Justice attempt to untangle the complicated questions arising from the rapid adoption of Single-Market law.

6.2 Restructuring of the Telecommunications Industry

Restructuring the telecommunications equipment industry is even more complex than operations and administration. Yet, a framework appears to be falling into place. It rests on six cornerstones: 1) the Guidelines that were issued for applying rules of competition in telecommunications, 2) a Directive in preparation on public procurement of equipment, 3) a Regulation issued on mergers and acquisitions, 4) a Directive issued on competition in terminals, 5) the founding of ETSI for uniform standards setting, and 6) a Directive in preparation on mutual recognition of types of equipment.

These interlocking actions are well advanced. Even though they are in various states of enactment, sufficient headway appears to have been made to conclude that when the pieces are in place, a policy framework for a competitive Single-Market in the telecommunications industry will exist. It will then have to be enacted in the member countries, differences in legislation from one country to the next dealt with, and the division of authority for regulation between Brussels and the member governments worked out. Dispute over the proper seat of authority over competition and antitrust law is clearly going to occupy many Community lawyers for several years to come. An obvious area of dispute is that
involving production and marketing of equipment. Less obvious, though looming ahead, is the growing international activity of the operating arms emerging from the breakup of the PTTs. British Telecom, France Telecom, and German Telekom, for example, are beginning to market abroad. Because of the different ways in which the individual member states have separated the operating from the regulatory, and the continuing support given by national governments to the national telecom organization, it can be anticipated that dispute over the acceptable extent of these activities is inevitable.

However, the marketplace itself seems to be acting on the assumption that a competitive order is going to be the rule in the future for this industry. In anticipation of the Single-Market legislation, the major corporations of Europe have been jockeying for position for several years. Realignments and new alliances have resulted in greater concentration around fewer corporate centers. That is the direction that the Commission has been seeking. The greater concentration is likely to produce financial strength needed for high technology R&D.

It is not clear, however, how well the emerging European corporate structure will perform in competition with US and Japanese multinationals, or how much protection they will get in Community markets. The new structures are much more complicated than in the past, with many European affiliations with American and East Asian companies. The Community has not yet made the necessary decisions or taken the necessary steps to ensure the degree to which its markets will be open to world competition. Completing and implementing nationally the Directives on telecommunications operations, issuing and implementing the Directives on procurement of equipment, and further steps in antitrust violations within the Community are vital to opening Europe's markets to competition in networking and terminal hardware. These actions will determine whether the strengthened European multinationals emerging from the reshuffling will have genuine competition in Europe, or will simply change from national champions to Community champions.
6.3 INTERNATIONAL POLICY AND THE SINGLE-MARKET IN TELECOMMUNICATIONS

The Community has taken several clarifying steps towards defining common international policies in telecommunications. But it still has a way to go. To most of the world, EC'92 looks like opportunity beckoning. But it is opportunity that could be blemished by Community protectionism. Although many important questions have been clarified, Community international policy is still pretty much a mystery.

Although reaching agreement on foreign policy issues is one of the most complicated aspects of decision making in the EC, the Community has taken important clarifying steps in recent months. To much of the world, the Single-Market program looks like opportunity beckoning and much of the concern about Fortress Europe has been dissipated.

6.3.1 Negotiations with EFTA

Negotiations with EFTA are scheduled to take place during 1990. There appears to be a good chance of reaching agreement on some form of customs union that would continue the past close relations between EFTA and the EC and assure fairly intimate ties in telecommunications. However, one member of EFTA, Austria, is already opting out and the organization is under considerable stress to continue as an intact body. The Community is attracted to the notion of having a central core of closely associated nations, with other Europeans bound by lesser commitment. In EFTA, public discussion of joining EC is still subdued, though this may turn out to be the route of choice.

6.3.2 Eastern Europe and the USSR

The disarray in the Soviet Empire has dazzled the European Community since mid-1989. Yet East Europe has not raised serious doubts about proceeding with market unification. "The only response to the challenge presented to us by the East," French President Mitterrand told the European Parliament in November 1989, "is to reinforce and accelerate the union and cohesion of the European Community." Other Community leaders have reiterated this message in their own style.
The EC's policy response to political and economic reform in the East has been to begin building new foundations for trade and finance with these aspiring democracies. The effort has made important, if modest, progress, particularly helpful in setting up new or redirecting existing funding institutions for East European and Soviet reconstruction. If, as seems likely, the East moves progressively toward market economies and adopts and implements the legal structures for enterprise systems, the foundations can be expected to extend and strengthen to the point where trade and investment will take off -- including that in telecommunications. However, slow growth may be in store for the next 2-3 years.

