
Volume 4

Number 1 *Volume 4, Number 1, 1982 (Symposium:
New World Order)*

Article 10

1982

The Use of Telecommunications Facilities to Implement National Policies

Joseph Markoski

Follow this and additional works at: [https://digitalcommons.nyls.edu/
journal_of_international_and_comparative_law](https://digitalcommons.nyls.edu/journal_of_international_and_comparative_law)

 Part of the [Law Commons](#)

Recommended Citation

Markoski, Joseph (1982) "The Use of Telecommunications Facilities to Implement National Policies," *NYLS Journal of International and Comparative Law*: Vol. 4 : No. 1 , Article 10.

Available at: https://digitalcommons.nyls.edu/journal_of_international_and_comparative_law/vol4/iss1/10

This Article is brought to you for free and open access by DigitalCommons@NYLS. It has been accepted for inclusion in NYLS Journal of International and Comparative Law by an authorized editor of DigitalCommons@NYLS.

THE USE OF TELECOMMUNICATIONS FACILITIES TO IMPLEMENT NATIONAL POLICIES

JOSEPH MARKOSKI*

I would like to step away from the rather broad concepts of the NWIO, human rights and the free flow of information and focus on a much narrower, and perhaps more mundane, subject: the telecommunications facilities that are used to transfer information between nations on a two-way interactive basis. In particular, I would like to focus on the manner in which these facilities can be, and have been, used to implement national policies that often have little to do with the provision of efficient and economical telecommunications services. Before doing so, however, I would like to review the manner in which international communications services are provided, the organizations that use them and the types of services that are available.

Telecommunications services are generally provided and regulated in one of two ways: telecommunications may represent a government monopoly or telecommunications services may be provided by the private sector subject to government regulation. In the United States, unlike virtually every other country in the world, telecommunications services and equipment are provided exclusively by the private sector. Basic telephone service as well as highly sophisticated data communications services are provided by literally hundreds of large and small private vendors. Government involvement is limited to regulation. This regulation is statutorily restricted, and thus, unlike the rest of the world, many telecommunication services in the United States are unregulated.¹

The Federal Communications Commission is directed by the Communications Act of 1934 "to make available a rapid, efficient, nationwide and worldwide wire and radio communication service with adequate facilities and reasonable charges."² The Commission itself does not provide telecommunications service or equipment and, with the exception of obscenity, gambling and other prohibited activities, it has no authority to control or regulate the substantive content of domestic or

* Partner, Squire, Sanders & Dempsey, Washington, D.C.; B.S.F.S. 1970, J.D. 1973, Georgetown University.

1. Markoski, *Telecommunications Regulations As Barriers To The Transborder Flow Of Information*, 14 CORNELL INT'L L.J. 287, 289-96 (1981) [hereinafter cited as *Telecommunications Regulations*].

2. 47 U.S.C. § 151 (1976).

international communications. In the words of the former head of the National Telecommunications and Information Administration, the United States system relies "on competition and the private sector whenever feasible, rather than on government regulation or intervention; rational cost-based telecommunications tariff and rate structures which are based on publicly available data and which seek to avoid subsidies or, where they (subsidies) are deemed to be in the public interest, to make them explicit."³

Outside the United States, telecommunications services and equipment are generally provided and regulated in a very different manner. In most other countries the provision of telecommunications is considered a government monopoly. Service is provided directly by the government, usually by a postal, telephone and telegraph authority (PTT). Service may also be provided by a government owned or controlled corporation responsible to the postal ministry. Private sector involvement is either unknown or extremely limited. A PTT is a self-regulating agency and is often free to structure technical standards, tariffs and policies to further the domestic and international social, economic or political goals of its government. Because of its other obligations, however, the goals of a PTT may or may not be consistent with the provision of economical and efficient telecommunications service.

