

U.S. Restrictions on International  
Data Transmission by  
Telecommunications Networks

Michael Botein

Eli M. Noam

Do not quote without permission of the author.  
c 1990. Columbia Institute for Tele-Information

Columbia Institute for Tele-Information  
Graduate School of Business  
809 Uris Hall  
Columbia University  
New York, New York 10027  
(212) 854-4222

U.S. RESTRICTIONS ON  
INTERNATIONAL DATA TRANSMISSION  
BY TELECOMMUNICATIONS NETWORKS

by

Michael Botein  
Eli M. Noam

Michael Botein and Eli Noam are Co-Directors of the Research Program in Telecommunications and Information Policy, Graduate School of Business, Columbia University.

1986

Research Working Paper Series. Not for citation, quotation, reproduction, or distribution without written permission. All papers represent the author's view only and not necessarily that of the Research Program or its affiliates.

## TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION. . . . .	1
I. THE U.S. CARRIER SYSTEM . . . . .	4
A. OVERVIEW . . . . .	4
B. REGULATORY AUTHORITIES . . . . .	6
C. AT&T . . . . .	9
D. THE FCC's JURISDICTION . . . . .	13
E. TYPES OF NETWORKS . . . . .	16
1. Public Networks . . . . .	16
a. Local service . . . . .	16
b. Long distance service . . . . .	17
c. International carriers . . . . .	18
2. Private Networks . . . . .	25
3. Closed User Groups . . . . .	26
4. Domestic Carriers and International Communications . . . . .	27
5. The Equipment Market . . . . .	30
6. Role of U.S. Antitrust Policy . . . . .	33
II. DEVELOPMENTS IN U.S. REGULATION OF INTERNATIONAL COMMON CARRIERS . . . . .	38
A. OVERVIEW OF DEREGULATORY POLICIES . . . . .	38
B. PROVIDERS OF INTERNATIONAL SERVICE . . . . .	41
C. CHANGES IN REGULATION OF INTERNATIONAL TELECOMMUNICATIONS SERVICES AND INTERNATIONAL SERVICE PROVIDERS . . . . .	43
1. Elimination of the voice/record dichotomy . . . . .	44
2. Entry of Western Union into international telecommunications . . . . .	44
3. Entry of additional international carriers . . . . .	44
4. Extension of Computer II rules to provision of international service . . . . .	45
5. Applicability of deregulation of common carriers to international communications . . . . .	45
6. Uniform Settlements Docket . . . . .	47
D. FACILITIES-RELATED REGULATORY DECISIONS . . . . .	48

Table of Contents

	<u>Page</u>
III. THE INTERNATIONAL IMPACT OF DOMESTIC U.S. RESTRICTIONS ON THE AVAILABILITY OF DATA . . . . .	55
A. LIMITATIONS ON EXPORT OF DATA . . . . .	55
1. Technology and Technological Information . . . . .	56
a. Control of Atomic Energy Information . . . . .	56
b. Information on Munitions . . . . .	57
c. "Dual Use" Technology and Technical Information . . . . .	57
d. Multilateral Export Controls . . . . .	58
e. Differential Treatment of Certain Audio-Visual Materials . . . . .	59
B. PRIVACY . . . . .	61
1. Restrictions on the U.S. Government . . . . .	62
2. Governmental Interception of Wire and Oral Communications . . . . .	63
3. Government Access to Financial Data . . . . .	65
4. Electronic Funds Transfer Act . . . . .	66
5. Private Collection of Credit and other Financial Information . . . . .	67
6. Collection of Information by Cable Television Systems . . . . .	69
a. Federal Law . . . . .	69
b. State Law: The Wisconsin, California and Illinois Examples . . . . .	71
7. Unauthorized Interception of Programming . . . . .	72
C. ANTI-ESPIONAGE LAWS AND CLASSIFIED INFORMATION STATUTES . . . . .	74
1. Gathering, Transmitting, or Losing Defense Information . . . . .	74
2. Delivering Defense Information to Foreign Governments . . . . .	75
3. Disclosure of Classified Information . . . . .	75
CONCLUSION . . . . .	76
FOOTNOTES . . . . .	83

## INTRODUCTION

Inspired by Lockean principles of natural law, classic American ideology seeks individualism, fragmentation of private power, limitation of government (with the notable exception of guaranteeing physical security), and protection of property rights and contracts. As applied to communications policy, this philosophy has justified a governmental role that is far narrower than in most other countries, and has based government's residual role largely on the grounds of market failure and national security.

Market failure exists when the traditional competitive mechanisms for limiting economic power cannot operate, due to the peculiarities of an industry. In the case of telecommunications, these peculiarities include: the absence of property rights in the electromagnetic spectrum; the natural monopoly characteristics often found in telecommunications networks; and the public good externalities of universal service. At the same time, national security principles have led the U.S. government to assure its global communications capability.

Until the mid-1970s, these were the fundamental goals of U.S. telecommunications policy. More recent trends, however, have shifted them in two contradictory directions. On the one hand, many of the market failure arguments have been discarded as either inherently flawed or obsolete through technological change and entrepreneurial initiative. On the other hand, national security arguments have become more important to U.S. policymakers.

For many other Western countries, however, the trends have been the opposite. National security concerns have a lower priority than before, while government's role in telecommunications often has become the foundation for

industrial policy in the electronics field.<sup>1</sup>

There have been other divergences. U.S. efforts to protect individual privacy have been applied vigorously against the state, but not as against private parties. The U.S. Constitution only occasionally applies.<sup>2</sup> Protections are mostly by adaptation of the common law, or by heterogeneous state legislation dealing with specific abuses.<sup>3</sup> Many other Western countries reverse these priorities; they are vigilant about private power, and often more tolerant of government authority.

The United States thus has diverged from European countries recently in its general outlook on basic telecommunications policy, as it has moved from a somewhat social democratic New Deal to a marketplace ideology. Since no country is an ideological island, this has led to problems of adjustment and coordination. An excellent example of this is the international flow of electronic information, at present subject to several multilateral efforts of harmonization.

To shed light on this area, it is necessary to understand the rules governing information flows in the United States. This survey describes U.S. regulatory policies for those information flows using telephone, telegraph and other point-to-point communications, excluding the mass media. It begins with a survey of the basic regulatory scheme, followed by a discussion of regulations in areas such as national security, privacy, common law and statutory restrictions. A host of other U.S. domestic laws -- such as stock trading regulations and the Uniform Commercial Code as to sales of goods -- potentially impact on international information flows. But coverage of all these topics would require a multi-volume treatise. This survey thus focuses upon the domestic U.S. legal and regulatory structures which are most likely to impact international

telecommunications directly -- that is, export licensing, national security and privacy statutes.

This piece distinguishes between conduit and content -- i.e., medium and message -- in examining U.S. restrictions on international telecommunications. It begins by reviewing U.S. regulatory and economic restrictions on the methods of point-to-point transmission in to or out of the United States. It then considers a wide variety of piecemeal limitations on the content of these information flows.

The survey concludes that U.S. governmental control over the channels of communication is rapidly disappearing; that various common law and regulatory restrictions also are declining; and that national security concerns apply more strictly than before.

instances also regulate cable television.<sup>6</sup> Municipal authorities regulate cable television status -- play an important role in regulating interstate telephony, and in some State regulatory commissions -- which also are usually independent in The FCC has some jurisdiction over cable television.<sup>5</sup>

one state to another -- and everything affecting interstate communications. The FCC is also in charge of interstate telephony -- that is, transmissions from broadcasting, satellite, and other civilian uses of the electromagnetic spectrum.<sup>4</sup> (adjudication of cases). The Commission allocates frequencies and regulates all executive authority (enforcement of its rules), and some judicial powers constitutional order, with some legislative powers (adoption of regulations), some independent of that office. It operates as a hybrid within the American Commission (FCC), a body of five commissioners appointed by the President but Federal policy emanates mainly from the Federal Communications level.

oversight. These regulations are set on the federal, state, and occasionally local owned, their use is often -- but not always -- subject to licensing and regulatory Although almost all civilian telecommunications facilities are privately and educational television broadcasting stations.

small municipally-owned cable television operations, rural telephone systems, does not own or operate civilian telecommunications services, except for a few telecommunications is simple in theory and complex in reality. The public sector The basic framework of government involvement in U.S.

## A. OVERVIEW

### THE U.S. CARRIER SYSTEM



through their powers to grant franchises to lay cable in their streets.<sup>7</sup>

On the executive level, the Commerce Department's National Telecommunications and Information Agency (NTIA) helps to coordinate the President's -- that is, the Executive Branch's -- overall telecommunications policy. It plays a role in international communications, together with the Office of U.S. Trade Representative and the State Department, which is the lead agency in international negotiations.<sup>8</sup> Despite its international visibility, the NTIA cannot match the FCC's domestic regulatory powers.

In addition, the Executive Branch's Department of Justice plays a major role through its Antitrust Division, which oversees much of the telephone industry by way of enforcing the 1982 court order which broke up AT&T.<sup>9</sup> The primary authority in that case is federal district court Judge Harold Greene, who frequently decides whether telephone companies and other parties are complying with the AT&T divestiture decree, and who has thus become a major presence in telecommunications matters.<sup>10</sup>

Conforming to a broader policy trend in the U.S. governmental decision making process, federal courts -- particularly the U.S. Court of Appeals for the District of Columbia Circuit -- have become a significant locus of telecommunications policy making. (The circuit courts hear appeals from trial courts and administrative agencies; their decisions can be reviewed only by the Supreme Court, which hears only a few percent of circuit court decisions.)<sup>11</sup> For example, the D.C. Circuit forced the FCC to allow non-AT&T equipment manufacturers to sell terminal units for connection into the local AT&T exchanges, making competition in the equipment market possible.<sup>12</sup> The Justice Department and the Federal Trade Commission also play a role in regulating

industry competitive behavior and structural changes — primarily mergers and acquisitions — and by forcing divestitures as with AT&T.<sup>13</sup>

Most important for telecommunications policy, at least in theory, is the U.S. Congress. The primary legislation for U.S. telecommunications is the Communications Act of 1934.<sup>14</sup> This Magna Charta of U.S. telecommunications rarely has been amended, despite many attempts. Policymaking in light of changed circumstances has been left largely to the FCC's and the courts' discretion. Congress often wields its power indirectly, however, by giving signals to the FCC through bills, resolutions, hearings, and the budgetary process. Congress can reduce an agency's budget unless it adopts certain policies, a position which obviously can have a strong influence on an agency.<sup>15</sup>

This multiplicity of decision-making governmental bodies frustrates coordinated and comprehensive policy-making. But this process also accomodates decentralized and ad hoc decisions, many of which are responses to specific problems, rather than part of a grand design. This has permitted a fairly rapid re-orientation of U.S. telecommunications policy, without major upheavels -- except perhaps for the AT&T divestiture.

## **B. REGULATORY AUTHORITIES**

Most telephone service in the United States is provided by firms regulated as "common carriers." This concept requires some explanation. The Communications Act of 1934 defines a "common carrier" merely as a "common carrier for hire, in interstate or foreign communication by wire or radio or in interstate or foreign radio transmission of energy."<sup>16</sup> In less circular terms, a common carrier is a firm which either holds itself out or is required by law to

provide transmission services to any financially qualified customer.<sup>17</sup> A common carrier offers to lease transmission facilities to the public on a nondiscriminatory basis, usually under a tariff of rates and services approved by the Federal Communications Commission and/or a state regulatory agency. A common carrier does not control the content of the information transmitted over its facilities. Local telephone exchange operators, domestic as well as international long distance networks and communication satellites are common carriers, despite the widely divergent services which they offer.

Because of traditionally federalist U.S. policies, carriers are regulated by several levels of government — federal, state and local. Local exchange operators — primarily, of course, the divested AT&T companies, the Bell Operating Companies (BOCs) — must secure state and occasionally even local approval of their operations. (Whether local approval is necessary depends upon whether a state has authorized cities to grant authorizations — generally termed "franchises" or "consents." Although local franchising was quite common during the early days of telephony, virtually all states today have prohibited local regulation of telephony.)<sup>18</sup>

The states in turn have created specialized administrative agencies — usually called "public utilities commissions" or "public service commissions" — to regulate telephone companies' rates and practices. State agencies may regulate only interstate activities — that is, activities occurring wholly within one state — such as charges for calls within or between exchange service areas in a state.<sup>19</sup> Both local exchange and long distance service providers must apply to the state agencies for approval of their tariffs and for "certificates of public convenience and necessity."<sup>20</sup>

Rate setting is a complex matter. Rates usually are designed to generate enough aggregate revenues to cover costs and depreciation, plus a reasonable profit on invested capital. Rate cases often involve protracted battles to define and measure costs, depreciation, and investments, and to define a reasonable profit, given the risk characteristics of the business. Furthermore, the allocation of costs and profits to some services and not to others can have major implications as to whether some customers subsidize others, and whether a competitive communications offering receives a subsidy by shifting some of its costs to a securely monopolistic service.

The FCC must approve any interstate carrier's rates and practices.<sup>21</sup> Although the Commission largely has abandoned its strict rate of return regulation, tariff filings and "Section 214 certificates" still are necessary.

This "content-neutral" or "conduit" status of common carriers often creates a set of public policy problems totally unrelated to a carrier's basic service obligations. For example, the last few years have witnessed a variety of disputes over local telephone companies' provision of "dial-it" recorded messages -- that is, local numbers which a customer can call, at a charge, to hear a recorded message provided by a third party. Some of these services contain sexually oriented or "dial-a-porn" material.<sup>22</sup> Because of its passive nature as a conduit, however, a telephone company cannot censor such material.

Regulation of the telephone industry historically has been justified by the existence of economies of scale -- i.e., the view that some services are most inexpensively delivered by a single firm or monopoly, since it can achieve the lowest average costs.<sup>23</sup> Interstate telephone service traditionally has been regulated by the FCC, while local or intrastate service is subject to regulation

by state public utilities commissions.<sup>24</sup> To the extent that a call involves both interstate and intrastate facilities, the FCC and state authorities collaborate in setting the rate for the call.<sup>25</sup> Regulators must publish rate applications and conduct public hearings prior to rendering decisions. In theory, tariffs are designed to give a common carrier a fair rate of return on its capital investment.<sup>26</sup>

### C. AT&T

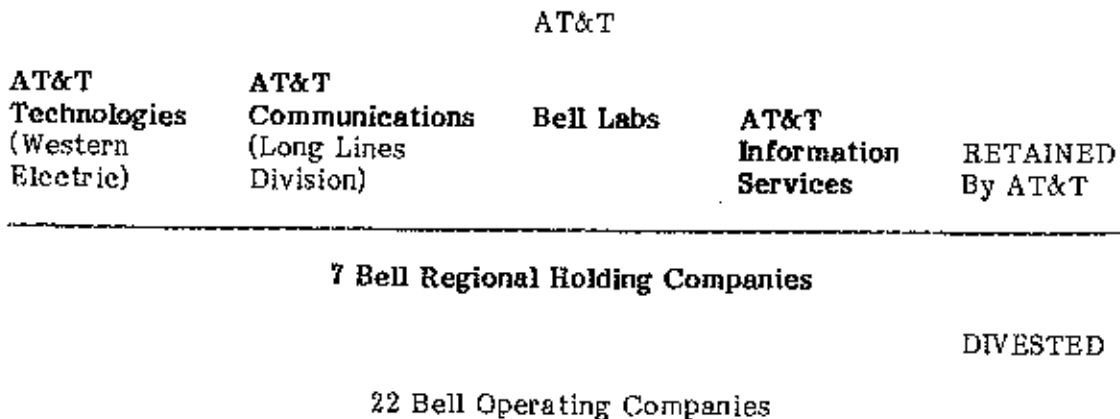
The U.S. telecommunications industry was a simple affair for a very long time. There was one telephone company, the American Telephone and Telegraph Company (AT&T). Despite its name, it was barred from telegraphy, which was the domain of Western Union. And internationally Western Union was excluded from the telegraph market, in favor of a handful of so-called international record carriers.

This was a structure of stability, in which companies were carefully excluded from each other's markets. Instead of competition, federal and state regulation kept the various companies -- most particularly AT&T -- from exploiting their market power. Over the past two decades, however, this traditional arrangement increasingly has exploded in a mutually reinforcing process of competitive entry and government liberalization, and has given way to a highly dynamic structure of overlapping markets, which also has affected United States international telecommunications.