In fact, investors and exporters have poured into the East in recent years. But many have been disappointed because of the red tape and still-stringent restrictions on business. Actual trade and investment flows have risen only modestly above historic levels. Some foreign businessmen have pulled out or are reneging on agreements, and a substantial number appear not to be expanding as rapidly as originally intended. As the East Europeans and Soviets pull themselves together, these difficulties should lessen and performance of the EC trade and investment contracts should improve. Because of the large requirements and high priorities in the telecommunications area, these markets should be among the most responsive, provided that CoCom rules on advanced telecommunications technology can be revised to allow these exports.

When it comes, German unification is likely to raise several thorny problems for the EC telecommunications program. Folding East Germany into liberalization should not in principle be troublesome, as Germany can request the transitional derogations that are permissible for less advantaged areas. This may not be so easily handled when it comes to the expected corporate mergers and acquisitions between West and East German telecommunications firms. The West German giants may attain excessive market power through corporate arrangements with East German producers as the vertically integrated public corporations are broken up. Some telecommunication mergers have been agreed upon even before the legal basis for such deals has been approved.
A major attraction of the East German telecommunications firms is their marketing channels throughout East Europe and the USSR, channels that the West German acquirers wish to maintain and exploit. The possibility of gaining "excessive" market power is a clear danger, and both the Cartels Office in Bonn and the Commission in Brussels have been watching these impending takeovers. This promises to be an issue between national and Community regulatory authority.

6.3.3 East Asia

Economic disputes between the Community and East Asians have been rancorous. While the Community appears to be leaning towards tougher access reciprocity policies towards Japan, the latter's investment and trade are continuing to rise, especially in electronic products, telecommunications hardware, and information service equipment. The Community's tough policies don't seem to work, yet there hasn't been sufficient response from the Japanese Government to warrant changing them. However, the new Kaifu Government has encouraged the Europeans to think that they will be able to begin serious discussions regarding their trade and investment problems.

6.3.4 The United States

The United States has looked on Community telecommunications reform as an antidote to what the American corporate world has seen as a highly protected market place. Even if the internal market reforms are successful, however, there is no guarantee that the more open atmosphere will be hospitable to the US or others from outside the Community. Four years into EC'92 and lengthy debate over the Single-Market, the Community has seemingly shown in convincing manner its interest in open market conditions and has pretty much turned off American fears of a Fortress Europe.

A key issue for US international telecommunications policy is how to deal with the post-1992 Community. The Single-Market program is intended to make the Community into a powerful world competitor in telecommunications, as well as to develop stronger and therefore attractive internal markets. A worldwide battle for markets in
telecommunications goods and services is already developing and escalating in scale and intensity. Both official and corporate America have been advocating an international agreement on rules of conduct in telecommunications trade -- rules to assure fair and open access to markets and provide safeguards against unilateral action aimed at protecting against the intense competition getting out of hand.

The US and the EC have been looking to GATT as the place to negotiate a basic framework of rules for telecommunications goods and services. Both have advocated the Uruguay Round as the opportunity to establish that framework. It is likely that the services portion of the agreement will include an annex or annotations specifically covering access and use of telecommunications. As the Uruguay Round approaches its culmination in 1990, it is evident that additional institutional arrangements may be necessary for complex issues for which the GATT framework may not be suited. Several US corporate executives have suggested that a US-EC treaty, based on a GATT framework, might be the best route for telecommunications issues of the post-1992 years. Whether to move in this direction, and if so how to do it, is a question that the US and the Community will be examining as the Europeans move ever closer to the Single-Market target date of December 31, 1992.
APPENDIX A

THE ORGANIZATION

OF

THE EUROPEAN ECONOMIC COMMUNITY
THE ORGANIZATION OF THE EUROPEAN ECONOMIC COMMUNITY

The European Economic Community (EEC) was formed in 1957 when the six founding governments -- Belgium, the Federal Republic of Germany, France, Italy, Luxembourg, and the Netherlands -- signed the Treaty of Rome. Although the European Communities include the European Coal and Steel Community and the European Atomic Energy Community as well as the EEC, the term "European Community" (and its acronym, EC) is commonly applied to the EEC. This is the terminology used in this paper.