Telecommunication services in many countries may thus be provided by the private sector and regulated by the government or a PTT may subsume both functions. These providers and regulators serve several classes of users. Other than the occasional business user, the social caller and the tourist, users generally fall into four non-exclusive, overlapping categories.⁴ First, there are those who engage in international communications to secure the direct financial benefits of closely coordinating their production, marketing and financial activities. In this category we find not only the large multinational corporations with worldwide manufacturing facilities and a global sales force, but also much smaller companies that manage to thrive solely because they can closely coordinate their global efforts. The second category consists of those who benefit from sharing centralized data processing resources that are expensive and difficult to duplicate. These resources include not only computers, but, more importantly, data bases of information. Within this group of organizations are computer service bureaus operating worldwide data-processing networks. Due to their broad geo-

3. The Commission regulates the provision of domestic and international common carrier communications services pursuant to Title II of the Communications Act. See 47 U.S.C. §§ 201-24 (1976).

4. See OECD, Usage of International Data Networks in Europe (ICCP Series No. 2) (1979).

graphic coverage, these networks can exploit the world's time zones to assure the constant use of their facilities and thus lower unit costs for their customers. The third category consists of users who are engaged in activities that are inherently dependent upon international communications such as international bankers, news correspondents, travel agencies and the State Department. The fourth group is composed of users engaged in activities that can best be described as involving international cooperation. Examples of such activities include scientific and technical research, medical and law enforcement information, weather forecasting and mutual defense.⁵

All of these users, depending on the nature of their needs, can choose from two categories of service. The first category consists of switched public networks, which can be used for either voice or data communications and are priced on a usage-sensitive basis. These services can be used to communicate between points served by the network. In the voice context, this is basic telephone service. For non-voice, we are talking about telex, packet switching services, Datel and similar offerings. Public networks are attractive to users who do not have a constant demand for international communications, because the cost of these services is generally a function of the amount of use. Usage-sensitive services are regarded as the most profitable by a PTT.⁶

The second category of service consists of private line or, as it is sometimes called, leased channel service. A private line is essentially a communications pipeline between two points. The line is dedicated to the exclusive use of one subscriber; it is available 24 hours a day; and it is priced on a flat rate, non-usage sensitive basis. Large users have historically found leased channels to be much more economical than usage-sensitive services. These leased circuits are transparent, that is, they do not interact with or alter the information they transport. Additionally, they provide users with the flexibility to adapt channels to their individual needs. This flexibility enables users to exploit state of the art technology far in advance of the technology utilized by a PTT, and dramatically increase the amount of data that can be accurately transmitted over these circuits.

By piecing private lines into networks, users have been able to provide themselves with reliable, secure, sophisticated and diverse service in countries where such service is not otherwise available or is not available in sufficient quantity. As new technology enables users to increase the efficiency of these private lines, the unit cost of individual transmissions decreases. These savings have, in turn, encouraged

5. *Id.*

6. *Id.*

greater use of leased circuits. This phenomenon has transpired without the intervention of either the PTTs or participating United States carriers.⁷

The growth of private networks, the increasing dominance of United States vendors of information services and a variety of other concerns have spurred some foreign PTTs to erect barriers to the transnational flow of information. The motivations underlying these restrictions range from a concern for personal privacy to safeguarding domestic employment through the development of an indigenous data processing industry.⁸ Thus, while telecommunications regulations once governed the technical aspects of service solely for operational reasons, and tariffs once prescribed rates to ensure a desired level of profitability, regulations and tariffs are now adopted and enforced by some countries for reasons wholly unrelated to efficient communication.

Two specific examples involve industrialized nations, and both are fairly recent occurrences. The first involves Japan and two United States data processing companies—Control Data Corporation and Tymshare, Inc.—that sought to extend their worldwide data processing networks to Japan. In 1976, these companies approached Japan's international carrier, Kokusai Denshin Denwa Co., Ltd. (KDD), and requested leased channel service between Tokyo and the United States. At first, KDD merely delayed action on their requests, a very effective, albeit transitory, means of restricting data flows. KDD thus blocked Control Data and Tymshare's initial entries into Japanese markets for 18 months.⁹ When KDD finally agreed to provide communications service to the data processors, KDD required each of the leased circuits used to be connected to a single specified computer system in a single specified location within the United States. The alleged purpose of this requirement was to prevent the misuse of these circuits in contravention of Japanese law. KDD, however, also required that both Tymshare and Control Data transfer their data processing traffic from their private lines to KDD's usage-sensitive public data service once that service became operational.