American Telephone and Telegraph had operated for twenty-five years pursuant to a 1956 "Consent Decree," which terminated an antitrust suit brought by the Justice Department in 1949.<sup>27</sup> The pre-divestiture AT&T was

substantially different than today's often confusing mixture of entities. AT&T was perhaps the most vertically integrated telecommunications corporation in the world, since it provided literally everything from equipment to long distance transmission to local service. Western Electric (now AT&T Technologies) produced both terminal and switching equipment; Long Lines Division (now AT&T Communications) provided ninety percent of the nation's long distance traffic; Bell Labs (the only AT&T entity to survive without a name change) did basic research, through a complex series of contracts with the other AT&T components; and 22 wholly or majority owned local telephone companies -- such as New York Telephone Company or Southern Bell -- provided local exchange service to one or more states.<sup>28</sup>

The divestiture ended the most significant portion of AT&T's vertical integration -- namely, the common ownership of the local exchange companies and the equipment as well as long distance service providers. At least in theory, this removed a number of perceived conflicts of interest, such as local exchange companies' paying inflated prices for Western Electric equipment.<sup>29</sup> Put in a simplistically graphic way, the diagram below shows the major separation created by the divestiture.



The divestiture came about in a relatively complicated procedural fashion. In 1982, AT&T settled a 1974 antitrust case, under a "Modification of Final Judgment" ("MFJ").<sup>30</sup> This technically was an amendment to the 1956 Consent Decree. The MFJ required AT&T to divest its 22 local exchange Bell Operating Companies (BOCs), which now are owned by seven "Bell Regional Holding Companies" (RHCs). (It is not yet clear whether a RHC is a common carrier.)<sup>31</sup> AT&T also kept several key entities: its research and development arm, Bell Labs; its manufacturing arm, Western Electric; its regulated long-distance operation, Long Lines Division; and a new entity for providing enhanced services (AT&T Information Services). The FCC supported the settlement, but urged that the BOCs also be permitted to enter unregulated fields.

While the Justice Department was pursuing its case, the FCC was imposing structural restraints on AT&T. The FCC found it necessary during the 1970's to decide how AT&T could provide data processing and other "enhanced" services. AT&T could provide only telecommunications transmission service under the 1956 Consent Decree. Because of the capabilities of electronic switching and of customer demand for new services, AT&T increasingly felt pressure to offer enhanced services. These services were provided at first through AT&T's common carrier offerings -- over the objections of the data processing industry -- and were considered communications services. The FCC addressed this dilemma in its first and then second Computer Inquiry. Ultimately, the Commission developed a distinction between "basic" or communications services, and "enhanced" or software-driven services. AT&T could provide only basic services through its regulated offerings. Enhanced services had to be provided by an unregulated and "fully separated" subsidiary.<sup>32</sup>

Despite strenuous objections by U.S. service providers, the FCC in 1983 changed the effect of the Computer II "basic" and "enhanced" classifications. If a carrier provided "enhanced" rather than "basic" service, it no longer needed -- and indeed, no longer could obtain -- an authorization pursuant to the certification processes of Section 214. Since most new value added carriers in fact were providing "enhanced" services by utilizing both data processing and telecommunications, they thus fell within this category. Because of this decision, providers of international enhanced services no longer could obtain FCC Section 214 authorizations for their services. The service providers argued that lack of Section 214 authority would impede their ability to obtain operating agreements with overseas PTTs, since they would not be treated as common carriers under domestic U.S. law.

At the same time that the FCC has proposed applying its "basic/enhanced" distinction internationally, it is reconsidering the overall Computer II policy.<sup>33</sup> The Commission recognizes that several events -- including the AT&T divestiture and the emergence of both domestic and international ISDNs -- may render the structural separation requirement obsolete, or a burden on efficient operations. Some observers believe that the separate subsidiary requirement soon will disappear.<sup>34</sup>

Most recently, in August of 1985 the Commission initiated yet another rule making proceeding, Computer III, to re-examine restrictions on both AT&T's and the BOC's activities.<sup>35</sup> In general, the FCC's proposals would allow both AT&T and the BOCs not only to offer enhanced services jointly, but also to operate without any requirement of a separate subsidiary in some circumstances. In addition, the Commission at least suggested abolishing the separate subsidiary



requirement and replacing it with detailed regulatory requirements.<sup>36</sup>

#### D. THE FCC'S JURISDICTION

There are, of course, common carriers other than telephone companies. They take different forms, and are not restricted to point-to-point transmissions. For example, a totally different type of common carrier is the Multipoint Distribution Service (MDS), which transmits omnidirectional microwave signals to multiple receivers with directional antennae. MDS operates on a small portion of the electromagnetic spectrum -- 2150-2162 MHz -- far above the frequencies which conventional television sets can receive. Authorized in 1962 for a variety of uses, MDS has been used until recently for "pay" television programming and high-speed data transmission. An MDS licensee leases its facilities on a nondiscriminatory basis in accordance with FCC tariffs, although it usually has a pay television service as its primary customer. The Commission prohibits an MDS operator from leasing more than half of its transmission time to any affiliated company.<sup>37</sup>

The MDS example shows how technological developments and their applications have created strains on the FCC's traditional definition and treatment of communications services. Under the Communications Act of 1934, the FCC has at least five different types of regulatory jurisdiction. These distinctions, although technical in nature, can be important in determining what types of FCC regulations -- e.g., common carrier or broadcasting -- apply to a particular communications service. This can make a great difference in the nature of regulation. In simplistic terms, broadcast status imposes content regulation but no economic restrictions or access requirements. On the other

hand, common carrier status often requires approval of rates and service conditions, but does not restrict content. 38

Second, the Commission has jurisdiction under Title III of the Act over use of "any apparatus for the transmission of energy or communications or signals by radio . . . ." — that is, any over-the-air use of the radio frequency spectrum.<sup>39</sup> This jurisdiction in turn breaks down into three distinct subcategories. The most visible type of Title III jurisdiction is regulation of broadcast stations, and Title III contains special provisions applicable only to broadcasters — such as the requirement of reply time under the fairness doctrine.<sup>40</sup> In addition, a license is necessary under Title III for any Title II common carrier spectrum use — from a mobile telephone to an international satellite. Moreover, Title III gives the Commission jurisdiction over spectrum uses which are neither broadcasting nor common carriage, under the general classification of "private radio."<sup>41</sup>

Finally, the FCC has a very vague type of implied jurisdiction over activities which are not clearly within either Title II or Title III. The most significant example of this type of jurisdiction is the Commission's "reasonably ancillary" jurisdiction over cable television. As defined by case law, this jurisdiction appears to allow the FCC to regulate cable in order to prevent any adverse impact on broadcast television.<sup>42</sup> Although the extent of this jurisdiction is unclear, it appears to be totally separate from — but implied by — the Commission's other jurisdiction.<sup>43</sup> The scope of this jurisdiction may have been cast somewhat in doubt by the recent passage of the Cable Communications Policy Act of 1984, which enumerates certain limited powers for the FCC in the regulation of cable television.<sup>44</sup>

The FCC's choice of a jurisdictional basis has a significant impact upon the

legal status of a medium. If a medium is classified as broadcasting, it becomes subject to the wide variety of statutory requirements, such as the fairness doctrine, the political "equal time" reply requirements, the sponsorship identification rules and the like.<sup>45</sup> On the other hand, classification as a common carrier requires an operator to file tariffs for its rates, subjecting it to at least potentially to rate-of-return regulation.<sup>46</sup>

The D.C. Circuit recently limited the FCC's discretion in choosing jurisdictional bases for the media. In National Association of Broadcasters v. FCC,<sup>47</sup> the court held that the Commission was required to regulate either direct broadcast satellite (DBS) operators or their channel lessees as broadcasters -- thus subjecting them to the full panoply of fairness, equal time, and other traditional broadcast regulations. The court reasoned that since "DBS systems transmit signals directly to homes with the intent that those signals be received by the public, such transmissions rather clearly fit the definition of broadcasting . . . ." <sup>48</sup> Moreover, it noted that the Act "does not give the Commission a blank check to regulate DBS in any way it deems fit."<sup>49</sup> At the same time, the court rejected analogies to regulation of MDS as a common carrier, suggesting that the Commission's initial classification of MDS may have been misconceived.

As a result, the NAB decision casts considerable doubt on the FCC's classification of the electronic media, in terms of common carrier or other status. In the fall of 1985, the FCC initiated a rulemaking proceeding in response to the NAB decision. The Commission recently proposed regulating both DBS and subscription television (STV) along the same lines as MDS, thus relieving them of any broadcast-style responsibilities.<sup>50</sup> Whether the FCC's

proposal would withstand judicial review under NAB, of course, is open to question.

Judicial review of FCC actions is quite simple in nature. In order to challenge the Commission's adoption of a rule, a party only needs to file a "petition for review."<sup>51</sup> Review of a licensing decision under Title III of the Act, on the other hand, is by an "appeal."<sup>52</sup> Under Section 402(b), a challenger may file its petition in any circuit court of appeal in which it has a principal place of business. Under Section 402(a), however, all appeals go to the District of Columbia Circuit Court, in order to allow one court to make national licensing policies. Both Section 402(a) and Section 402(b) proceedings are appellate in nature, and thus involve merely the submission of briefs and the presentation of short oral arguments -- rather than the introduction of evidence as in a trial court.<sup>53</sup>

## E. TYPES OF NETWORKS

### 1. Public Networks

Operation of the various types of telephone networks in the United States is highly decentralized.<sup>54</sup> Following the AT&T divestiture, the structure of networks is as follows.

#### a. Local Service

- (i) There are 22 Bell Operating Companies, such as the New England Telephone Company. They are organized into seven Bell Regional Holding Companies, such as NYNEX. The BOCs provide the bulk of local service, with more than 1,000 small independent companies serving approximately ten percent of

the nation's geographic area and twenty percent of its population. The largest independent company is General Telephone & Electronics (GTE). Local companies are restricted to service within their Local Access and Transport Areas (LATAs), and may not enter long distance or international communications. They are regulated by various bodies, primarily state commissions and the FCC.

- (ii) Various private "by-passers" compete with the BOCs in providing local service through a number of technologies.<sup>55</sup>

These technologies include:

- a. Cable television;
- b. Point-to-point microwave;
- c. Digital Termination Service (DTS), a two-way point-to-point switched microwave service;<sup>56</sup>
- d. Fiber optic links;
- e. Infrared transmission, which does not require an FCC license; and
- f. Cellular radio, primarily in the form of mobile car telephones.<sup>57</sup>

- (iii) Shared tenant services (STS), a hybrid new form of local transmission in which landlords resell local service using a private branch exchange (PBX) and lines leased from telephone companies or other carriers.

b. Long distance service

- (i) AT&T controls more than 80% of "interexchange" or

"interLATA" service.<sup>58</sup>

- (ii) Other common carriers (OCCs) such as MCI, Sprint, and ITT provide the rest.
- (iii) "Resellers" of long distance service (including in part the OCCs, which often lease lines from AT&T) and many others buy long distance service at low bulk rates and resell it at a profit to smaller users.
- (iv) Lessors of long-distance links include a growing number of railroads or highway authorities, which install fiber optic lines on their routes.
- (v) Domestic record carriers, primarily Western Union and RCA, provide mostly telegraph services, and increasingly data transmission.
- (vi) Specialized companies -- including data networks and value-added networks such as Telenet and Tymnet -- provide packet switching and other high-technology services.
- (vii) Satellite carriers (such as RCA), often operating as common carriers, lease transponder capacity to other common carriers and private users.

c. International carriers

- (i) AT&T provides the bulk of international voice service, and now also provides record service.
- (ii) Other common carriers such as MCI International and Sprint provide service to countries with whose postal, telegraph and telephone (PTT) authorities they have agreements. In the

Pacific, the Hawaiian Telephone Co. handles much of the traffic.

- (iii) Comsat, the U.S. Signatory to INTELSAT and INMARSAT, originally operated solely as a "carrier's carrier," and is now able to access users directly. For international civilian satellite communications (as distinguished from cable or microwave), INTELSAT was the sole link. U.S. carriers may go through either Comsat or a private carrier to access INTELSAT for international satellite service. As noted below, INTELSAT also now faces "bypass" from private satellite operators.<sup>59</sup>
- (iv) International record carriers (IRCs) such as RCA, ITT, TRT, MCI International (formerly Western Union International) also offer telegraph and telex service. The IRCs originally were restricted to international record service. These restrictions now have been abolished.
- (v) Specialized carriers and value added carriers such as Telenet use leased circuits to provide data base and related services.
- (vi) Applications have been approved for new international satellite carrier systems; similarly, approvals have been granted for new transatlantic cable ventures.<sup>60</sup>

None of these new carriers can function without a link to a foreign carrier. Hence, U.S. approval is not sufficient for actual service.

These networks -- local, long-distance, and international -- are substantially free to offer all types of telecommunications services, with restrictions which include the following:

1. Although AT&T can carry other companies' electronic publishing or videotex communications, it may not provide its own information service until 1989.<sup>61</sup>
2. The BOCs may provide such services as their own information services only through a fully separated subsidiary.<sup>62</sup>
3. Under the Cable Communications Policy Act of 1984, local telephone companies may provide cable television service only in "rural" areas, which a cable company would find too unprofitable to enter. But they are free to construct and lease back cable facilities to cable companies, as long as the local telephone companies do not control the systems' programming in any way.<sup>63</sup>
4. Since local telephone companies' rates are regulated, an expansion of their service offerings is subject to regulatory scrutiny if it affects rates.
5. For local transmission, the situation is very much in flux. Some states have instituted rules to restrict local "by-pass" in favor of the local exchange telephone companies. ("By-pass" occurs when an unregulated company uses any of the means discussed previously to provide services within a LATA without using the local public switched exchange.)<sup>64</sup> In several instances, intra-state long-distance service entry -- that is, service between LATAs -- is also restricted to entry by additional carriers under state rules. Many of these regulations are now subject to litigation.

In addition, certain geographical service restrictions apply. BOCs and other local telephone companies have exclusive franchises for public switched



service in their geographic areas, though this exclusivity is being undermined de facto by various forms of bypass and shared tenant services. BOCs cannot offer long-distance or international service, while AT&T cannot provide local service. GTE has provided both local and long-distance services, but must do so through separate subsidiary companies.

Common carriage provides access rights to all users, including resellers which compete with a carrier. Local exchange companies must grant access to all long-distance carriers, as long as they pay for access. By the middle of 1986, equal quality access -- i.e., equal availability of all long-distance carriers to all telephone users -- must be provided to all long distance carriers.<sup>65</sup> Customers indicate their "primary" carrier, to which domestic and international long-distance calls automatically are routed by a local exchange. A customer thus is connected directly to the long-distance carrier of its choice, without inputting elaborate access codes, as was necessary in the past. Customers also can utilize private branch exchanges (PBXs), to select a different long-distance carrier for each call according to a "least-cost-routing" computer, which chooses the least expensive carrier for each route.

A form of universal service obligation requires common carriers to accept all customers who pay their bills. Local telephone companies also must serve to customers in undesirable locations. State rules vary on the extent of this requirement.<sup>66</sup> A typical arrangement is for customers to get a certain connection distance (e.g., up to three utility poles or their equivalent) as part of the basic installation charge, with additional distance requiring an extra fee.

As a matter of law, neither the FCC nor state agencies currently impose any absolute universal service obligation. As a matter of practice, however,

both AT&T and local exchange companies effectively must serve all customers. Over the last century, their networks have expanded to cover virtually the entire country, and under both federal and state law they may not withdraw service without the prior approval of the FCC or the relevant state authority.<sup>67</sup> Since the FCC requires a carrier to make a relatively difficult showing of economic necessity before discontinuing service, carriers effectively are locked into serving their present areas -- which for AT&T includes into interstate service for virtually the whole country.

Reselling of domestic local and long distance transmission is allowed and extensive. Indeed, carriers must sell even to resellers which compete with them. Recent trends include sharing of the bandwidth on satellite transponders, reselling of local transmission by shared tenant services, and competing coin and credit-card public telephones.<sup>68</sup>

Resellers do not require an authorization from the FCC. They merely need to file a notification with the FCC if they hold themselves out to the public generally.<sup>69</sup> Where there is no such general offering -- e.g., one bank's reselling its surplus transmission capacity to another -- no FCC filing at all is necessary.

Of particular importance are the rates for access to local exchange networks by long-distance carriers. In the past, complex financial accounting rules ("separations and settlements") arguably provided an internal subsidy from AT&T's long-distance service to the BOCs. Complicated FCC tariffs also governed the access charges paid by the OCCs. After divestiture, this system was revamped, with equal access charges for carriers to be phased in as equal access to the BOCs for non-Bell long distance carriers was introduced.<sup>70</sup>

Furthermore, a new system of customer access charges partially substitutes carrier-paid access fees for the use of local exchange networks.

At least in theory, introduction of customer access fees forces all long-distance carriers to compete on an equal footing, since they are not subject to different charges for use of local exchange facilities. (The FCC has allowed state commissions to waive consumer access charges, however, for low-income families.)<sup>71</sup> Because of the extremely large amounts of money at issue to the carriers, and because of redistributive impact of access fees, they have become a very controversial subject. For example, the OCCs fear that by being forced to pay the same as AT&T -- compared to roughly half as much in the past -- they will lose their price advantage with consumers and thus suffer market erosion. The OCCs contend that the BOCs' provision of better technical facilities to them does not justify equalization of access costs.