The original six members were later joined by six additional members: Denmark, Greece, Ireland, Portugal, Spain, and the United Kingdom. The original scope of the EC has expanded from a customs union, where a common system of tariffs and taxes was applied to goods and services, plus setting out a limited number of common policies. Other activities have been taken up over the years, including a common agricultural policy, community fisheries policy, and regional development to help poorer regions in Community countries. In 1986, the Single European Act was ratified to bring into being a Single-Market, devoid of barriers on economic transactions among the member countries. The Single-Market Act is the most important change since the Treaty of Rome was signed.

The European Community is governed by four principal bodies: the Council, the Commission, the European Parliament, and the European Court of Justice. Following is a brief description of each.

THE COUNCIL OF MINISTERS

The Council of Ministers is the principal decision making body of the EC. Its headquarters are in Brussels, adjacent to the Commission’s offices. The Council consists of Ministerial-level representatives from each of the twelve members, who meet in groups determined by the subject matter at hand (for example, the Council of Ministers for Agriculture, for Finance, or for Foreign Affairs). The presidency of the Council rotates every six months among the member states.
The European Council meets at Heads of State or Heads of Government level twice a year, which is the occasion for changing presidencies at all levels of the Council. Each nation's period of presidency is regarded as a time when issues of particular importance may be promoted.

The Council has a sizable secretariat in Brussels, which prepares documents and similar functions. The secretariat operates under Ambassadorial level representatives of the twelve members. The Ambassadors reside permanently in Brussels and function as principal advisors on the spot for members of the Council of Ministers. They are also the key contacts between governments and the Commission.

Decisions in the Council are made by unanimous vote. The original Treaty did provide for majority decision in some limited instances. The Single European Act, however, reinforced majority rule by providing for approval by qualified majority on Single-Market issues and established a presumption that Council voting on matters governed by the Treaty would be decided by a qualified majority rather than unanimous vote. A qualified majority requires 54 or more votes from a total of 76. Votes are apportioned for this purpose by the following formula:

- Ten votes each: Germany, France, Italy, and the UK
- Eight votes: Spain
- Five votes each: Belgium, Greece, and the Netherlands
- Three votes each: Portugal, Denmark, and Ireland
- Two votes: Luxembourg

THE EUROPEAN PARLIAMENT

The European Parliament has headquarters in Strasbourg, France, and offices in Luxembourg and Brussels. There are 518 members who are chosen in direct elections every five years in each of the member countries. The elections are conducted in accordance with electoral procedures drawn up by the individual member countries. Members are
consequently elected under vastly varying standards. The 518 seats in the Parliament are apportioned in relation to population counts. Members of the Parliament do not sit or vote as country blocs. Rather, they organize as loosely bound cross-country blocs, or remain independent.

The European Parliament reviews legislation and other decisions proposed by the Commission. It has limited power to amend or reject, though it can hold up proposals for several months. Its recommendations are not legally mandatory, yet they may often carry significance beyond their formal bearing. For example, a Parliamentary recommendation is the basis of the EC position on the "hormones in meat" issue with the United States. Moreover, the Single European Act has since 1986 given Parliament added authority for its review of legislation; for instance, a Council Directive that is voted down by a two-thirds majority in the Parliament can be overridden only by a unanimous vote in the Council. The Parliament also has a degree of control over the EC budget, and it may increase expenditures of particular items over those proposed by the Commission. It cannot, however, enact new forms of revenue.

THE COMMISSION

The Commission is headquartered in Brussels and has seventeen members. Two Commissioners are named by each of the five largest countries (France, Germany, Italy, Spain, and the UK) and one by each of the other seven members. Each serves a four-year term and may be reappointed. Each is assigned specific responsibilities over one or more of the twenty-two Directorates General in the Commission. Commission decisions are made by the Commission as a whole. The president of the Commission, currently Jacques Delors of France, occupies a position of great influence and stature, and is generally accorded status of Head of Government in international meetings. (See appendix B for a listing of the current members of the Commission, along with their areas of responsibility.)
The Commission serves as the guardian of the Treaty and is initiator of policy decisions in an institutional sense, as it is the only Community body with authority to draft laws. Its proposals must be reviewed by the Parliament, as described earlier, and approved by the Council. They are also subject to judicial interpretation in the Court of Justice. The Treaty of Rome gives the Commission special autonomous authority for dealing with issues regarding state owned monopolies. The Commission also negotiates with non-Member countries on behalf of the Community and has authority to draw up trade and other agreements with foreign countries and economic blocs. It can represent the Community in international forums.