7. *Telecommunications Regulations*, *supra* note 1, at 298.

8. See Eger, *The Global Phenomenon of Teleinformatics: An Introduction*, 14 CORNELL INT'L L.J. 203, 209-34 (1981) [hereinafter cited as *The Global Phenomenon*]; Ramsey, *Europe Responds to the Challenge of the New Information Technologies: A Teleinformatics Strategy for the 1980's*, 14 CORNELL INT'L L.J. 237, 241-45 (1981); Bortnick, *International Information Flow: The Developing World Perspective*, 14 CORNELL INT'L L.J. 333, 337-40 (1981) [hereinafter cited as *International Information*]; see generally New York Times, Mar. 13, 1983 § 3 (Business), at 1, col. 2 (article discussing new barriers to the flow of information and the reaction of United States business).

9. *Telecommunications Regulations*, *supra* note 1, at 311.

Although couched in terms of the permissible uses of KDD's communications service offerings, the two requirements imposed were much more than mere telecommunications regulations. In fact, KDD had effectively prevented Tymshare and Control Data from marketing their full line of data processing services in Japan. It is important to understand that in order to maintain a secure environment for their customers' data and to ensure the continuous reliability of their services, data processors assign responsibility for data processing services among a number of computer centers in various geographic locations.¹⁰ Depending on the application involved, data processing networks constantly move data between customer terminals and computer centers. Because primary processing capability for specific applications lies with specific processing centers, the only services that Tymshare and Control Data could offer in Japan were those processed on the systems connected to the ends of their trans-Pacific circuits.

In order to provide a full line of data processing services and thus compete with Japanese data processors, Control Data and Tymshare had three options. First, they could secure, probably after more KDD delay, additional private lines between Japan and each of their computer centers in the United States. Aside from being inefficient, the cost of this would render their services non-competitive. A second option would be to reconfigure their United States facilities so as to aggregate all of their computing facilities into one system in one location. This centralization of computer facilities, besides being a highly expensive proposition, would be technologically inappropriate. The third choice, favored by the KDD, would be the transfer of data processing traffic to KDD's usage-sensitive public data service. If this option were chosen, communications costs would increase by a factor of 10, making Tymshare and Control Data less effective competitors,¹¹ and providing more revenue for KDD.

A second more direct and substantially more effective means of restricting the use of leased channel circuits was recently adopted by another major United States trading partner—West Germany. These restrictions, which came into effect on January 1, 1982, require all leased lines entering Germany to be "hardwired" to a single terminal device that is not connected to any other communications network in Germany. If the user of the circuit wishes to access the public networks operated by the German Bundespost in order to reach German customers, the data must first flow from the leased line to a computer

10. *Id.* at 312.

11. *Id.*

located in Germany that performs "true" data processing.¹²

Like the KDD restrictions, the Bundespost regulations are, on their face, telecommunications regulations. However, by requiring data processing to be performed in Germany, these regulations impede foreign competition and defeat many of the economic and technical advantages of operating a worldwide data processing network. Data processors that are not prepared to locate some or all of their processing operations in Germany must transfer their international data processing traffic to the more expensive usage-sensitive public data services. As a consequence, the regulations not only protect West Germany's data processing services industry (and the jobs that it provides), but they also help the Bundespost earn higher revenues.¹³

Although the regulation is drafted in rather broad language, it affects only those users that require access to Bundespost's public network. It does not affect a private line used by a multinational corporation to link two of its computers or offices. The same is true of the Bundespost's plans to eliminate flat-rate pricing for certain private lines. Beginning in 1985, leased circuits that access the public network will be provided on a combination flat-rate and usage-sensitive basis. At the same time, flat-rate private lines will only be available to those who use them to satisfy internal communications needs, such as multinational corporations. Intentionally or otherwise, the Bundespost regulations effectively isolate vendors of information services from the other classes of international telecommunications users.