Various other telecommunications charges are regulated. The BOCs' rates and terms are regulated by state commissions, on the principle of rate-of-return regulation. Due to the dominance of the local exchange companies in local residential distribution, deregulation of these charges is unlikely in the near future.

The principle of rate setting is to permit a "fair" return on invested capital, at a rate comparable to investments of similar risk. Rates thus include revenues that -- after subtractions for operating expenses, depreciation, and taxes -- result in a fair profit.<sup>72</sup> Because this return is aggregated, not every service or customer category need pay its share of costs and return on capital. Internal subsidies are common. For example, rates often are lower for rural than for urban users, and for residential than for business users. Since rate setting is

meaningless without a definition of the product, federal and state agencies also set service quality requirements.<sup>73</sup>

Where local exchanges face competition because of bypass, their rates too probably will be deregulated. In domestic and international long distance service, rate regulation is already on its way out. The OCCs need only file tariffs with the FCC, stating their rates. Internationally, only AT&T (and the Hawaiian Telephone Company on some Pacific routes) are subject to rate regulation. Only "dominant carriers" -- i.e., those with monopoly power -- must secure prior approval of their rates.<sup>74</sup> In practice, rate regulation is handled quite laxly. Domestically, the goal of regulating AT&T's rates has shifted from protecting users against monopolistic price increases to protecting competitors from predatory price reductions. Long-distance rate regulation is likely to disappear as the OCCs establish themselves.

At least at present, the Communications Act requires all charges for interstate common carrier services to be just and reasonable.<sup>75</sup> Under the statute, the reasonableness of charges is subject to review by the FCC, which has the authority to prescribe just and reasonable charges and to order rebates and refunds of overcharges.<sup>76</sup> In order to establish the reasonableness of their rates, carriers must submit to the Commission schedules of their rates. In the past, these filings were voluminous in nature, containing complex technological and economic showings prepared by experts. In today's deregulatory environment, they tend to be much less formal. Changes in rates must be submitted to the Commission, and do not become effective until the FCC approves a proposed rate change or until ninety days after filing of the proposed change.<sup>77</sup> In practice, only AT&T must file tariffs with the Commission.<sup>78</sup>

2. Private Networks

Over the last few years, large-volume users of data and voice transmission services increasingly have utilized private line telephone facilities. These operations often totally bypass the BOC or other local exchange facility, by direct connections to the uplink and downlink satellite installations of interexchange carriers. For example, a major broker in New York uses private lines to connect its Manhattan offices directly with satellite transmission facilities in New Jersey. The local BOC plays no role in linking the terminal equipment to the satellite facility, and consequently derives no revenue from the transmission.

The OCCs' uplink and downlink facilities are regulated by the FCC as interstate common carriers. State agencies may regulate them only to the limited extent that they provide intrastate long-distance services. A non-carrier uplink or downlink, however, is subject to no federal regulation beyond the requirement of securing a license under the Communications Act to use the radio frequency spectrum.<sup>79</sup> As yet, satellite transmission services have not been used for private line purposes, because of these systems' high construction and maintenance costs. (This does not include use of satellites by cable television programmers, however, which might be considered a type of private line activity.) These private systems would not be subject to state or federal regulation as common carriers, since they do not hold themselves out to the public; they thus would be unregulated in every sense except for needing FCC licenses under Title III of the Act.<sup>80</sup>

### 3. Closed User Groups

Closed user groups are located conceptually somewhere between a single user's private network on the one hand, and a reseller's public services on the other. Since both are almost totally deregulated (except for a few restrictions in several states concerning local service), closed user groups are unregulated in terms of charges, access, and content. No licensing is necessary, except to the extent that over-the-air transmissions are involved. Liability is based on contractual provisions or general commercial law.

There is no right of access to join a closed user group. If a group restrained trade by refusing to allow a competitor to join a group deemed to be an "essential facility," however, traditional antitrust principles would require it to grant access.<sup>81</sup> Some closed user groups' provision of value-added services might turn out to be natural monopolies. That is, single-firm production will prove to be substantially less expensive than multi-firm production, and no segment of users will be exposed to lower-priced and loss-free entry. In those cases, antitrust prohibitions on discrimination against competitors may apply.<sup>82</sup> For example, the Supreme Court prohibited the Associated Press from refusing to sell news to its members' competitors, because no practicable substitute for its news service existed.<sup>83</sup>

Defining a closed user group is extremely slippery; no legal definition exists. There are literally thousands of electronic bulletin boards and specialized data bases, through which private and commercial users communicate with each other via computers. Users range from major banks to antique traders to baseball fans. Some operate with leased lines, while others use conventional local and long-distance telephone services.

4. Domestic Carriers and International Communications

U.S. policymaking has an obvious impact on the domestic sphere. Even a decision not to regulate sets loose powerful forces. The U.S. experience has been that pro-competitive forces are expansionary. Once competition is permitted, pent-up user demand and entrepreneurial suppliers provide new services.<sup>84</sup>

The federal government has been more deregulatory than the states, and continuously has expanded the scope of its primacy over the states by invoking the doctrine of federal preemption -- that is, invalidation of state laws inconsistent with federal laws -- even where the federal policy is abstention from regulation.<sup>85</sup> Perhaps the most significant case establishing federal primacy was North Carolina Utilities Comm'n v. FCC,<sup>86</sup> which authorized the FCC to preempt most state telephone regulation.

Although it lacks similar preemption powers in the international sphere and cannot act unilaterally, the present FCC probably will not be highly flexible and strive for international harmonization. The Commission is more likely to seek deregulation of U.S. firms where unilateral action is at all practical, and hope that market forces will take care of the details.

There is no statutory distinction under the Communications Act between domestic common carriers which provide transborder transmission services and carriers which do not. No special regulatory requirements apply to carriers with transborder as well as domestic transmission capabilities. Any communications common carrier operating within the U.S. is subject to state and/or federal regulation.

Because they are common carriers, if U.S. carriers provide international

service, they must grant access to domestic customers, including resellers.<sup>87</sup> Under most foreign administrations' current policies, however, resellers would not be able to link up at the other end; the carrier rather than the reseller would be viewed as the authorized user. But since neither a U.S. carrier nor a foreign administration would necessarily know whether a reseller was using a leased line, unsanctioned resale might be impossible to detect and thus to prohibit.

A U.S. carrier obviously needs a foreign carrier counterpart. Although a variety of U.S. carriers may want to operate internationally, without foreign local and long-distance distribution they cannot provide service. Foreign administrations are wary of introducing competitive complexity into their international service; furthermore, transactions with multiple U.S. carriers may impose extra costs. For example, European arrangements with MCI appear to involve primarily traffic inbound from the United States. A minimum amount of inbound traffic must be generated by MCI before a PTT will install outbound transmission equipment.<sup>88</sup>

Access of foreign carriers to the United States is affected by several restrictions:

1. Foreign entities may not own more than 25 percent of U.S. local telephone companies and long distance carriers.<sup>89</sup> There do not appear to be any restrictions against foreign companies owning a U.S. value-added network or reseller, unless it functioned as a common carrier. Through such resale, foreign carriers could distribute their service within the United States.
2. In order to serve U.S. customers, foreign carriers have to link up with a U.S. carrier for long distance service -- such as AT&T and the IRCs



(the traditional partners) or the OCCs (newer partners). It presumably also would need to deal with a BOC or a bypass operator for local distribution, unless a customer had its own satellite downlink. From the U.S. perspective, the only restrictions (except for those discussed below) are on direct links to the BOCs, due to the prohibition against their providing long distance service.<sup>90</sup>

3. The nature of foreign carriers' communications links to the U.S. also is governed by the Cable Landing License Act of 1921, which goes back to 19th century agreements concerning telegraphic cable.<sup>91</sup> That Act requires bilateral reciprocity for carrier access. In practice, this has led to an FCC policy of approving only half-circuit access for foreign carriers, in order to guarantee the other half circuit for a U.S. carrier in the reverse direction.<sup>92</sup> Beyond trade reciprocity, the half-circuit policy also has technical reasons, since control of a full circuit by a foreign carrier from a country with a congested telephone system might create burdens on domestic U.S. networks. Conversely, the half-circuit arrangement gives foreign carriers an economic incentive to upgrade their domestic network capacity. Capacity differentials might not be at issue if U.S. carriers had full landing rights in a foreign country. The United States might treat this as adequate reciprocity, and give a foreign carrier similar rights in the United States.

The development of overcapacity in international circuits is likely to affect U.S. international carriers' activities in the future. At present, U.S. international communications needs are rising by about 15% annually. But

TAT-8, the new INTELSAT satellites, private satellites, private oceanic cable, and regional satellite projects will add more capacity than is demanded; they thus may create a glut. The existence of excess capacity and of marginal costs substantially below average costs may lead to price wars. In that situation some form of U.S. rate regulation or other restraint on pricing might re-emerge.

5. The Equipment Market

The connection of terminal equipment to the interstate network is regulated by the Communications Act<sup>93</sup> and the FCC's regulations.<sup>94</sup> Part 68 of the FCC's rules sets minimum technical standards that equipment must meet in order to be connected to any public switched network.<sup>95</sup> The FCC's objective is to provide uniform interconnection standards to protect the telephone network from improper terminal equipment and wiring.

Because interconnection standards are uniform, terminal equipment users have nondiscriminatory access to the telephone network. Equipment sellers must register their products, however, with the FCC before marketing them.<sup>96</sup> Registration requires the disclosure of a unit's technical specifications, so that the FCC's staff can identify any possible system degradation prior to installation of the equipment. But there is no approval process to go through. Moreover, there is a national security exception to the registration requirement. If a federal agency certifies that compliance with registration procedures would jeopardize national security interests, equipment may be connected to the network without publication of technical data.

Part 68's objectives and the registration requirements are relatively recent developments in U.S. common carrier policy. Prior to Carterphone,<sup>97</sup> AT&T and

the OCCs developed their own interconnection standards, and manufactured or procured equipment compatible with those standards. Competitive terminal equipment suppliers had no access to the telephone network, since users could connect only equipment leased from AT&T.

The U.S. market for central-office (i.e., local exchange) equipment was characterized in the past by a fairly competitive situation only in the procurement of equipment for independent telephone exchange companies and independent telephone companies -- that is, non-AT&T companies. AT&T was precluded from that market, but -- perhaps as a result -- many other companies were active in it, including foreign suppliers such as Ericsson and Northern Telecom. On the other hand, the vast Bell system and all of its customers -- comprising 80% of the total market -- were foreclosed to other suppliers by its ties to AT&T's manufacturing subsidiary, Western Electric. The Carterfone case and subsequent liberal equipment approval policies opened up customer terminal equipment to a large variety of suppliers.<sup>98</sup> Today, one can buy a telephone for as little as four dollars on a New York City street corner.

The AT&T divestiture radically changed the market for local exchange equipment. By severing the link between the BOCs and AT&T, it freed the former from having to buy from Western Electric (now AT&T Technologies). (AT&T also markets equipment through its fully separated subsidiary, AT&T Information Systems, a relic from prior FCC attempts to deal with AT&T's market power through internal restructuring).<sup>99</sup>

Although most analysts expected the BOCs to cling to AT&T as their equipment supplier, they in fact have embraced a wide variety of non-AT&T equipment quite rapidly.<sup>100</sup> They are responsible to their state regulatory

commissions to use the least expensive qualified supplier. In one instance involving equipment allegedly affecting defense communications, the Defense Department reportedly used pressure to influence a carrier not to buy non-U.S. equipment. But the opening of the U.S. market to non-AT&T and foreign network equipment generally has been rapid.

Network standards are coordinated for the BOCs by Bell Communications Research (Bellcor). There appears to be no sign that Bellcor is using this role to favor AT&T or other U.S. manufacturers. Neither the executive branch, the FCC, nor the state commissions has shown a desire to set standards beyond those already in place.

Procurement of network equipment by local telephone companies is governed by their obligation to state regulators to pay the lowest possible prices. Pressure is on them to keep rates low, because of the loss of subsidies from long-distance service.<sup>101</sup> The ability to compare cost trends for the 22 companies also forces them to seek low-cost equipment. The "gold plating" (over-capitalization) of the past is unlikely to persist in today's environment.<sup>102</sup> Because of the divestiture, the BOCs no longer have any incentive to increase Western Electric's profits, since none of those profits are returned to the BOCs.

The opening of the U.S. telecommunications equipment market to foreign suppliers has not been matched by a reciprocal opening of foreign markets to U.S. producers, and foreign markets were affected by the high exchange rate of the dollar in the past. The U.S. balance of trade in telecommunications equipment thus has become increasingly negative, even though U.S. manufacturers have begun to sell equipment in countries such as Japan.<sup>103</sup> One response to these developments had been the introduction of proposed federal

legislation to require reciprocity; several bills are slowly moving through the Congress.<sup>104</sup> The U.S. also has exerted pressure on Japan to lower its non-tariff barriers in equipment procurement. For example, the U.S. International Trade Commission recently ruled that a number of Japanese manufacturers had "dumped" -- i.e., sold below cost -- cellular car telephones in the U.S.<sup>105</sup> The decision allows the U.S. Customs Service to increase duties on these manufacturers' products. Similar stresses are likely to develop with European countries, as they increase their U.S. market share. As has been the case in the automotive industry, one response to this problem may be for foreign manufacturers to open plants in the United States. Apparently a number of major Japanese firms are considering this option.<sup>106</sup>

#### 6. Role of U.S. Antitrust Policy

On the software side, both AT&T and the BOCs are subject to a number of significant restrictions under both the MFJ and the FCC's Computer II decision.<sup>107</sup> AT&T may not offer "electronic publishing" on its own until 1989.<sup>108</sup> Although the reason behind choosing this particular period of time is less than clear, the Department of Justice and Judge Greene, after extensive argumentation by the publishing industry, were concerned that AT&T would drive burgeoning new companies out of the software business. Furthermore, AT&T has been required since 1983 to offer all "enhanced" telecommunications services -- such as data processing or value-added networks -- only through a structurally fully separated subsidiary, under the 1981 Second Computer Inquiry. This restriction is presently under review.<sup>109</sup> Similarly, BOCs may not offer enhanced services at all, except through a "fully separated subsidiary" -- that is,

a corporation outside of the BOC's legal control -- and only with the prior approval of Judge Greene under the MFJ.<sup>110</sup>

This new competition on both ends of the equipment supply market is fully consistent with the traditional U.S. emphasis on enhancing competition through the antitrust laws. Section 2 of the Sherman Act imposes both civil and criminal liability upon any type of monopoly activity, including monopsony.<sup>111</sup> Precisely for this reason, the 1956 Consent Decree was necessary to immunize AT&T from liability, because of the "captive consumer" relationship between Western Electric and the BOCs -- a relationship with both monopoly and monopsony characteristics. Although the Antitrust Division of the Department of Justice as well as the Federal Trade Commission have primary responsibility for enforcement of the U.S. antitrust laws, the FCC and the state commissions must give at least some consideration to the antitrust aspects of regulated firms' conduct.

The effect of the antitrust laws has changed substantially with the advent of deregulation. In the past, the existence of a regulatory scheme often was held by the courts to protect a firm from antitrust liability, under the general rubric of "primary jurisdiction." As will be discussed, this doctrine has a variety of different aspects. Its central rationale, however, is simply that a court should not hold a firm liable for engaging in governmentally sanctioned activities.

"Primary jurisdiction" includes at least four major doctrines: primary exclusive jurisdiction, true primary jurisdiction, statutory exemptions, and agency immunizations.<sup>112</sup> Under primary exclusive jurisdiction, a court loses all power over a case, except the very limited ability to review any ensuing agency action. On the other hand, true primary jurisdiction gives an agency the initial

opportunity to consider a legal issue or to find facts, but reserves for the court the ultimate power to render a judgment.

A statutory exemption is simply a congressional act which bars antitrust claims against particular industries. An agency immunization has virtually the same effect of removing potential liability, but is not self-executing and must be secured from an agency. Statutory exemptions and agency immunizations thus are quite similar in terms of both policy and impact. On a state level, legislation often also creates antitrust immunity under the "state action" doctrine.<sup>113</sup>

The original statement of primary exclusive jurisdiction came in the context of protecting Interstate Commerce Commission tariffs from collateral attacks in state courts. The putative parent of the doctrine is Texas & Pacific Railway v. Abilene Cotton Oil Co.<sup>114</sup> In fact, the Court there held only that an aggrieved shipper could not challenge in state court the validity of a railroad's tariff filing with the Interstate Commerce Commission, but instead had to commence a proceeding before the Commission.

Statutory exemptions and agency immunizations create inherent problems with regulated industries, since the theories behind regulation and antitrust are naturally antithetical. Although the basic regulatory and antitrust schemes evolved at roughly the same time toward the end of the nineteenth century, the Supreme Court has recognized very properly that they represent "two regimes."<sup>115</sup> Since administrative agencies often apply anticompetitive standards, statutory exemptions and agency immunizations may result in approval of anticompetitive conduct.<sup>116</sup> Every such decision is thus at least potentially anticompetitive.