THE EUROPEAN COURT OF JUSTICE

The European Court of Justice is the judicial arm of the Community. The Court comprises thirteen judges and six advocates general appointed for six years and is based in Luxembourg. Because of the heavy and increasing load on the Court, a subsidiary Court of First Instance has recently been established and began to function in 1989. Judges are appointed by common agreement among the member states as independent jurists. Although the Court must have at least one judge from each member nation, the judges serve in an independent capacity, not as representatives of a country. Any state, institution, or individual may bring a case to the Court. The Court may also review cases heard in national courts when the litigation involves Community law. The Court rules on the conformity of member state actions to the Treaty of Rome and to Community legislation and decisions. Judgments of the Court are binding on member states.
APPENDIX B

THE EUROPEAN COMMUNITY: CURRENT COMMISSIONERS

AND AREAS OF RESPONSIBILITY
### Table B-1

**The European Community:**

**Current Commissioners and Areas of Responsibility**

<table>
<thead>
<tr>
<th>Directorate General Number</th>
<th>Directorate General Name</th>
<th>Commissioner(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>External Relations and Trade Negotiations</td>
<td>Frans Andriessen and Abel Matutes</td>
</tr>
<tr>
<td>II</td>
<td>Macro-Economic and Monetary Affairs</td>
<td>Henning Christopherson and Jacques Delors</td>
</tr>
<tr>
<td>III</td>
<td>Internal Market and Industrial Affairs</td>
<td>Martin Bangemann</td>
</tr>
<tr>
<td>IV</td>
<td>Competition, Cartels, and State Aids</td>
<td>Sir Leon Brittan</td>
</tr>
<tr>
<td>V</td>
<td>Employment, Education, and Social Affairs</td>
<td>Vasso Papandreou</td>
</tr>
<tr>
<td>VI</td>
<td>Agriculture</td>
<td>Raymond MacSharry</td>
</tr>
<tr>
<td>VII</td>
<td>Transport</td>
<td>Karel van Miert</td>
</tr>
<tr>
<td>VIII</td>
<td>Aid to Developing Countries</td>
<td>Manuel Marin</td>
</tr>
<tr>
<td>IX</td>
<td>Personnel Administration and Translation</td>
<td>Antonio Cardoso e Cunha</td>
</tr>
<tr>
<td>X</td>
<td>Information and Communication</td>
<td>Jean Dondelinger</td>
</tr>
<tr>
<td>XI</td>
<td>Environment, Consumer Protection, and Nuclear Safety</td>
<td>Carlo Ripa di Meana and Karel van Miert</td>
</tr>
<tr>
<td>XII</td>
<td>Research and Development</td>
<td>Filippo Padoletti</td>
</tr>
<tr>
<td>XIII</td>
<td>Telecommunications and Information Technology</td>
<td>Filippo Padoletti</td>
</tr>
<tr>
<td>XIV</td>
<td>Fisheries</td>
<td>Manuel Marin</td>
</tr>
<tr>
<td>XV</td>
<td>Financial Services, Company Law, and Tax</td>
<td>Martin Bangemann, Sir Leon Brittan, and Christiane Scrivener</td>
</tr>
<tr>
<td>XVI</td>
<td>Regional Development</td>
<td>Bruce Millan</td>
</tr>
<tr>
<td>XVII</td>
<td>Energy</td>
<td>Antonio Cardoso e Cunha</td>
</tr>
<tr>
<td>XVIII</td>
<td>EC Borrowing and Lending</td>
<td>Karel van Miert</td>
</tr>
<tr>
<td>XIX</td>
<td>EC Budget</td>
<td>Peter Schmidhuber</td>
</tr>
<tr>
<td>XX</td>
<td>Internal Financial Control</td>
<td>Peter Schmidhuber</td>
</tr>
<tr>
<td>XXI</td>
<td>Customs Union and Indirect Tax</td>
<td>Christiane Scrivener</td>
</tr>
<tr>
<td>XXII</td>
<td>Environment, Consumer Protection, and Nuclear Safety</td>
<td>Henning Christopherson</td>
</tr>
</tbody>
</table>
APPENDIX C

CONTACTS AND REVIEWERS
APPENDIX C

CONTACTS AND REVIEWERS

Caryl Aumoine
P.T. Meridian
Paris, France

Mylle H. Bell
BellSouth
Atlanta, Georgia

John Berg
Future Tech
Washington, D.C.