Although the Bundespost and KDD restrictions have received substantial negative publicity in the United States, primarily because they involve industrialized nations, they are by no means unique or uncommon. There are countless other ways in which telecommunications regulations can be manipulated, interpreted and enforced as a means to encourage or discourage the flow of information across national borders.

Tariffs are the most effective means of encouraging or discouraging the use of telecommunication facilities. The Italian PTT, for example, has been experimenting with leased channel tariffs that encourage Italian newspapers to use the nation's communications network and high-speed facsimile devices to print simultaneous editions of their papers in different cities throughout the country.¹⁴ The tariff encourages this system by allowing newspapers to lease circuits on a flat-rate basis for only a few hours at off-peak times each night, at a fraction of the cost

12. *Id.* at 317 & n.153.

13. *Id.* at 318.

14. *Id.* at 309 n.110.

of full-time usage.

Tariffs can also be used to discourage use. The most obvious way, of course, is simply to raise prices. General rate increases, however, affect everyone equally. Consequently, it is more common for tariffs to be based on a value of service concept that selectively discriminates against certain classes of disfavored users. A PTT, for example, may charge substantially higher prices for those who use their circuits for data, as opposed to voice, communications, or for sophisticated users that transmit data at high rates of speed or that derive multiple channels from a single circuit.¹⁵

The most effective means, however, of deterring the inroads of foreign information service providers is either to utilize usage-sensitive pricing for the leased circuits upon which they depend or to force them to transfer to usage-sensitive services. As demonstrated by the action of KDD and the German Bundespost, such action usually has several consequences. It makes foreign vendors less effective competitors; it increases the revenues of the PTT; and more importantly, and unfortunately, it deprives users of economical access to a wide variety of information sources.¹⁶

Technical standards can also be used to facilitate or inhibit the use of international communications services. Such standards can be prescribed or narrowly interpreted to discriminate against the services or equipment of selected vendors, nations or particular companies. This is particularly true with respect to equipment. If a PTT requires type approval of independently supplied equipment and follows a registration program, such as exists in the United States, users have wider options. A system that entails endless delays, on the other hand, or one that involves non-technical considerations such as the level of domestic unemployment or the place of the equipment's manufacture, will artificially restrict the offerings available to users.

Another telecommunication regulation that can be used to dis-

15. See Till, *Do Telecom Monopolies Benefit Users?*, TELEPHONY, Dec. 17, 1979, at 112, 116.

16. *Telecommunications Regulations*, *supra* note 1, at 299-302. Usage-sensitive pricing is based on the number of characters transmitted, as well as the duration of the message. This method of data communications service pricing offers small users an equivalent to the sophisticated data communications services that were only available to users of large private leased channel networks. *Id.* at 299 n.53, 54. In opposing the introduction of a usage-sensitive service by Western Union International (WUI), two American groups, the Association of Data Processing Service Organizations, Inc. (ADAPSO) and the Computer and Business Equipment Manufacturers Association (CBEMA), expressed concern that WUI's new service would replace, rather than complement, flat-rate transparent private line service. "[T]he elimination of private line service would constitute a barrier to the free flow of information." *Id.* at 300.

courage the transborder flow of information is a prohibition on the encryption of data.¹⁷ Many users of computer services, many international corporations and many governments encrypt data because of its commercial value, personal sensitivity or national importance. If encryption is barred, these flows would be discouraged.

Laws or regulations that prohibit foreigners from becoming common carriers or from operating or using certain types of transmission facilities can also be used as dataflow barriers. The same is true of regulations that do not keep pace with technology. If enforced, these regulations can restrict the introduction of innovative new services and new information sources. Because such regulations can produce unacceptable results, they often are not enforced. They nonetheless remain on the books and can be enforced selectively when a foreign party seeks to enter domestic markets.

Often, barriers are created by the simple fact that not all of a PTT's regulations are in print or by the fact that they cannot easily be identified and located. In such cases, many businesses or purveyors of information services will bypass an otherwise marginal market. Much as a PTT can bar data flows simply by delaying action on a request for service, a PTT may also propound an endless series of information requests before it agrees to provide service to new market entrants.