The easiest cases naturally are those in which the status of an agency's

immunization power or of an industry's statutory exemption is clear. When a court finds that an agency could not conceivably immunize a violation of the antitrust laws, the court need not consider whether the agency must pass on the conduct.<sup>117</sup> Conversely, many industries operate under express statutory exemptions from the antitrust laws.<sup>118</sup>

The situation becomes infinitely more complicated, however, either where the scope of an exemption is unclear or where an implied exemption may exist. Congress is often deliberately or carelessly vague in its language. In this area of comparatively free decision, the courts have established virtually no standards at all. The Supreme Court occasionally has suggested that immunization power should turn on whether an agency's regulatory scheme is sufficiently "pervasive." But the Supreme Court has vacillated in using even this general test, applying or ignoring it as it has wished, in order to retain or relinquish judicial jurisdiction.<sup>119</sup> The cases indicate that the Supreme Court tends to look to an agency's effectiveness in protecting some public interest other than competition.

True "primary jurisdiction" exists only where there is concurrent jurisdiction between a court and an agency. In this situation, the question is which tribunal will proceed first, rather than which tribunal will proceed.<sup>120</sup> To be sure, primary jurisdiction has some impact upon the outcome of a case; after all, if an agency uses its "expertise" to find facts, review under the substantial evidence rule will restrict a court's role greatly. (The substantial evidence rule prevents a court from reversing an agency unless the court finds that the agency made a clear and material mistake.) A court may well be able to refer a case in such a way, however, as to preserve unlimited review powers.

One of the less visible but increasingly tangible effects of deregulation has



been to remove the traditional protections of the primary jurisdiction doctrine. As federal administrative agencies -- particularly the FCC -- have removed regulatory requirements, they have opened the door to new antitrust suits. Although no definitive statistical data exists, the sheer volume of antitrust litigation has increased substantially during the last few years, particularly in the telecommunications field.<sup>121</sup> One factor naturally is the loss of many defenses or immunities. Another is the need for an alternative forum to resolve private disputes which deregulatory agencies refuse to handle. And a third is the prospect of treble damages and attorneys' fees for a successful plaintiff in an antitrust case. Indeed, some executives at regulated firms have commented informally that they would prefer returning to the old regulatory regime, rather than coping with the new antitrust regime.

## II

### DEVELOPMENTS IN U.S. REGULATION OF INTERNATIONAL COMMON CARRIERS

#### A. OVERVIEW OF DEREGULATORY POLICIES

Almost by definition, all U.S. regulation of common carriers affects their ability to disseminate to and receive information from entities in other countries. In some cases, U.S. authorities have made regulatory changes without regard to their international impacts. In other cases, however, international effects were of central importance.

The past decade has seen dramatic changes in U.S. governmental policies as to provision of telecommunications facilities and services in the United States. The most dramatic single act, of course, was the breakup of AT&T.<sup>122</sup> But other significant actions include the deregulation of subscriber terminal equipment; alternative long-distance companies; an "open-skies" policy allowing privately owned domestic satellites; use of computer technology by telecommunications networks; liberalization of international service restrictions; the opening of local exchange service to competitive "bypassers," and authorization for resale of long-distance and local telephone service.<sup>123</sup>

Because of the size of the domestic U.S. carrier market and the recognition of complexities in the international market, the United States -- primarily through the FCC -- has moved slowly to take actions relating to international telecommunications. In April, 1985, FCC Chairman Mark Fowler announced that the FCC increasingly should turn its attention to the international arena, since the Commission's work in the area of fostering competition in domestic telecommunications was winding down.<sup>124</sup> Several

recent FCC actions confirm this view. The FCC has stated that:

We also seek comment on the extent to which differences in the international market should be reflected in the extension of our competitive carrier policies to that market. In particular, would competition among U.S. international carriers be sufficient to make the international telecommunications market competitive given the presence of foreign PTTs in the provision of all international telecommunications services?<sup>125</sup>

Since the Carter administration, the FCC's philosophy has been that a government agency has neither the resources nor the expertise to make judgments about economic developments.<sup>126</sup> This approach was a radical change from more than 40 years of making just such judgments under the Communications Act, which is viewed as almost a model statute in terms of giving flexibility to regulators. Indeed, even as the Commission now is moving into uncharted deregulatory territory, the 1934 Act has changed little — except perhaps for the recent cable television amendments and the Record Carrier Competition Act of 1981.<sup>127</sup> Instead of seeking new legislation the Commission has relied on the Act's broad mandates.

In moving forward on the international front, the Commission has recognized the increasingly global nature of U.S. firms' activities, the reliance on telecommunications as an integral part of both domestic and international business, and the U.S. economy's increased focus on services rather than goods. In order to apply their policies internationally, U.S. regulators have had to deal with major differences between the domestic and international environments. Most important, the Commission has had to recognize and evaluate the role of the overseas PTT or correspondent carrier in every international telecommunications enterprise. In the United States, of course, U.S. government

policies apply to both ends of the circuit. In international telecommunications, however, a foreign PTT is at the other end, and generally has different regulatory goals than the FCC's — most significantly, to subsidize domestic systems with revenues from international service.<sup>128</sup> Competition among international carriers obviously would reduce these subsidies.

The rigid structure of international telecommunications also creates hurdles for U.S. deregulatory objectives. International service providers previously were separated from each other by segmentation of the international telecommunications market.<sup>129</sup> The sub-markets included: the distinction between undersea cable and satellite facilities; a separation between provision of voice and record services; and a differentiation between domestic and international service.<sup>130</sup>

A key FCC policy in the past was its restrictive approach to international facilities, particularly undersea cables. Although it subjected AT&T to overall rate regulation, the Commission rarely questioned any domestic facility proposal by AT&T. With regard to international facilities, however, the FCC closely scrutinized applications. Its policy was based on both AT&T's fairly large investment and pressure from Comsat to protect satellite traffic. In addition, the Commission limited the firms which could provide each type of service. It generally restricted AT&T to international measured toll service (IMTS), and limited the U.S. international record carriers -- ITT World Communications, RCA Global Communications, TRT Telecommunications, Western Union International and FTC Communications -- to non-voice service (e.g., telegram and telex). New entry into international telecommunications was virtually impossible for years, and even the FCC's efforts to permit Western Union to

provide international service required an amendment to the Communications Act.<sup>131</sup>

Not surprisingly, as its liberal domestic policies took shape, the FCC's entry and service policies for international telecommunications appeared to make less and less sense, at least from the U.S. perspective. New carriers (such as Graphnet, Telenet and International Relay) sought to enter the market; users wanted new services and options; and observers increasingly recognized that the traditional market segmentation served no apparent purpose, other than preserving market share for certain carriers and maintaining rates at a fairly high level.

#### **B. PROVIDERS OF INTERNATIONAL SERVICE**

Although foreign common carriers are free to interconnect and do business with both local and long-distance U.S. carriers, they may own only limited amounts of stock or other equity in U.S. carriers. Under the Communications Act,<sup>132</sup> a foreign individual or entity may own only twenty percent of a U.S. carrier, or twenty-five percent of a holding company of a U.S. carrier. The FCC enforces the statute rather strictly, and has looked beyond corporate structural devices -- including voting trusts, preferred stock and management contracts -- in order to find illegal alien ownership.<sup>133</sup>

This limitation obviously may be a bit anomalous, since it does not apply uniformly to all of the electronic media -- most particularly, cable television, which has many of the passive "conduit" aspects of a common carrier.<sup>134</sup> The reason for this distinction seems to be solely the historical accident that Section 310(a)'s terms apply only to broadcasting and common carriage.

AT&T continues to be the dominant provider of U.S. international message telephone service, with more than 98 percent of the market. This percentage is likely to drop, since the OCCs -- e.g., MCI and Sprint -- recently initiated international message telephone service. In the record carrier (i.e., telegraph and telex) market, ITT World Communications, RCA Global Communications, TRT Telecommunications, MCI International (formerly Western Union International) and FTC Telecommunications continue to provide most telex services. With the authorization of the Record Carrier Competition Act (RCCA) of 1981, Western Union also provides international telex service.<sup>135</sup> Most of the data traffic and the new electronic mail services are carried by voice carriers, primarily AT&T.

The RCCA was enacted to permit Western Union to re-enter the international record market, and to eliminate the artificial barriers between domestic and international record service created by Section 222 of the Communications Act. This 1943 amendment barred Western Union from providing international record service, because Congress feared that Western Union would use its domestic market power to monopolize international record service.

Within the past 10 years, additional firms -- including International Relay, Telenet, Graphnet and Consortium Communications International -- have entered the international record market. While these companies hold authorizations to provide international service, they actually use other carriers' facilities.

Regulation of facilities ownership and use still creates significant U.S. government involvement in international telecommunications. AT&T, the international record carriers, and the OCCs hold ownership interests through

"indefeasible rights of use" (IRUs) in submarine cables, and participate in U.S.-mandated "facility planning" exercises.<sup>136</sup> These are a prerequisite to FCC consideration of applications for authority to invest in and construct such facilities.<sup>137</sup> Rather than consider individual applications for international facilities, the FCC created the facilities planning process to take a comprehensive view of carriers' and PTTs' plans for submarine cables and satellite circuits. One commentator has pointed out somewhat ironically that when the FCC initiated this process, "the European administrations . . . learned that, no matter what arrangements they had made with the carriers, the FCC had the final say in their investment decisions, so they might as well deal directly with the FCC."<sup>138</sup>

The FCC has authorized new transoceanic cables, despite their siphoning of traffic for international satellite facilities. It also has begun approving the cables of new ventures, such as Tel-Optik, a consortium led by Cable & Wireless as well as E. F. Hutton.<sup>139</sup> Comsat continues in its role as U.S. Signatory to INTELSAT. Comsat is still a "carrier's carrier", in that it deals solely with U.S. carriers. Several new private satellite operators appear to be well on their way to "bypassing" it, however, by establishing their own satellites and earth stations.<sup>140</sup> Recently, Comsat established a corporate entity to provide end user services.

#### **C. CHANGES IN REGULATION OF INTERNATIONAL TELECOMMUNICATIONS SERVICES AND INTERNATIONAL SERVICE PROVIDERS**

As indicated above, over the past few years the FCC has removed many of the historical restrictions on international telecommunications and the U.S.

players. These FCC actions include the following:

1. Elimination of the voice/record dichotomy. Until recently, there was a sharp distinction between voice and non-voice service. The FCC allowed AT&T to provide voice service, but generally not to expand into the non-voice market. The dichotomy resulted partly from historical circumstances and partly from the FCC's concern in retaining a viable international record carrier industry. In 1982, however, the FCC ruled that any carrier could provide any service.<sup>141</sup> This followed a number of other decisions which gradually allowed AT&T to enter the data market and the IRCs to enter the voice market.

2. Entry of Western Union into international telecommunications. This was effected through the Record Carrier Competition Act of 1981, which repealed Section 222 of the Communications Act.<sup>142</sup> When Section 222 was enacted, Western Union had a monopoly on U.S. domestic telegraph business, and was required to divest its international operations in order to protect the other IRCs. Shortly before the RCCA's passage, the FCC had determined that Section 222 was not reciprocal -- that is, that the IRCs were free to provide domestic record service, even though Western Union could not offer international service.<sup>143</sup> The Justice Department had kept AT&T out of the domestic telegraphy since the famous "Kingsbury Commitment" of 1913, under which AT&T agreed to avoid that market.<sup>144</sup>

3. Entry of additional international carriers. In 1976 the FCC authorized Graphnet and Telenet to provide international record service, thereby allowing competitive entry into international telecommunications.<sup>145</sup> More recently, the FCC routinely has granted applications by MCI, Sprint and SBS to provide international service.



4. Extension of Computer II rules to provision of international service.

As noted before, the FCC has increased substantially AT&T's ability to provide "enhanced services" in its Computer II and Computer III proceedings.<sup>146</sup> This may have an impact on international telecommunications. Some U.S. carriers fear that deregulation of enhanced service providers would increase foreign PTTs' powers in dealing with U.S. entities, and thus result in playing off U.S. companies against each other. Since service providers are not subject to FCC authorization, they could negotiate arrangements with PTTs which did not conform to the FCC's policies for allocating costs among common carriers and BOCs. At least theoretically, an enhanced service provider thus could divert traffic and revenue from certificated U.S. carriers, and/or force them to reduce settlement rebates with the PTTs. Or a foreign company even could become a U.S. enhanced service provider. It would not be subject to alien ownership restrictions, since it would not own the transmission facilities. And it might be able to obtain preferential treatment on its home territory. Another issue is whether enhanced service providers would utilize private lines and divert revenues from the public switched networks. One response for the PTTs would be to eliminate flat-rate tariffs for private line service, as Germany already has done. Many U.S. users (such as IBM, Control Data and General Electric) utilize private lines not only to control costs for international data transmission, but also to keep transmissions confidential.

5. Applicability of deregulation of common carriers to international communications. During the past few years, the FCC has eliminated rate-of-return regulation for most common carriers except AT&T. In the Competitive Carrier proceeding, the Commission developed a doctrine of "forbearing" from

regulation, such as certification of carriers and their investments under Section 214 of the Communications Act as well as from rate regulation under Sections 201 and 202 of the Act.<sup>147</sup> The FCC determined that only a dominant carrier (i.e., AT&T) needed to -- or would be permitted to -- file tariffs. This decision still required the filing of Section 214 applications and tariffs, however, for international service.

The premise of the Competitive Carrier proceeding is that entry into and exit from the telecommunications services market need not be determined by the FCC, and that users are adequately protected by competition as well as the FCC's complaint mechanisms. The FCC thus believes that tariffs no longer are necessary to protect the public.

To this end, the FCC has increased the number of auditors in its Common Carrier Bureau from twenty-seven to eighty.<sup>148</sup> Whether this larger staff can monitor the practices of AT&T, the BOCs and the OCC, however, remains to be seen.<sup>149</sup> The effectiveness of Computer III's proposed shift from structural restrictions -- e.g., fully separate subsidiaries -- to regulatory requirements thus may depend heavily upon the Commission's ability to implement an effective supervisory procedure.

On the international front, the FCC initiated a proceeding in 1985 to consider extending some of the deregulatory Competitive Carrier findings to international telecommunications service.<sup>150</sup>

In the international proceeding, the FCC defined two separate product markets -- international message telephone service (IMTS) and non-IMTS. The Commission also proposed to examine the question of dominance on a country-by-country basis. If only one carrier provided IMTS or non-IMTS to a certain

country, it would be considered dominant and subject to rate regulation. For example, the FCC found that AT&T and the Hawaiian Telephone Company were the only dominant IMTS providers and therefore subject to full rate regulation. The FCC tentatively concluded that no non-IMTS carriers were dominant, and thus should be subject to "streamlined" regulation -- much like its "regulatory forbearance" in the domestic Competitive Carrier proceeding. The non-dominant carriers thus would need to file initial applications to serve new points, but would not require permission to activate additional circuits; instead, they would need merely to report their circuit activations twice a year. Tariffs would be presumed lawful if filed on 14 days' notice, but would not need to include supporting data.

6. Uniform Settlements Docket. The extent of U.S. government involvement in the settlement arrangements between U.S. carriers and their overseas correspondents is a critical issue for U.S. international carriers. The FCC administers a Uniform Settlements Policy, which requires all U.S. carriers to have uniform settlement rates with all other carriers for the same routes.<sup>151</sup>

When different entities provide international telecommunications service at each end of a circuit, they agree upon a division of the revenues between them. The entities create an "accounting rate" or "settlement rate" -- that is, an amount to be paid by the carrier collecting from a customer to the other carrier. The accounting rate may bear little or no relationship to the actual customer charge or "collection" rate.

As a hypothetical example, the accounting rate for the first three minutes of a telephone call between New York and Paris might be \$3.00, the charge for the call in the U.S. \$4.50, and the charge in France \$6.00. When U.S. customers

In addition to extending its pro-competitive and deregulatory policies to international services, the FCC also has sought to increase competition between types of transmission media and service providers. Prior to the advent of communications satellites, the Commission focused on authorization for and ownership of submarine cable facilities. The FCC scrutinized applications for these facilities to decide whether their need justified an increase in a carrier's rate base. Partly because investments in international submarine cables were visibly large in comparison to investments in most domestic facility applications,

#### D. FACILITIES-RELATED REGULATORY DECISIONS

U.S. consumers and prevent U.S. firms from unfavorable terms.<sup>153</sup> FCC scrutinize international accounting rates more closely, in order to protect Uniform Settlements Policy, a 1984 staff background paper suggested that the result.<sup>152</sup> Although the FCC recently has indicated interest in re-examining the collection rates would decrease or that other benefits to the public would denying the request, the Commission stated that FTCC had not shown that rates for telex service with the United Kingdom and 26 European countries. In waiver of the Uniform Settlements Policy, to allow FTCC to reduce accounting The FCC recently denied a request by FTC Communications (FTCC) for a far, the FCC has been reluctant to deviate from this policy.

call, they pay \$4.50 to AT&T, which credits \$3.00 to the French PTT. When French customers call, they pay \$6.00 to the French PTT, which in turn credits \$3.00 to AT&T. The Uniform Settlements Policy does not regulate U.S. carriers' rates on the U.S. end, but attempts to protect U.S. companies from "whip-sawing" by foreign PTTs, by requiring all U.S. carriers to pay a uniform rate. So

the Commission reviewed them closely.