Peter D. Bergstrom
The MITRE Corporation
Bedford, Massachusetts

Keith Bernard
Cable and Wireless
Falls Church, Virginia

John Berndt
AT&T
Basking Ridge, New Jersey

Robert P. Bigelow
Computer Law Newsletter
Winchester, Massachusetts

Steven E. Billet
AT&T Europe
Brussels, Belgium

John S. Caplin
GEC Plessey
Maidenhead, United Kingdom

Jean-Pierre Chamoux
Ministry of Posts and Telecommunications
Paris, France

Yves H. Clerc
Bull
Paris, France

Carolyn Conlan
National Security Agency
Fort Meade, Maryland
Nicholas P. Costello  
Commission of the European Communities  
Brussels, Belgium

Desmond Dinan  
George Mason University  
Fairfax, Virginia

Wilson Dizard  
Center for Strategic and International Studies  
Washington, D.C.

John Eger  
Worldwide Media Group  
Stamford, Connecticut

Michael E.C. Ely  
American Embassy  
Brussels, Belgium

Larry G. Forrester  
AT&T  
Basking Ridge, New Jersey

Arthur Freeman  
Department of State  
Washington, D.C.

Paul Golunski  
Ministry of Posts and Telecommunications  
Caen, France

Jean-Claude Gorichon  
Ministry of Foreign Affairs  
Paris, France

James A. Griffin  
The MITRE Corporation  
Bedford, Massachusetts

Richard Hooper  
PA Consulting Group  
London, United Kingdom

Dieter Kimble  
Organization for Economic Cooperation and Development  
Paris, France

Seisuke Komatsuzaki  
Research Institute of Telecom-Policies and Economics  
Tokyo, Japan
John F. Magee
Arthur D. Little
Cambridge, Massachusetts

Eileen Mahoney
Fulbright Scholar on Communications
Moscow, USSR

Christian Mitjavile
Bull
Paris, France

Barry Mullinix
The MITRE Corporation
Bedford, Massachusetts

David J. Norton
GEC Plessey
Maidenhead, United Kingdom

Lionel H. Olmer
Paul, Weiss, Rifkind, Wharton, & Garrison
Washington, D.C.

Leo S. Packer
Association of American Engineers
Paris, France

G. Russell Pipe
Telecommunications Services Trade Project
Springfield, Virginia

Paul Provost
AT&T Europe
Brussels, Belgium

Thomas J. Ramsey
Squire, Sanders, & Dempsey
Washington, D.C.

Piero Ravaoli
Commission of the European Communities
Brussels, Belgium

Edward Regan
Manufacturers Hanover Trust
New York, New York

Jacques Reinstein
Washington, D.C.

Peter Robinson
Atwater Institute
Montreal, Canada
Dr. Martyn F. Roetter  
Arther D. Little  
Cambridge, Massachusetts

Stephen Ruth  
George Mason University  
Fairfax, Virginia

Kathleen C. Stewart  
AT&T  
Morristown, New Jersey

Sharon Stover  
University of Texas  
Austin, Texas

Alan Tousignant  
American Embassy  
Brussels, Belgium

Dominique Turcq  
McKinsey & Company  
Brussels, Belgium

Herbert Ungerer  
Commission of the European Communities  
Brussels, Belgium

Raymond Vernon  
Harvard University  
Cambridge, Massachusetts

Dawson Walker  
Cable and Wireless  
London, United Kingdom

Anthony Wallace  
George Mason University  
Fairfax, Virginia

Dimitri Ypsilanti  
Organization for Economic Cooperation and Development  
Paris, France

Charles A. Zraket  
The MITRE Corporation  
Bedford, Massachusetts