Other barriers have nothing to do with a PTT's regulations, but rather with the manner in which a PTT allocates resources. In the interest of developing a domestic core network, a PTT may ignore or relegate to secondary status the services and facilities needed for effective international communications. In such cases, users will encounter unacceptable delays in securing service, face a limited choice of service options or contend with shortages that limit their ability to exploit new markets. This situation has led to the unlikely coalescence of large users and developing nations. A number of users in the United States have suggested that our government assist developing countries by giving them our communications technology and the wherewithal to implement it.¹⁸ This is an area where the International Program for Development of Communications can make a valuable contribution.¹⁹

To date, the United States government has not been very effective

17. See Frank, *User Advised to Judge Options in Face of Data Flow Rules*, *COMPUTERWORLD*, Mar. 12, 1979, at 47, 48.

18. For a discussion of United States efforts to increase the availability of scientific and technical information in the Third World countries, see *International Information*, *supra* note 8, at 336-37.

19. *Id.* at 347. The IPDC was created by UNESCO's Twenty-first General Conference in Belgrade in October 1980. This group was designed to improve information infrastructures and train personnel in Third World countries. *Id.*

in responding to foreign telecommunication regulations that are used as instruments of national informatics or economic policies. When the FCC has been faced with determined resistance on the part of a PTT, it has been unable to secure the speedy removal or modification of such regulations. When other agencies of the federal government, such as the Department of State, the Department of Commerce, and the Office of the United States Trade Representative, have become involved, the results have been somewhat more positive, but the response time has been excessive.

In large part, the United States' failures are attributable to the fact that responsibility for national telecommunications and information policy is divided among many agencies, none of which has primary or exclusive jurisdiction. Consequently, when users of international communications services have looked to the United States government for leadership in dealing with transborder dataflow restrictions, the results have not been promising.

These failures have led to pressures upon Congress, the United States Trade Representative, and the FCC to pursue sectoral reciprocity. In other words, they have been asked to take action to ensure that the terms and conditions pursuant to which foreign entities enter United States markets are no more favorable than those under which United States businesses are permitted to enter foreign markets. In recent months, however, the clamor for sectoral reciprocity has waned dramatically. Perhaps the most significant factor in the erosion of support for such measures is the growing perception that sectoral reciprocity could exacerbate, rather than alleviate, the problems presented by dataflow barriers.²⁰

There is also a growing recognition that dataflow barriers are not solely technical telecommunications problems, nor solely economic trade problems. Rather, they involve a variety of other considerations, such as personal privacy, national security, the transfer of technology and the individual's right to information. Consequently, simplistic approaches to dataflow barriers are increasingly being rejected.

If I can tie this discussion back to the New World Information Order, it is by saying that those who use telecommunication regulations as instruments of national policy must take care that they do not increase the already high costs of technology transfer. Louis Joinet's often repeated comment that "information is power, and economic information is economic power"²¹ must be counterpoised with that of an-

20. For a discussion on international reciprocity proposals before Congress, see *Telecommunications Regulations*, *supra* note 1, at 329-31.

21. *The Global Phenomenon*, *supra* note 8, at 206. Louis Joinet, then-magistrate of

other, perhaps less famous commentator, who noted that "information is power, [but only] if available at the right price, at the right time, and in a usable format. Information is worthless if storing and processing the data is costlier than the value and usefulness of the data."²² This danger is becoming increasingly real as the world's economy deteriorates.

Those who would restrict the free flow of information should, therefore, be reluctant to impose anything but the most minimal restrictions deemed essential to protect the commonweal. There will always be disagreements as to what is "essential," but if we start with the premise that restrictions should be minimal, we will find more room for accommodation.

the French Ministry of Justice, made the statement at the Organisation for Economic Co-Operation and Development (OECD) symposium on Transborder Data Flows and the Protection of Privacy in Vienna, Austria (Sept. 20-23, 1977). *Id.* at 206 n.10.

22. Zycherman, *Data Protection Laws Must Not Become Non-Tariff Barriers*, TRANSNAT'L DATA REP., Mar. 1980, at 17.