AT&T, the IRCs, and other carriers used these cables and were at least theoretically subject to rate base regulation; they thus sought to obtain ownership interests in these facilities, in the form of the previously-mentioned indefeasible rights of use (IRU). The FCC concluded that it was impossible to audit the IRCs, and that no benefits would flow from rate regulation of that industry.<sup>154</sup> The carriers sought ownership interests in order to expand their rate bases and realize certain benefits under the U.S. Tax Code. These indefeasible rights of use still exist. This creation of new ownership interests in the cables (in addition to the PTTs' interests) added new parties to the negotiating process.

Further complexity resulted from the activities of INTELSAT, through Comsat. Anxious to implement the Communications Satellite Act of 1962, the FCC initially made Comsat a carrier's carrier in providing international satellite service.<sup>155</sup> The Commission also required carriers to use satellites as well as cables, in order to promote the international satellite system. The carriers preferred the submarine cables, however, because of their known technology and the carriers' ownership of the IRUs. Moreover, carriers used satellites under leases, which could not be included in a carrier's rate base.

As new carriers entered the international market and new services were offered domestically, the FCC found that flexibility was not common in the use of international facilities. The "fifty-fifty" balanced loading principle, in force since 1979, was modified to permit AT&T to carry up to 60% of its traffic on cables by 1990, with total freedom for the other carriers.<sup>156</sup> Even the remaining restriction seems fated for extinction.

Comsat's role in the use of international satellite services has come under intensive scrutiny. The mammoth Comsat Study,<sup>157</sup> identified Comsat's possible conflicts of interest and suggested several changes in U.S. firms' procurement of international satellite service. These changes authorized entities to obtain service directly from Comsat, allowed private ownership of U.S. earth stations for accessing INTELSAT, permitted direct access to INTELSAT satellites, and structured Comsat to avoid conflicts of interest in its role as U.S. signatory and monopolist.<sup>158</sup>

Perhaps somewhat ironically, one of the first issues was whether Comsat could serve end users directly -- not the question of providing greater flexibility to carriers in accessing the international satellite system. In the 1980's, the FCC implemented the Authorized User,<sup>159</sup> decision, involving the question whether the U.S. government could purchase service from Comsat rather than an international service carrier. The Commission determined that only in "unique and exceptional" circumstances could Comsat serve end users directly. Users of international television service sought to overturn this policy.<sup>160</sup> In Authorized User II,<sup>161</sup> the Commission reaffirmed its position.

Ultimately, the Commission decided that INTELSAT users could be served directly, and went on to consider a more liberal policy.<sup>162</sup> The D.C. Circuit remanded this decision to the Commission,<sup>163</sup> on the ground that the FCC had not fully considered questions of earth station ownership and direct access to INTELSAT, which the U.S. international carriers viewed as a necessary prerequisite to any expansion of Comsat's ability to provide service. Comsat also recently completed a reorganization required to provide competitive end user service.

Following enactment of the Comsat Act,<sup>164</sup> the FCC developed various policies to effectuate and protect Comsat's role as the U.S. Signatory and monopoly U.S. provider of international satellite service. A key component of this role was the construction and operation of earth stations to uplink to INTELSAT satellites. In 1966 the FCC outlined an "Interim Policy" for the ownership and operation of these stations. Comsat and the U.S. international service carriers -- AT&T and the IRCs -- would own and operate the stations jointly through a cooperative Earth Station Ownership Committee (ESOC).<sup>165</sup> This approach gave Comsat the major role in earth station management as well as investment decisions, and allowed Comsat to bundle earth station costs with space segment costs in setting rates.

Following pressure from various carriers and users, in 1982 the FCC proposed a more liberal international earth station policy.<sup>166</sup> Carriers and users wanted Comsat to separate out its space segment (satellite) and earth segment (earth station) charges; they also wanted the option of building their own lower-cost earth stations at sites with efficient access to INTELSAT. In 1984, the FCC authorized international carriers to construct and operate international earth stations.<sup>167</sup> The Commission concluded that "competition in the provision of earth services [will] enhance] intramodal competition by permitting carriers other than Comsat to own and operate earth stations."<sup>168</sup>

The Commission's new policy on international earth station ownership has some restrictions. Applicants may not receive routine action on their applications unless they propose specialized new services, such as the INTELSAT Business Service (IBS). The FCC indicated that it was unlikely to grant applications for general purpose earth stations accessing the international

satellite system. The Commission also required Comsat to separate out earth and space segment charges in order to further competition. Finally, the Commission imposed additional requirements on the phase-out of the ESOC arrangement.<sup>169</sup>

Not surprisingly, the competitive pressures that led to modifications of the earth station ownership and authorized user policies necessitated an examination of whether Comsat should continue to be the sole U.S. source of access to INTELSAT.

Even though the Commission at times has acknowledged the difficulty of extending its pro-competitive policies internationally, it has attempted to inject as much competition as possible on the U.S. side. A perhaps unforeseen development and an opportunity for furthering competition resulted from applications for satellite systems to compete with INTELSAT, and, most recently, applications for private submarine cables.

These applications follow the same procedures as any request for authorization to operate a radio frequency spectrum device under Title III of the Communications Act.<sup>170</sup> This procedure essentially requires an applicant to show its financial, legal, as well as technical qualifications, and to establish that its operation would not cause electrical interference to any other service. The only difference between an application for an international satellite facility and any other Title III application -- whether for a television station or a mobile radio -- is that a geosynchronous orbital position must be available for allocation by the FCC. The total number of available orbital slots, of course, is governed by the regulations of the International Telecommunications Union.<sup>171</sup>



In 1983, Orion Telecommunications applied for a license to build a private satellite system over the North Atlantic. Orion would launch its own satellites, and not make use of any INTELSAT facilities.<sup>172</sup> Its application was followed by filings from other companies: International Satellite, Inc. (backed by TRT); Cygnus (backed by the earth station manufacturer MA/COM); RCA Americom (for modification of a U.S. domestic satellite); and PanAmerican Satellite (for service to the Caribbean, Mexico and Latin America). These applications were opposed by foreign governments, and touched off a debate within the U.S. government concerning whether the U.S. should endorse or permit international systems to "bypass" INTELSAT. A large part of this concern emanates from provisions in the INTELSAT agreements concerning non-INTELSAT international satellite systems.<sup>173</sup>

The intra-governmental debate kept the applications pending at the FCC, and culminated in the issuance of a White Paper, intended to provide guidance to the FCC in its deliberation.<sup>174</sup> The Executive Branch's involvement in the debate probably was discretionary on its part, and not legally required in any fashion.<sup>175</sup> Although the President has a statutory role under the Act, Executive Branch participation never has been held to be mandatory. The FCC thus presumably could have proceeded on its own, since it is a legally independent agency. The Executive Branch often uses its obvious influence, however, to break regulatory logjams -- such as that involved in Orion's application.

The Executive Branch's White Paper cautiously approved the concept of separate systems, as long as they did not interconnect with public switched networks -- thus restricting them to private line service. The FCC conducted a

proceeding on the pending applications and eventually granted them, subject to limited conditions.<sup>176</sup> Not surprisingly, Comsat has opposed private satellite systems vehemently. Indeed, both Comsat and INTELSAT have sought legislation to preclude such systems or to restrict their operations.

Not to be outdone by the competitive satellite applicants, two companies -- Tel-Optik Limited and Submarine Lightwave Cable Company (SLCC) -- applied for licenses to operate international submarine cable in the U.S.<sup>177</sup> The submarine cable applications did not raise issues under the INTELSAT agreements. Moreover, the major U.S. owner of submarine cable systems, AT&T, did not file any substantial objections. The FCC thus moved expeditiously in granting the Tel-Optik application.<sup>178</sup> The Tel-Optik application proposed two cables, to be operated in conjunction with Cable & Landing in the United Kingdom, the first cable to be implemented in 1989, the second in 1992. Similar applications are pending for Pacific routes.<sup>179</sup> Apart from questions about the availability of capital, the competitive submarine cables generally face less regulatory opposition and will not be restricted as to the services they can provide.

### III

#### THE INTERNATIONAL IMPACT OF DOMESTIC U.S. RESTRICTIONS ON THE AVAILABILITY OF DATA

##### A. LIMITATIONS ON EXPORT OF DATA

As noted in Parts I and II, U.S. regulatory agencies increasingly have deregulated both domestic and international facilities for data transmission. The conduits of communication thus are less restricted than ever before.

Clearing the international channels, however, does not per se assure a free flow of information. Like other countries, the United States has many restrictions upon the availability of certain types of information--for reasons ranging from personal privacy to national security.

Indeed, the trend towards both domestic and international deregulation makes these restrictions particularly significant. With the removal of substantial impediments to international transmissions, domestic restrictions on the availability of data may become the most significant burden on the free flow of information from the United States side.

Part Three thus gives a sampling of the major domestic U.S. restrictions on the availability of data--whether for domestic or international transmission. As noted in the Introduction, no overall scheme exists for this patchwork of laws. Nevertheless, an overview is useful.

In general, the U.S. regulatory regime does not impose restrictions upon the import or export of data and data processing or similar services. There are numerous restrictions, however, on domestic use and transmission of security-related information. These regulations naturally affect international

telecommunications.

1. Technology and Technological Information

Both cooperatively with several Western bloc nations and on its own, the United States restricts the transfer of technology and technological information to hostile or non-aligned nations. This section briefly reviews the domestic and multilateral regulatory schemes for controlling the export of sensitive data. Current U.S. export controls fall into three categories:

- Nuclear information is regulated by the Nuclear Regulatory Commission (NRC) and the Department of Energy (DOE) under the Atomic Energy Act of 1954, as amended by the Nuclear Non-Proliferation Act of 1978;
- Munitions and related information is controlled by the State Department, under the Arms Export Control Act of 1976; and
- "Dual use" information and technology (e.g., information with both military and civilian applications) is regulated by the Commerce Department under the Export Administration Act of 1979.

a. Control of Atomic Energy Information. The Atomic Energy Act imposes criminal sanctions for divulging "restricted data" to unauthorized recipients.<sup>180</sup> Restricted data is:

all data concerning (1) design, manufacture, or utilization of atomic weapons; (2) the production of special nuclear material; or (3) the use of special nuclear material in the production of energy, but shall not include data declassified or removed from the Restricted Data category.<sup>181</sup>

A quirk in this law is that data remains restricted until declassified -- even if it already is in the public domain. This led to the celebrated Progressive case, in which a federal district court enjoined publication of a magazine article explaining how to build a hydrogen bomb.<sup>182</sup> This appears to be the only case in U. S. history in which a court imposed a prior restraint on a print medium.

b. Information on Munitions. Under the Arms Export Control Act, the State Department maintains a "Munitions List" and licenses the import as well as export of any items on the list.<sup>183</sup> The State Department's International Trade in Arms Regulations ("ITAR") restrict the disclosure of technical data pertaining to weapons, including "any unclassified information that can be used or adapted for use in the design, production, operation, maintenance or reconstruction" of items on the Munitions List.<sup>184</sup> The ITAR also prohibit the export of technology or information which "advances the state-of-the-art or establishes a new art in an area of significant military applicability in the United States" without State Department authorization.<sup>185</sup>

c. "Dual Use" Technology and Technical Information. Under the Export Administration Act (EAA),<sup>186</sup> the Commerce Department controls the export of commodities, technologies and data on industrial processes which affect national security, foreign policy or limited domestic resources. Technical information about industrial processes is defined in the Department's Export Administration Regulations (EAR) as "information of any kind that can be used or adapted for use in the design, production, manufacture, utilization, or reconstruction of articles or materials." This information is placed on a Commodities Control List -- an approach similar in concept to the State Department's Munitions List.<sup>187</sup> The EAR define "export" not only as the transmission of technical data outside

of the United States, but also as the verbal or written release of such data to foreign nationals within the United States. Unlike nuclear information restrictions, however, the EAR exempt public domain information from export restrictions.<sup>188</sup> The reasoning of the Progressive case thus presumably would not justify a prohibition on publication of such data.

Items on the Commodity Control List and information related to these items may be exported only with a license from the Commerce Department. "Validated licenses" are required for some exports, depending upon both the nature and destination point of an item. "General licenses" cover exports not requiring a validated license.<sup>189</sup>

Both the ITAR and EAR definitions of technical data are broad enough to require export licenses for a wide range of information. These regulations require information providers to determine whether their information includes "technical data," and whether the information will be available to aliens. If so, an information provider must obtain a license from either the Commerce or the State Department prior to disclosure. (Exemptions for material in the public domain sometimes are applicable, as noted above.) The State Department may deny, revoke, suspend, or amend licenses without notice, if it determines that such action is necessary in the interests of world peace, national security, or U.S. foreign policy.<sup>190</sup> Similar provisions apply to the Commerce Department.<sup>191</sup>

d. Multilateral Export Controls

In 1950, the United States, Canada, the United Kingdom, France, West Germany, Italy and Japan created a multilateral consulting organization to coordinate export controls for mutual security -- the Coordinating Committee

(CONCOM). This agency controls 150 items for export to the USSR, other Warsaw Pact nations, Albania, North Korea, Mongolia, Vietnam and the People's Republic of China. CONCOM reviews this list approximately every three to four years. All member nations must concur in additions to or deletions from the list. Exceptions may be obtained -- and the United States has received more than any other nation -- upon the approval of member nations.<sup>192</sup>

e. Differential Treatment of Certain Audio-Visual Materials

In 1967, the United States formally ratified a multinational agreement, the purpose of which is to promote international mutual understanding by international circulation of scientific, educational and cultural materials.<sup>193</sup> The Agreement originally was adopted by UNESCO at its third general session in Beirut in 1948 -- hence its informal name, "The Beirut Agreement". Initial implementation of the treaty by the United States was effected by a statute,<sup>194</sup> and by an Executive Order.<sup>195</sup> The United States Information Agency (USIA) has been designated by the President to implement the Agreement.

The Agreement facilitates the flow of information between signatory nations by curtailing import duties, licenses, and special taxes through the issuance of exemption certificates. Each signatory nation controls export licenses to material which originates within its borders. Even if licensed, however, incoming material is subject to an independent determination by the importing nation as to the material's educational character and exemption from import duties -- a procedure called "authentication." The Agreement requires its signatories to certify materials to be of a "scientific, cultural, or educational nature" when:

Their primary purpose or effect is to instruct or inform through the development of a subject or aspect of a

subject, or when their content is such as to maintain, increase or diffuse knowledge, and augment international understanding and goodwill; and when the materials are representative, authentic, and accurate . . . .<sup>196</sup>

Audio-visual materials covered by the Agreement include films, filmstrips, microfilms, sound recordings, slides, models, wall maps, posters, videotapes "and the like."<sup>197</sup>

The USIA implements the Agreement through a series of regulations.<sup>198</sup> Review and certification of materials is conducted by the USIA's Chief Attestation Officer (CAO). The regulations require the CAO to consult USIA and other government experts for certification or authentication of materials whenever "the desirability of substantive expertise in making a fair evaluation" is indicated.<sup>199</sup> This ad hoc review is complemented by a standing Interdepartmental Committee on Visual and Auditory Materials for Distribution Abroad, which advises the USIA on broad policy questions and evaluates specific materials. Applicants may seek formal review of CAO decisions before a Review Board of three USIA members, appointed by the Director of the USIA. Final review is through the USIA Director.<sup>200</sup>

The USIA routinely certifies materials to be of "international educational character" -- i.e., subject to duty-free import or available for export -- under the criteria of the Agreement. But it generally refuses to certify entertainment programming, spot news and propaganda materials.<sup>201</sup>

The rationale behind these exclusions from duty-free treatment is less than clear. Entertainment and spot news may be excluded by the Agreement's language that the primary goal of the material is "to instruct or inform through the development of a subject or aspect of a subject," or that its content



"maintain, increase, or diffuse knowledge."<sup>202</sup> Entertainment may have a primary purpose other than instruction; spot news does not necessarily enhance understanding of an issue.

If a program attempts to "influence opinion" or to "espouse a cause," it still may be instructive or informative.<sup>203</sup> But as the Chief Attestation Officer of the United States has noted, "if we feel that the purpose of a film is to advocate a cause or is persuasive of one point of view, that's one type of propaganda, and we deny it a certificate."<sup>204</sup> This standard may allow the USIA to deny certificates on the basis of subjective or ideological feelings.<sup>205</sup>

## B. PRIVACY

The United States has been active in protecting personal privacy against governmental intrusion. A number of laws prohibit the collection of personally identifiable data by both public and private entities in a comparatively narrow set of circumstances. A melange of federal, state and local statutes protects personal data on a piecemeal basis. In most cases, federal or state legislatures have acted upon highly particularized fears -- e.g., governmental data processing for administration of welfare payments or use of interactive cable television for audience research.

Although these restrictions mainly inhibit domestic activities, they also might impact on a variety of international transactions. For example, credit ratings on U.S. investors might not be available for overseas entities because of federal or state laws to protect personal privacy.

1. Restrictions on the U.S. Government

The Privacy Act of 1974 regulates the collection, maintenance, use and dissemination of information by federal agencies.<sup>206</sup> The Act defines a "record" as any piece, collection, or grouping of information about an individual that is maintained by a federal agency. This includes data on an individual's education, medical history, financial transactions, criminal activities or employment history, if it contains his or her name, identifying number, symbol or other identification.<sup>207</sup>

Under the Act, no agency may disclose any record to another person or agency, except pursuant to a written request by -- or with the prior written consent of -- the individual affected, unless the record falls within one of several exemptions. For example, exceptions exist if disclosure of a record would be pertinent to a civil or criminal law enforcement activity, which is authorized by law and carried out by any properly authorized U.S. law enforcement agency or pursuant to an appropriate court order.<sup>208</sup>

If an agency maintains records, an individual may gain access to any information about him or her. The agency must: (1) permit the individual to review the record and have a copy made; (2) allow the individual to request the agency to amend any such record; and (3) upon refusal to amend a record, grant an administrative review of such refusal within thirty days.<sup>209</sup> A final agency decision is reviewable, of course, in the federal courts.

An agency also may keep only such information about an individual as is relevant and necessary to accomplish the agency's goals. It must collect data from a person directly to the extent possible, if the information might result in adverse determinations about an individual's rights, benefits, and privileges under

A party to a communication may intercept the communication without violating the Act, however, unless the purpose of the interception is to commit a crime or other injurious act. The theory behind this provision is that the conversation is no longer private, because at least one participant has consented to the interception. Unless an interception is exempt, a person may be fined up to \$10,000 and imprisoned up to five years for wire tapping.<sup>214</sup> For example, agents of a common carrier may intercept wire communications in the course of their employment. And FCC employees may intercept communications while performing official duties. Law enforcement personnel may intercept communications if they have the consent of one or more of the communicating

The Omnibus Crime Control Act regulates the Government's interception of "wire" and "oral communication."<sup>212</sup> These terms have specific statutory definitions. A "wire communication" is any message conveyed wholly or partially through a wire, cable or like connection operated by a common carrier. An "oral communication" is any communication by a person who reasonably expects that his or her conversation is private and not subject to interception by third parties. An "interception" occurs when a communication is achieved through the use of mechanical, electrical or other devices.<sup>213</sup>

## 2. Governmental Interception of Wire and Oral Communications

The Act does not create a central administrative or enforcement agency. Responsibility for compliance rests with the heads of each agency. The Office of Management and Budget, however, oversees agencies' compliance with the Act's procedural guidelines.<sup>211</sup>

Federal programs.<sup>210</sup>

parties, or act with a court order.<sup>215</sup>

The use of intercepted communications as evidence in judicial, administrative, or legislative proceedings is restricted.<sup>216</sup> Evidence is not admissible in federal, state, or local proceedings if its gathering was not authorized by the Act. The Act provides for disclosure of intercepted information if it is derived from a court-authorized interception and if parties opposed to disclosure have been notified of the impending disclosure and furnished with a copy of the court order authorizing the interception.<sup>217</sup> A person may move to suppress disclosure of wire or oral communications on the grounds that the authorization for the interception was insufficient or that the interception did not conform to the authorizing order.<sup>218</sup> A person whose communication is intercepted or disclosed in violation of the law can sue the perpetrators. Good faith reliance on a court-ordered interception, however, is a complete defense to such a lawsuit.<sup>219</sup>

A court may order the interception of a communication if there is probable cause to believe that: (a) an individual is involved in one of several enumerated crimes (e.g., transmission of betting information, bribery, extortion); (b) information relating to that offense will be obtained through an interception; (c) normal investigative techniques have failed or appear unlikely to succeed; and (d) the communications at issue are commonly used by suspects in the case.<sup>220</sup> Another clause provides emergency grounds for interception without prior court approval, for communications concerning activities that threaten the national security or involve organized crime. In these cases, however, application for court approval must be made within 48 hours of the interception.<sup>221</sup>

In addition, under the Foreign Intelligence Surveillance Act, the President,

through the Attorney General, may authorize electronic surveillance to obtain foreign intelligence information without a court order.<sup>222</sup> The surveillance must be directed solely at intercepting communications between foreign powers or at acquiring technical intelligence information emanating from premises under a foreign country's exclusive control. There must be no substantial likelihood that the surveillance will intercept communications with a U.S. citizen.<sup>223</sup> Where communications of U.S. citizens are involved or are likely to be involved, surveillance cannot be undertaken without court approval.<sup>224</sup> The Attorney General may direct a common carrier to furnish all information, facilities or technical assistance necessary to carry out surveillance, and to keep records of the communications under strict security procedures.<sup>225</sup>

### 3. Government Access to Financial Data

The Right to Financial Privacy Act of 1978 generally denies government authorities access to customer financial information held by banking and other financial institutions.<sup>226</sup> But exceptions exist, such as: authorization by the customer; compliance with an administrative subpoena, a valid search warrant, or a court order, or a formal written request.<sup>227</sup> All of these activities must further a legitimate law enforcement inquiry in order to create an exemption.

A government agency must notify the subjects of an inquiry that their financial records are being sought, and disclose the purpose of the request. A person subject to an inquiry may challenge the inquiry in federal court, on the ground that the information sought is not relevant to a legitimate law enforcement inquiry.<sup>228</sup> The Government may obtain a court order for direct access without notice, upon a showing that notice would allow the subject party

to flee or to destroy evidence.<sup>229</sup> Upon receipt of financial records, one government agency may not disclose them to another agency without notifying the subject party and without a certification from the receiving agency that the records are relevant to a legitimate law enforcement inquiry.<sup>230</sup>

#### 4. Electronic Funds Transfer Act

The Electronic Funds Transfer Act (EFTA) requires financial institutions to inform their customers about their rights and obligations for EFT services.<sup>231</sup> It provides procedures for resolving inaccuracies in customer accounts, and penalties for banks' errors in transmitting or documenting EFT transactions.

The EFTA defines an "electronic funds transfer" as any transfer of funds initiated through an electronic terminal, telephonic instrument, computer or magnetic medium (e.g., tape, disc, RAM) to authorize a financial institution to debit or credit an account. This includes point-of-sale transfers, automated teller machine transactions, direct deposits or withdrawals, and transfers by telephone.<sup>232</sup> The Act covers state or national banks, state or federal savings and loan associations, mutual savings banks, state or federal credit unions, or any other entity which directly or indirectly holds customer accounts.<sup>233</sup>

The Act requires a financial institution to disclose the terms and conditions of EFT accounts when a consumer orders EFT service, including information on issues such as: the consumer's liability for unauthorized transfers; the types of services offered; rates for all services; the institution's liability to the consumer; and the conditions under which EFT consumer information will be disclosed to third parties.<sup>234</sup> The consumer is liable for an unauthorized EFT transaction if it took place either with an access card or device issued by the institution for

5. Private Collection of Credit and other Financial Information

The Fair Credit Reporting Act (FCRA) regulates the information-gathering and disclosure practices of "consumer reporting agencies" (CRAs), and the use of "consumer credit reports".<sup>239</sup> A "consumer reporting agency" is "any person which, for monetary fees, dues, or on a nonprofit cooperative basis regularly engages in whole or in part in the practice of assembling or evaluating consumer credit information or other information on consumers for the purpose of furnishing consumer reports to third parties."<sup>240</sup> If businesses gather but do not disclose information to third parties, or disclose only information about their own dealings with a consumer, they are not deemed to be "reporting agencies." A "consumer report" is "any written, oral, or other communication by a consumer reporting agency bearing on a consumer's credit worthiness, character, general

A financial institution is liable to a consumer for failure to comply with the Act's provisions. But an unintentional violation -- that is, a bona fide error which took place despite all reasonable precautions -- does not create liability.<sup>237</sup> Compliance with EFTA's provisions is enforced by the Comptroller of the Currency, the Federal Reserve Board, the Federal Deposit Insurance Commission, and other federal agencies.<sup>238</sup>

insufficient funds in the account or force majeure.<sup>236</sup>

does not exceed fifty dollars.<sup>235</sup> A financial institution is liable for failing to make a transfer in the correct amount or time period, if it had proper instructions from the consumer -- subject to exceptions, of course, such as EFT transactions, or through a code or other means of access issued by the institution. A consumer's liability for an unauthorized transaction, however,

reputation, personal characteristics, or mode of living . . . to be used as a factor in establishing a consumer's eligibility for: credit or insurance, employment, government benefits or licenses or business transactions."<sup>241</sup>

A consumer reporting agency may furnish a financial report under the following circumstances:

1. in response to a valid court order;
2. with the consumer's permission;
3. to parties which intend to use the information for a consumer credit transaction (e.g., extension of credit, review or collection of an account) or for employment purposes;
4. for underwriting insurance for a consumer;
5. to parties using the information to determine a consumer's eligibility for a government license or benefit; or
6. to parties with a legitimate business need for the information in connection with a business transaction with the consumer.<sup>242</sup>

A CRA need not allow consumers to see their files, but must disclose to them the "nature and substance" of all information (except medical information) in its files, the source of the information, and any third-party access to the data within the last six months. The Act prohibits reporting of obsolete information -- e.g., paid tax liens which antedate the report by seven years.<sup>243</sup>

Consumers may dispute the contents of their file.<sup>244</sup> Upon the verification of discrepancies, the agency must delete inaccuracies and notify



parties who had received the information.<sup>245</sup> If a third party denies credit, insurance, or employment to a consumer on the basis of a CRA's report, the third party must identify the CRA to the consumer.<sup>246</sup>

Willful noncompliance of these provisions by CRA or third parties creates liability for actual and punitive damages.<sup>247</sup> Negligent noncompliance also gives rise to liability. The Act's requirements are enforced primarily by the Federal Trade Commission and secondarily by the Federal Deposit Insurance Corporation, the Comptroller of the Currency and others.<sup>248</sup>

## 6. Collection of Information by Cable Television Systems

### a. Federal Law

The Cable Communications Policy Act of 1984 is a general codification of cable television law, including provisions on subscriber privacy.<sup>249</sup> The Act requires cable operators to give initial and thereafter annual written notice to cable subscribers, informing them of: (1) the type of personally identifiable information to be collected on them and the nature of its use; (2) the nature, purpose, and frequency of disclosure of such data, as well as the types of persons to whom disclosure will be made; (3) the time period during which data will be maintained by the operator; and (4) the times and places at which subscribers can examine this information.<sup>250</sup>

The Cable Act prohibits a cable operator from collecting personally identifiable information concerning any subscriber without the subscriber's prior written or electronic consent.<sup>251</sup> For example, on an interactive or two-way system, a computer might need to ask subscribers whether they consented to release of information about their transaction before processing transaction

requests. Without a subscriber's consent, a cable operator may collect only data necessary to render cable service or to detect unauthorized reception of cable communications.<sup>252</sup>

A cable operator may not disclose personally identifiable information about subscribers without their consent.<sup>253</sup> An exception to this prohibition exists if disclosure is necessary to conduct a legitimate cable television business activity, or is pursuant to a court order after the subscriber has received notice of the order.

Cable subscribers have access to all information about them maintained by a cable operator.<sup>254</sup> A subscriber must have a reasonable opportunity to correct any error in such data. A cable operator must destroy personally identifiable information which is no longer necessary.<sup>255</sup> Any person aggrieved by a cable operator's violation may bring a civil action in a federal district court. The court may award punitive as well as actual damages, and reasonable attorneys fees as well as litigation costs.<sup>256</sup>

As a corollary to a subscriber's access rights, a government agency may obtain information about a subscriber only if it shows a court through clear and convincing evidence that the subject of the request is reasonably suspected of engaging in criminal activity, and that the information would be material evidence in the case. In any event, the subscriber has a right to contest the government's claim.<sup>257</sup>

The Act does not prevent state or local franchising authorities from enacting or enforcing laws consistent with the Act, in order to protect subscriber privacy.<sup>258</sup> A number of states and cities in fact do so, as discussed below.

b. State Law: The Wisconsin, California, and Illinois Examples

Under Wisconsin law, upon a subscriber's request, any terminal capable of transmitting a message from a subscriber's location to an operator's central processing facilities must provide the subscriber with equipment to prevent transmission of such messages -- except for signals necessary to monitor security, fire and utility services.<sup>259</sup> A cable operator must notify each subscriber in writing of the availability of such devices, and may not make any additional charge for them.<sup>260</sup>

Unless an operator obtains the written consent of a cable subscriber every two years, an operator may not: (1) monitor the subscriber's cable equipment or use, except for purposes of billing or of checking the system's technical performance; (2) disclose information on a subscriber's personal behaviour, including individual viewing habits, finances, or programming preferences; or (3) conduct research that requires subscriber response (except by mail or personal interview), unless the subscriber has been notified in writing before the research begins.<sup>261</sup> Violators are subject to a forfeiture of up to \$50,000 for a first offense, and \$100,000 for subsequent offenses.

The Illinois Communications Consumer Privacy Act makes it unlawful for a cable operator to: (1) observe activities in a subscriber's household without the subscriber's knowledge or permission; (2) provide lists of subscribers without prior notice to them; (3) disclose subscribers' television viewing habits without their prior consent; or (4) install a home security device without the resident's express written consent.<sup>262</sup> Violations of the Act are punishable by fines of up to \$10,000.

California prohibits cable operators from recording or monitoring

conversations without the subscriber's express written consent. A cable operator also may not disclose any individually identifiable information — such as a subscriber's viewing habits, shopping choices, interests, opinions, banking data, or any other personal or private information — without the subscriber's written consent.<sup>263</sup>

The California statute also prohibits a cable operator from giving individually identifiable subscriber data to government agencies in the absence of legal compulsion, such as a court order or subpoena. An operator must notify a subscriber of the nature and origin of any request prior to disclosing information, unless otherwise prohibited by law.<sup>264</sup>

Individually identifiable subscriber information gathered by a cable operator must be made available for subscriber inspection. If a subscriber shows that the information is inaccurate, an operator must correct the data.<sup>265</sup> A cable operator must notify all subscribers of their privacy protections.<sup>266</sup>

#### 7. Unauthorized Interception of Programming

The Communications Act includes a general prohibition on the unauthorized interception and commercial exploitation of signals not transmitted to the general public.<sup>267</sup> Divulging the contents of these signals to third parties without the sender's consent violates the Act. The prohibition does not apply, however, to radio communications relating to ships, aircraft, vehicles, or persons in distress, or transmitted by amateur or citizens band operators.

As amended by the Cable Act, Section 705 also prohibits the interception of channels on a cable television system without the program supplier's specific authorization. In effect, it creates a federal "theft of service" statute, to prevent

viewers from receiving programming without paying for cable service. The severity of criminal penalties for violating this section depends on the nature of the intercepted signal. Willful violations for personal use may result in fines of up to \$1,000 and imprisonment for up to six months. But if a person willfully intercepts signals for purposes of "commercial gain" (e.g., to attract customers to a restaurant), he or she is liable for fines of up to \$50,000 and imprisonment for up to two years.

Along somewhat similar lines, another Cable Act amendment attempts to create a new "marketplace" system for cable and other programming transmitted by satellite.<sup>268</sup> Most cable channels -- such as the pay channel, Home Box Office (HBO) -- are transmitted via satellite and intended for receipt only by cable television operators, who then resell them to their subscribers. Many viewers have bought inexpensive -- \$1,000 to \$2,000 -- satellite receivers, in order to pick up these signals for free. Section 705 now allows reception of programs if they are not encrypted and if a "marketing system" is not established by the national programming source, such as HBO.

If a marketing system has been established, a user may receive such programming upon paying the programmer for a license.<sup>269</sup> Unauthorized private viewing of these signals is punishable by a fine of up to \$1,000 and imprisonment for up to six months. If people intercept these signals without authorization and for commercial gain, however, they may be fined up to \$50,000 and imprisoned for up to two years.<sup>270</sup> Violators face civil liability for all revenues received by their interceptions. Programmers also may seek injunctions and damages.

In practice, the unauthorized reception of satellite transmissions has been

growing by leaps and bounds, particularly in rural areas that are not served by cable television. Some observers believe that almost 2,000,000 homes now have satellite receivers.<sup>271</sup> Satellite programmers recently adopted a uniform scrambling protocol, however, and will begin encrypting their signals in 1986 -- a move which naturally will force viewers to buy service from the programmers.<sup>272</sup> The trend appears to be that local cable operators will sell programming for satellite reception within their operating areas, thus adding a new revenue flow to their operations.

### C. ANTI-ESPIONAGE LAWS AND CLASSIFIED INFORMATION STATUTES

U.S. law contains a large number data classification provisions relating to espionage.<sup>273</sup> An intensive discussion of these provisions is neither feasible nor appropriate. Nevertheless, a brief description of several major provisions may be in order, since all of them impact upon the availability of data for international transmission.

The Espionage Act imposes fines of up to \$10,000 and imprisonment for up to ten years on persons convicted of engaging or conspiring to engage in three broad categories of proscribed activity.<sup>274</sup> The terms of the Act are quite comprehensive in scope. They include the following.

#### I. Gathering, Transmitting, or Losing Defense Information.

It is illegal to obtain information regarding national defense by entering military installations, government buildings or research laboratories, or by intercepting defense-related telephone, telegraph, or radio transmissions.<sup>275</sup> Unauthorized copying or other obtaining of documents, plans, photographs and

items connected with the national defense also violates the Act.<sup>276</sup> If a person receives or attempts to receive illegally procured national defense materials, he or she is in violation of the Act.<sup>277</sup> If people with lawful access to defense-related materials communicate such information to unauthorized persons or fail to deliver such information to an authorized U.S. official, they also violate the Act.<sup>278</sup>

2. Delivering Defense Information to Foreign Governments.

If people have reason to believe that information in their possession may be used to jeopardize national security, they may not communicate it to any foreign government or its agents.<sup>279</sup> Violation of this section is subject to punishment by death or life imprisonment. Attempting to communicate defense and security-related information to an enemy in wartime may be punished by execution or life imprisonment.<sup>280</sup>

3. Disclosure of Classified Information.

The law prohibits any knowing communication to unauthorized persons of classified information concerning: (1) the nature, preparation, or use of any U.S. or foreign code, cipher, or cryptographic system; (2) the design, construction, or use of U.S. or foreign cryptographic or intelligence-related devices; (3) the communications intelligence activities of the United States or any foreign government; or (4) confidential communications of foreign governments.<sup>281</sup>

## CONCLUSION

This survey of restrictions on data flows out of or into the United States shows that such restrictions are relatively limited and are diminishing outside the area of national security. Historically, the United States has exercised some control over international communications by regulation of the channels of communication, rather than of the content of the communications themselves. This regulation was premised initially on the scarcity of electromagnetic spectrum and later of geosynchronous orbit positions. Coupled with the absence of a governmental monopoly, this scarcity necessitated an allocation among private firms. The regulation of communications channels, in turn, focused primarily on industry structure rather than of behaviour, on the grounds that structure determines behavior and that structural regulation avoids free speech problems under the first amendment of the U.S. Constitution.

Historically, U. S. policy in international telecommunications had been to carve up the market into district segments, each assigned to different types of carriers. Underlying the restrictive licensing scheme was the desire to regulate behavior and at least partly to limit AT&T's power, by restricting it to the voice market, regulating its rates, and insulating the international record carriers from competition. When satellite communications emerged as a potential disruption to this system, fear of AT&T's expanding powers led the U.S. government to create Comsat as a monopoly, initially serving as a carriers' carrier without any competition for users' business.<sup>282</sup>

This system of neat, compartmentalized service categories functioned as a cartel mechanism by dividing markets and separating competitors from each



other. Partly because it was profitable, it proved unstable when its underlying conditions changed, namely when: (a) voice and record service distinctions broke down as telephone carriers became major data carriers; (b) new entrants did not conform to traditional market divisions; (c) transmission capacity grew and costs fell rapidly through high-capacity satellites as well as submarine cables; and (d) government policies opened competition in domestic telecommunications, dismembered AT&T and extended deregulation to the international sector.<sup>283</sup>

These factors combined to eliminate in rapid succession many of the structural rules that had characterized U.S. communications. The few remaining rules also may change in the future, along with INTELSAT's position. The United States is in transition to an environment in which carriers -- such as AT&T, MCI, GTE, SBS, RCA, ITT, Western Union, Comsat, Telenet, and Orion -- will compete to provide all types of domestic as well as international transmission services, with little governmental supervision except for initial frequency and orbital allocations.<sup>284</sup>

The limit on this scenario, of course, is the necessity of accommodation with overseas carriers and governments, which do not share the United States' competitive views for reasons of ideology, politics, or economics. The United States faces in every international telecommunications body a front that includes most of its traditional allies and trading partners. At the same time, the competition among U.S. carriers allows those countries' telecommunications authorities to play off U.S. carriers against each other, thus transforming a previously bilateral monopoly situation into a unilateral one.

At the extreme, foreign carriers could enter the U.S. market by connecting with local BOC exchange companies; they thus could bypass U.S. long-distance

and international carriers while discriminating against the latter's access in their home territories. In this situation, a variety of U.S. measures -- such as the "anti-whipsawing" rules -- may survive and even expand. While inconsistent with true deregulation, these rules would be a rational response to the realities of an international environment that prevents a unilateral deregulation in a multilateral world.

With these caveats, most U.S. regulation of transmission channels and market segments is about to disappear. In terms of regulation of international communication flows, this leaves primarily those restrictions that also affect domestic communications. In other words, the international effect is merely an extension of domestic law, including special provisions as to national security. Among the former category--that is, general restrictions on informations flows--are the following, which for purposes of brevity have not been discussed in this paper:

- (a) privileged information (such as medical or accounting data);
- (b) defamation;
- (c) proprietary information, protected by copyright or contract;
- (d) financial information, which the financial securities laws may require to conform to certain standards of completeness, timeliness, and accuracy;
- (e) false advertising;
- (f) obscenity and indecency;
- (g) information that can be construed to be part of the unauthorized practice of a profession requiring a license;
- (h) information violating people's privacy, appropriating their likeness or

personality, holding them up to ridicule, causing mental and emotional distress, and interfering with their civil rights;

(i) "fighting words", that are likely to provoke an immediate violent response;

(j) advocacy of violent behavior, where such behavior is imminent, intended, and likely;

(k) advertising of controlled products and services, such as liquor, cigarettes and gambling;

(l) the manner of political speech, in instances where public campaign financing is accepted; and

(m) in general, regulation concerning the reasonableness of time, place and manner of information dissemination. For example, the provision of sexually oriented "adult" pornographic telephone tape messages outside of evening hours may be limited.

While these general categories of restrictions exist, they almost never prohibit information flows in advance. Only after such dissemination has taken place can an injured individual or the state seek damages or penalties.<sup>285</sup> Exceptions to this principle against "prior restraints" are obscenity, some national security threats, and imminent danger of violence. Most of the other restrictions listed above are interpreted very narrowly, and are difficult to enforce because of the presumption in favor of free speech. The major exception is securities trading regulations, that control dissemination and use of stock market related information. These restrictions recently have become subject to constitutional challenge under the free speech clause of the U.S. constitution.<sup>286</sup>

All of these restrictions affect information flows into or out of the U.S. Their scope is in continuing flux because of vague statutes and regulations, which are subject to judicial common law case-by-case review. While it is difficult to generalize, the past trend was to limit restrictions on information flows, and it has continued under the current Supreme Court.

The major restriction on international and U.S. domestic information flows lies in the area of national security. Unilateral and cooperative restrictions on the transfer of technological and strategic information to non-allied countries exist in a variety of forms, and their enforcement has received priority in recent years. These regulations center on nuclear information, arms information, and dual use (civilian and military) information. Multinational coordination attempts to harmonize Western efforts.<sup>287</sup>

Concerning the protection of data privacy, there is a frequent but erroneous view that such protections are weak or non-existent in the United States. There is no comprehensive national statute, possibly because of a general U.S. reluctance for centralized legislation. The thrust of U.S. protection is to restrict, through piecemeal legislation, governmental intrusion into personal data by requiring search warrants, notification, opportunity to challenge searches, access by individuals to information about themselves and the right to correct such data. Restrictions on private collection of data are more lax, where the information is not distributed to third parties. Here the underlying assumption is that an individual seeking credit or employment relinquishes some privacy in order to reduce transactions costs. But consumers have access to credit files kept on them, and employers cannot divulge information freely.<sup>288</sup>

Some characteristics of U.S. international communications regulation conflict both with each other and with other industrialized countries' policies.

These characteristics are:

- (a) withdrawal of the governmental role in establishing channels of communications and encouragement of competition;
- (b) freedom of speech (tempered by common law and regulatory safeguards of special policy concerns)
- (c) national security;
- (d) acceptance of private data collection as an integral part of economic activity; and
- (e) support of the commercial activities of U.S. firms internationally.

As befits this multiplicity of goals, there are not enough "degrees of freedom" to structure a consistent and stable policy, nor is every goal achieved in a pure form. Hence, foreign critics easily can point to inconsistencies as a sign of ideological hypocrisy or commercial greed. As Ralph Waldo Emerson said, however, "A foolish consistency is the hobgoblin of little men."<sup>289</sup> It is precisely in the nature of the common law and of a federal state that policies emerge piecemeal, without necessarily being coordinated in time and purpose.

On the other hand, such a mechanism permits frequent adjustment. Indeed, U.S. policies on information and telecommunications have changed quite rapidly in the past 15 years, with virtually no major legislation. Overall, the tendency clearly has been towards withdrawal of the governmental role. In the international sphere, the concurrent stress on national security has been the major counter-trend.

This is not ideological inconsistency; even most advocates of a minimalist state seek a strong protective role for government in foreign affairs. But it creates practical problems, as well as the need to negotiate with foreign governments on international communications matters. It keeps the U.S. government active in communications regulation, and provides a built-in friction with its allies which is not likely to disappear in the near future.

FOOTNOTES

- \* Visiting Professor and Co-Director, Center for Telecommunications and Information Studies, Columbia University Graduate School of Business. B.A., 1966, Wesleyan University; J.D., 1969, Cornell University; LL.M., 1972, Columbia University; J.S.D., 1979, Columbia University.
- \*\* Associate Professor and Co-Director, Center for Telecommunications and Information Studies, Columbia University Graduate School of Business. A.B., 1970, Harvard University; A.M., 1970, Harvard University; J.D., 1975, Harvard University; Ph.D., 1975, Harvard University.

The authors gratefully acknowledge the contributions of Leslie Taylor, Esq. in preparing Section II, and of Mr. W. Edward Singletary in preparing Section III.

1. E.g., S. Nora & N. Minc, Informatization de la Societe (1980).
2. E.g., Griswold v. Connecticut, 381 U.S. 479 (1965).
3. E.g., A. Westin, Privacy and Freedom (1967).
4. 47 U.S.C. §§ 214, 301 (1982).
5. E.g., FCC v. Midwest Cable Co., 440 U.S. 369 (1979).
6. E.g., N.Y. Exec. L. § 811 et. seq. (1979).
7. E.g., New York City, Charter § 362 (1985).
8. See Government Services Administration; Government Organization Manual (1985).
9. See discussion in text at n.27 et. seq., infra.

10. See S. Simon, After Divestiture (1985).
11. See discussion in text at n.52, infra.
12. Hush-a-Phone v. FCC, 238 F.2d 266 (D.C. Cir. 1956).
13. See L. Sullivan, Antitrust 751 et. seq. (1977).
14. 47 U.S.C. § 151 et. seq. (1982).
15. E.g., E. Krasnow, L. Longley, & H. Terry, The Politics of Broadcast Regulation (3d ed. 1982).
16. 47 U.S.C. § 153(h) (1982).
17. National Ass'n of Regulatory Utility Comm'rs v. FCC, 525 F.2d 630 (D.C. Cir.), cert. denied. 425 U.S. 992 (1976).
18. W. K. Jones, Cases and Materials on Regulated Industries (2d ed. 1976).
19. E.g., 47 U.S.C. § 152(a) (1982).
20. E.g., N.Y. Public Service L., art. 8 (1979).
21. 47 U.S.C. § 214 (1982).
22. E.g., 47 U.S.C. § 223 (Supp. 1985).
23. E.g., Handler, Regulation vs. Competition, 44 U. Cin. L. Rev. 191 (1975).
24. 47 U.S.C. § 152(a) (1982).
25. W. Bolter, Telecommunications Policy for the 1980's (1984).
26. FPC v. Hope Natural Gas Co., 320 U.S. 591 (1944).
27. See discussion in text at n.30, infra.
28. W. Bolter, supra n.25, at 174 et. seq.
29. See discussion in text at n.54 et seq., infra.
30. United States v. AT&T, Civ. No. 74-1698 (D.D.C. 1984), modifying United States v. Western Electric Co., Inc., Civ. No. 17-49 (D.C.N.J. 1956).
31. U.S. West, Inc. v. FCC, Civ. No. 84-1448 (D.C. Cir. 1985).



32. See Amendment of Section 64.702 of the Commission's Rules and Regulations (Computer II Inquiry), 77 FCC 2d 384 (1980); 84 FCC 2d 50 (1980); 88 FCC 2d 512 (1981); aff'd. sub. nom. CCIA v. FCC, 693 F.2d 198 (D.C. Cir. 1982).
33. See Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), 77 FCC 2d 384 (1980); 84 FCC 2d 50 (1980); 88 FCC 2d 512 (1981); aff'd sub. nom., CCIA v. FCC, 693 F.2d 198 (D.C. Cir. 1982).
34. E.g., Remarks of Dr. Alan Pearce, in New York City, December 12, 1985.
35. Computer III, Docket No. 85-229, FCC 85-397 (August 16, 1985).
36. See Marks & Casserly, An Introduction to the FCC's Third Computer Inquiry, The Computer Lawyer, October, 1985 at 1 et. seq.; Wiley & Polsky, Understanding the Computer III Inquiry, Telematics, November, 1985 at 3 et. seq.
37. 47 C.F.R. § 21.900 (1985).
38. See discussion in text at n.22, supra.
39. 47 U.S.C. § 301 (1982).
40. 47 U.S.C. § 315 (1982).
41. 47 U.S.C. § 301 (1982); e.g., 47 C.F.R. 95.401 et. seq. (1985) (Citizens Band radios).
42. FCC v. Midwest Video Corp. 440 U.S. 689 (1979).
43. E.g., Southwestern Cable Co. v. FCC, 392 U.S. 157 (1968).
44. 47 U.S.C. § 601 et. seq. (Supp. 1985).
45. E.g., 47 U.S.C. § 315 (1982).
46. 47 U.S.C. § 214 (1982).

47. 740 F.2d 1190 (D.C.Cir. 1984).
48. Id. at 1194.
49. Id. at 1207.
50. Notice of Proposed Rulemaking, \_\_\_ FCC 2d \_\_\_ (Oct. 4, 1985).
51. 47 U.S.C. § 402(b) (1982).
52. 47 U.S.C. § 402(a) (1982).
53. 47 U.S.C. § 402 (1982).
54. For a general description, see W. Bolter, supra n.25.
55. Noam, The "New" Local Communications, \_\_\_ Computer L.J. \_\_\_ (1986).
56. E.g., D. Irwin, Telecommunications Regulatory Monitor II-29 et. seq. (1985).
57. Davis, Making Sense of the Telecommunications Circus, High Technology, September, 1985, at 22-25.
58. Davis, supra n.57, at 22.
59. See discussion in text at n.166 et seq., infra.
60. See discussion in text at n.174, infra.
61. W. Bolter, supra n.25, at 178 et. seq.
62. Davis, supra n.57, at 22.
63. 47 U.S.C. § 613(b) Supp. (1985).
64. See discussion in text at n.54, supra.
65. E.g., S. Simon, supra n.10.
66. E.g., N.Y. Pub. Serv. L. § 92 (1979).
67. E.g., 47 U.S.C. § 214(a) (1982).
68. E.g., Universal Payphone, 58 P&F RR 2d 76 (1985).
69. Id. at II-38 et. seq.

70. D. Irwin, supra n.56, at II-13 et. seq.
71. Report and Order, CC Docket Nos. 78-72, 80-286 (1985).
72. C. F. Phillips, The Regulation of Public Utilities, 331 et. seq. (1985).
73. E.g., 47 C.F.R. Part 68 (1985).
74. D. Irwin, supra n.56, at II-38 et. seq.
75. 47 U.S.C. §§ 201, 202 (1982).
76. 47 U.S.C. §§ 203, 204, 205 (1982).
77. 47 U.S.C. § 203 (1982).
78. D. Irwin, supra n.56, at II-38 et. seq.
79. 47 U.S.C. § 301 (1982).
80. Id.
81. St. Louis Terminal Ass'n v. United States, 224 U.S. 383 (1912).
82. L. Sullivan, Antitrust 125 (1977).
83. United States v. Associated Press, 326 U.S. 1 (1945).
84. E.g., J. Henry, The Economics of Pay-TV Media, in Video Media Competition 19 et. seq. (E. Noam ed. 1985).
85. Noam, Federal and State Roles in Telecommunications: The Effect of Deregulation, 36 Vanderbilt L. Rev. 949 (1983).
86. 537 F.2d 787 (4th Cir. 1976), cert. den. 429 U.S. 1027 (1976).
87. See discussion in text at n.58, supra.
88. Remarks of Mr. William McGowan, President, MCI, before IDATE, Montpellier, France, October 23, 1984.
89. 47 U.S.C. § 310(a) (1985).
90. See discussion in text at n.54, supra.
91. 47 U.S.C. § 234 (1982).

92. E.g., Report and Order, 93 FCC 2d 701 (1983).
93. 47 U.S.C. § 201 et. seq. (1982).
94. 47 C.F.R. Part 68 (1985).
95. 47 C.F.R. § 68.2(a)(1),(2),(3),(4) (1985).
96. 47 C.F.R. § 68.200 (1985).
97. 13 FCC 2d 420 (1968).
98. E.g., Universal Payphone, 58 P & F RR 2d 76 (1985).
99. E.g., CCIA v. FCC, 693 F.2d 198 (D.C. Cir. 1982).
100. Computer World, March 14, 1984, at 63.
101. See discussion in text at n.56, supra.
102. C. F. Phillips, The Regulation of Public Utilities 633-634 (1984).
103. Communications Week, December 30, 1985, at 1, 18; Communications Week, December 23, 1985, at 1.
104. Communications Week, December 2, 1985, at 8.
105. Communications Week, December 9, 1985, at 10.
106. Interview with Mr. Michael Lactorin, Analyst, DAIWA Securities, Inc., in New York City, June 18, 1985.
107. See discussion in text at n.33, supra.
108. 1982-2 Trade Cases, p. 73,146.
109. See discussion in text at n.33, infra.
110. 1982-3 Trade Cases p. 73.126.
111. 15 U.S.C. § 2 (1982).
112. McGovern, Types of Questions Over Which Administrative Agencies Do Not Have Primary Jurisdiction, 13 ABA Antitrust Section 57, 61 (1958).
113. Parker v. Brown, 317 U.S. 341 (1943).

114. 204 U.S. 426 (1907).
115. Pan American World Airways, Inc. v. United States, 371 U.S. 296, 310 (1963).
116. Hughes Tool Co. v. Trans World Airlines, Inc., 409 U.S. 363 (1973).
117. See Maryland & Va. Milk Producers Ass'n v. United States, 362 U.S. 458, 474-71 (1960); United States Alkali Export Ass'n v. United States, 325 U.S. 196, 204-06 (1945).
118. Walden, Antitrust in the Positive State, 41 Texas L. Rev. 741, 767-88 (1963).
119. E.g., United States v. Radio Corp. of America, 358 U.S. 334, 348-51 (1959).
120. See Comment, New Twists on Old Wrinkles: Primary Jurisdiction and Regulatory Accommodation with the Antitrust Laws, 15 B.C. Ind. & Comm. L. Rev. 80 93-94 (1971).
121. See Phillips, supra n.72, at 670-683.
122. Telecommunications Regulation Today and Tomorrow (E. Noam (ed., 1982).
123. E.g., Hush-a-Phone v. FCC, 238 F.2d 266 (D.C. Cir. 1956); Carterphone, 13 FCC 2d 420 (1968), recon. den. 14 FCC 2d 571 (1969); Customer Interconnection, 61 FCC 2d 766 (1976); see also North Carolina Utilities Commission v. FCC, 537 F.2d 787 (4th Cir. 1976), cert. den. 429 U.S. 1027 (1976). Specialized Common Carriers, 29 FCC 2d 870 (1971), aff'd sub nom., Washington Utilities and Transportation Commission v. FCC, 513 F.2d 1142 (9th Cir. 1975); Domestic Satellites, 35 FCC 2d 844 (1972), aff'd sub. nom. Network Project; Shared Use of Common Carrier Services, 60 FCC 2d 261 (1976), recon. den. 62 FCC 2d 588(1977), aff'd sub nom., AT&T v. FCC, 572 F.2d 17 (2d Cir. 1978), cert. den., 439 U.S. 875 (1978).

124. Remarks of Hon. Mark Fowler, U.S. Global Telecommunications: The Popcorn Principle, Washington, D.C. February 26, 1985.
125. See Notice of Proposed Rulemaking re International Competitive Carrier Policies, 100 FCC 2d 1270, 1271 (1985).
126. E.g., Fowler, The Public's Interest, 4 Communications and the Law 51 (1982).
127. 47 U.S.C. § 222; 95 Stat 1687 (1981).
128. R. Ewald, The Deregulation of International Communications 245 et. seq. (1985).
129. Noam, Telecommunications Policy on the Two Sides of the Atlantic: Divergence and Outlook, in Economic Policy Towards Telecommunications in the Industrialized Countries (M. Snow, ed. 1986).
130. Goldberg, One Hundred and Twenty Years of International Communications, 37 Fed. Comm. L. J. 131 (1985).
131. 47 U.S.C. § 222 (1982); 95 Stat. 1687 (1981).
132. 47 U.S.C. § 310(a) (1982).
133. E.g., Airsignal Corporation, 81 FCC 2d 472 (1980).
134. E.g., Notice of Proposed Rule Making, 56 FCC 2d 159 (1975).
135. 47 U.S.C. § 222 (1982); 95 Stat 1687 (1981).
136. Ewald, supra n.125, at 259 et. seq.
137. Third Notice of Inquiry, CC Docket 79-184, August 3, 1984.
138. Goldberg, supra n.127, at 145.
139. Report and Order, 100 FCC 2d 1033 (1985).
140. See discussion in text at n.171, infra.
141. Overseas Communications Services, 92 FCC 2d 641 (1982).

142. 47 U.S.C. § 222 (1982); 95 Stat 1687 (1981).
143. Western Union International, 76 FCC 2d 166 (1980).
144. W. J. Blyth & M. M. Blyth, Telecommunications: Concepts, Development and Management 39-41 (1985).
145. Graphnet Systems, Inc., 63 FCC 2d 402 (1977), recon. den., 67 FCC 2d 1020 (1978), remanded 595 F.2d 897 (1979). See also ITT World Communications Inc., 76 FCC 2d 15 (1979); International Relay, Inc., 77 FCC 2d 819 (1980).
146. See discussion in text at n.32, supra.
147. Memorandum Opinion and Order, 91 FCC 2d 232 (1982) ("Telenet").
148. A. Pearce, supra n.34.
149. Id.
150. International Competitive Carrier Policies, CC Docket No. 85-107, FCC 85-177 (released April 19, 1985).
151. 47 C.F.R Part 31 (1985).
152. Report and Order, May 9, 1985.
153. E. Kwerel, Promoting Competition Piecemeal in International Telecommunications, OPP Working paper Series, Federal Communications Commission, December, 1984.
154. See Preliminary Audit and Study of the Rates of Return of the IRCs, 75 FCC 2d 726 (1979), appeal docketed sub nom. Western Union Telegraph Co. v. FCC, No. 79-2497 (D.C. Cir. Dec. 14, 1979).
155. 47 U.S.C. §§ 701 et. seq. (1982).
156. Report and Order, 98 FCC 2d 1166 (1985).
157. 88 FCC 2d 564 (1980).
158. See 90 FCC 2d 1394 (1982); 81 FCC 2d 287 (1980); 90 FCC 2d 488 (1982).

159. 4 FCC 2d 421 (1966); 6 FCC 2d 593 (1967).
160. Spanish International Network, 70 FCC 2d 2127 (1978).
161. Report and Order, 50 Fed. Reg. 2552 (1985).
162. Report and Order, 90 FCC 2d 1394 (1982).
163. AT&T World Commns. Co. v. FCC, \_\_\_ F.2d \_\_\_ (D.C. Cir. 1984).
164. 47 U.S.C. § 701 et. seq. (1982).
165. Interim Earth Station Ownership Policy, 5 FCC 2d 812 (1966).
166. INTELSAT Earth Station Ownership Inquiry, 90 FCC 2d 1458 (1982); 97 FCC 2d 444 (1984).
167. Frieden, Getting Closer to the Source: New Policies for International Satellite Access, 37 Fed. Commns. L.J. 293 (1985).
168. Modification of Policy on Ownership and Operation of U.S. Earth Stations that Operate with the INTELSAT Global Communications Satellite System, 49 Fed. Reg. 50030 (1984).
169. Id.
170. See discussion in text at n.39, supra.
171. Rice, Regulation of Direct Broadcast Satellites: International Constraints and Domestic Options, 44 et. seq., in Development and Regulation of New Communications Technologies (D. M. Rice, M. Botein & E. B. Samuels eds. 1980).
172. Ewald, supra n.128, at 283 et. seq.
173. Article XIV(d), INTELSAT Agreement, TIAS 7532, Washington, August 20, 1971.
174. Senior Interagency Group on International Communication and Information Policy, A White Paper on New International Satellite Systems (February 5, 1985).



175. E.g., 47 U.S.C. § 701(a) (1982).
176. In the Matter of Establishment of Satellite Systems Providing International Communications, CC Docket No. 84-1299, FCC 84-632 (January 4, 1985).
177. Ewald, supra n.128, at 318 et. seq.
178. Report and Order, 100 FCC 2d 1033 (1985).
179. Ewald, supra n.128, at 295 et. seq.
180. 42 U.S.C. §§ 2011-2296 (1982).
181. 42 U.S.C. 2014(y) (1982).
182. United States v. The Progressive, 467 F. Supp. 990 (D. Wisc. 1979).
183. 22 U.S.C. § 2751 (1982).
184. 22 CFR § 125.01 (1985).
185. 22 C.F.R. § 125.01 (1985).
186. 50 U.S.C. 2401 (1982).
187. 15 C.F.R. § 379.1 (1985).
188. 15 C.F.R. § 379.3 (1985).
189. 50 U.S.C. 2404(e)(2), (3) (1982).
190. 22 C.F.R. § 123.05(a)(1-3) (1985).
191. 15 C.F.R. § 370.3(b) (1985).
192. See, e.g., Maly, Technology Transfer Controls, 23 *Jurimetrics Journal* 33 (1982).
193. Agreement for Facilitating the International Circulation of Visual and Auditory Materials of an Educational, Scientific and Cultural Character, 17 U.S.T. 1578 (1967).
194. 22 U.S.C. § 1431 (1982).
195. Order No. 11311, 31 Fed. Reg. 13413 (October 14, 1966).

196. Agreement, art. II, 17 U.S.T. 1581.
197. Agreement, Article II, 17 U.S.T. 1581.
198. 22 C.F.R. §§ 502.1-502.8 (1985).
199. 22 C.F.R. § 502.4(a) (1985).
200. 22 C.F.R. §§ 502.5(a), (c) (1985).
201. 22 C.F.R. § 502.6(b)(1), (2), (3) (1985).
202. 22 C.F.R. 502.6(a)(3) (1985).
203. 22 C.F.R. § 502.6(b)(3) (1985).
204. Rosenberg, "For Our Eyes Only," American Film, July-Aug. 1983 (quoting Mr. John Mendenhall, Chief Attestation Officer of the United States).
205. E.g., Note, 3 Cardozo Arts & Enter. L. Rev. 403 (1984).
206. 5 U.S.C. § 552 et. seq. (1982).
207. 5 U.S.C. § 552a(a)(4) (1982).
208. 5 U.S.C. § 552a(b) (1982).
209. 5 U.S.C. § 552a(d)(1), (2), (3) (1982).
210. 5 U.S.C. § 552a(e) (1982).
211. 5 U.S.C. § 552a(g), (j) (1982).
212. 18 U.S.C. 2510 (1982).
213. 18 U.S.C. § 2510 (1), (2), (4) (1982).
214. 18 U.S.C. § 2511(1) (1982).
215. 18 U.S.C. § 2511(2) (1982).
216. 18 U.S.C. § 2515 (1982).
217. 18 U.S.C. § 2517 (1982).
218. 18 U.S.C. § 2518(a) (1982).
219. 18 U.S.C. § 2520 (1982).

- 220. 18 U.S.C. § 2518(3) (1982).
- 221. 18 U.S.C. § 2518(5) (1982)
- 222. 50 U.S.C. § 1801 (1982).
- 223. 50 U.S.C. § 1802(a) (1982).
- 224. 50 U.S.C. § 1802(b) (1982).
- 225. 50 U.S.C. § 1802(4) (1982).
- 226. 12 U.S.C. § 3401 (1982).
- 227. 12 U.S.C. §§ 3405-3408 (1982).
- 228. 12 U.S.C. § 3408 (1982).
- 229. 12 U.S.C. § 3409 (1982).
- 230. 12 U.S.C. § 3412(a) (1982).
- 231. 15 U.S.C. § 1693 (1982).
- 232. 15 U.S.C. § 1693a(6) (1982).
- 233. 15 U.S.C. § 1693a(8) (1982).
- 234. 15 U.S.C. § 1693c (1982).
- 235. 15 U.S.C. § 1693g (1982).
- 236. 15 U.S.C. § 1693h (1982).
- 237. 15 U.S.C. § 1693m(a), (c) (1982).
- 238. 16 U.S.C. § 1693o (1982).
- 239. 15 U.S.C. § 1681 (1982).
- 240. 15 U.S.C. § 1681a(f) (1982).
- 241. 22 U.S.C. § 1681a(d) (1982).
- 242. 22 U.S.C. § 1681b (1982).
- 243. 22 U.S.C. § 1681c (1982).
- 244. 22 U.S.C. § 1681i (1982).

245. 22 U.S.C. § 1681i(d) (1982).
246. 22 U.S.C. § 1681m(a) (1982).
247. 22 U.S.C. § 1681n (1982).
248. 22 U.S.C. § 1686s. (1982).
249. 47 U.S.C. § 521 (Supp. 1985).
250. 47 U.S.C. § 551(a)(1) (Supp. 1985).
251. 47 U.S.C. § 551(b)(1) (Supp. 1985).
252. 47 U.S.C. § 551(b)(2)(A), (B) (Supp. 1985).
253. 47 U.S.C. § 551(c)(1) (Supp. 1985).
254. 47 U.S.C. § 555(d) (Supp. 1985).
255. 47 U.S.C. § 551(e) (Supp. 1985).
256. 47 U.S.C. § 551(f) (Supp. 1985).
257. 47 U.S.C. § 551(h) (Supp. 1985).
258. 47 U.S.C. § 551(g) (Supp. 1985).
259. Wis. Stat. Ann. § 134.43(1)(a) (1982).
260. Wis. Stat. Ann. § 134.43(1)(c), (d) (1982).
261. Wis. Stat. Ann. § 134.43(2)(a),(b),(c) (1982).
262. Ill. Stat. Ann., Ch. 38, § 87-1 (1982).
263. Calif. Stat. Ann. § 637.5(a)(1), (2) (1982).
264. Calif. Stat. Ann. § 637.5(c) (1982).
265. Calif. Stat. Ann. § 637.5(d) (1982).
266. Calif. Stat. Ann. § 637.5(e) (1982).
267. 47 U.S.C. § 705(a) (Supp. 1985).
268. 47 U.S.C. § 705(b) (Supp. 1985).
269. 47 U.S.C. § 7605(b)(1), (2) (Supp. 1985).

270. 47 U.S.C. § 705(d)(1), (2) (Supp. 1985).
271. Cablevision, December 9, 1985, at 11.
272. Id.
273. See, e.g., 50 U.S.C. 401 note, Ex. Ord. No. 12356, section 1.3(1) (1982) (classification of military plans); 50 U.S.C. 401 note, Ex. Ord. No. 12356, section 1.3(2) (1982) (information regarding national security installations); 50 U.S.C. 401 note, Ex. Ord. No. 12356, section 1.3(3) (1982) (information regarding foreign governments); 50 U.S.C. 401 note, Ex. Ord. No. 12356, section 1.3(4) (1982) (information regarding intelligence activities); 50 U.S.C. 401 note, Ex. Ord. No. 12356, section 1.3(5) (1982) (information regarding foreign relations); 50 U.S.C. 401 note, Ex. Ord. No. 12356, section 1.3(7) (1982) (information regarding nuclear materials and facilities).
274. 18 U.S.C. § 791 (1982).
275. 18 U.S.C. § 793(a) (1982).
276. 18 U.S.C. § 793(b) (1982).
277. 18 U.S.C. § 793(c) (1982).
278. 18 U.S.C. 793(d) (1982).
279. 18 U.S.C. § 794(a) (1982).
280. 18 U.S.C. § 794(b) (1982).
281. 18 U.S.C. § 798(a)(1), (2), (3), and (4) (1982).
282. See discussion in text at n.157, supra.
283. See discussion in text at n.141, supra.
284. See discussion in text at n.147, supra.
285. E.g., Near v. Minnesota, 283 U.S. 697 (1931).

286. See Penny Stock Newsletter, Nos. 801 - 19962, 801 - 15347 (S.E.C., December 19, 1984).
287. See discussion in text at n.188 et. seq., supra.
288. See discussion in text at n.200 et. seq., supra.
289. R. W. Emerson, Self-Reliance.