# DATA BORDER CROSSINGS

# by Edward M. Roche and David J. Dell

Most of us are well aware that the world is being changed by new information technologies, especially in the area of computers and telecommunications. Fewer are aware that these same technologies have stimulated major policy debates in international councils and within the economic and foreign policy-making chambers of an ever-increasing number of nations. Generally, these debates focus on the economic and political impact of technologies that enable computer data to be sent across national borders, a process known as transborder data flow (TDF). But transborder data flow has given rise to complex social and moral questions as well. At issue are such matters as national sovereignty and security, and the right of citizens to privacy and freedom of speech.

Among the many forums addressing these questions are the Council of Europe (COE), the International Telecommunications Union (ITU), the Organization for Economic Co-Operation and Development (OECD), as well as government agencies and private think tanks throughout the world. Given the dramatic increase in the use of computers and satellites around the globe, the need for a thorough examination of transborder data flow is immediate and great.

Ostensibly, we have already developed the international mechanisms to deal with these issues. The ITU, for example, regularly convenes representatives of the world's telephone and telegraph systems to make certain that the various systems can exchange messages. Even at the League of Nations, problems presented by the telephone and the telegraph were of major concern. Today's debates are, in fact, highly reminiscent of the debates of earlier decades, when the focus was on such "new" technologies as the telex, telegraph, radio, and telephone. Indeed, some of the initial resistance to the telephone was generated by the notion that it represented an invasion of privacy. Much the same sort of technophobia is at work in the international community today.

Just as earlier regulations governing the transmission of coded telegraph traffic over international borders managed to evolve, so too will regulations for today's transborder data flow. There now exist international agreements governing the transshipment of books, magazines, and newspapers, agreements established over many years thanks to the mastery of a great amount of detail by numerous civil service workers around the world. So will the transmission of computer-held and created information become an integral in the comity of nations.

### **DATA PROTECTION**

Much of the initial concern with transborder data flow involved the telecommunication of such data as credit ratings, mailing lists, travel plans, and health or employment records to other countries. It was recognized that when this type of data about an individual was sent abroad, he risked losing the legal protection afforded by his own country.

This concern led to a number of efforts to set both local and international legal standards for the processing and transmission across international borders of personal information. Western European nations have moved rapidly to create a standard body of laws to protect such data. Once the Council of Europe Data Protection Convention is ratified by five member-states, it will have the force of law. The Convention, expected to come into force before the end of 1983, states:

Personal data undergoing automatic processing shall be: obtained and processed fairly and lawfully; stored for specified and legitimate purposes and not used in a way incompatible with those purposes; adequate, relevant and not excessive in relation to the purposes for which they are stored; accurate and, where necessary, kept up to date; preserved in a form which permits identification of the data subjects for no longer than is required for the purpose for which those data are stored. Personal data revealing racial origin, political opinions or religious or other beliefs, as well as personal data concerning health or sexual life, may not be processed automatically unless domestic law provides appropriate safeguards. The same shall apply to personal data relating to criminal convictions.

Appropriate security measures shall be taken for the protection of personal data stored in automated data files against accidental or unauthorised destruction or accidental loss as well as against unauthorised access, alteration or dissemination.

Under this Convention, countries may refuse to allow personal information to be sent to countries that do not provide comparable safeguards to protect computer-held information.

This refusal might well extend to the United States,

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since it has embraced a rather contrary recommendation of the Council of the OECD concerning voluntary guidelines governing the protection of privacy and transborder flows of personal data. The OECD recommends that "member countries endeavor to remove or avoid creating, in the name of privacy protection, unjustified obstacles to transborder flows of personal data," in recognition of the fact that these flows "contribute to economic and social development." In the wake of an extensive campaign sponsored by the U.S. Department of Commerce, more than two hundred U.S. multinationals have publicly endorsed the OECD guidelines.

While international groups attempt to create uniform standards for the processing and transmission of personal data across international borders, debate continues about the effects of transborder data flow on national sovereignty. It has long been thought that a government might regulate communication across borders in order to safeguard its security and to promote its own economic well-being. Until now the restrictions resulting from this control did not discriminate among the different media; for example, it was, and is, illegal to export classified information irrespective of the medium used.

In the case of TDF, however, internationally operating computer/communications networks are being singled out for special types of restrictive regulations. In West Germany, companies are prohibited from exporting data that have not first been processed within Germany's borders. In Brazil the transfer to databases outside the country is subject to an extremely rigid licensing procedure controlled by the Special Informatics Secretariat. In France, the Ministry of Industry's Informatics Mission has stated that

foreign-based processing of national data restricts the possibility of exerting control, and opens the gates to fraud and infringement. Any kind of external audit is becoming illusory now that processing is being internationalized. There can be no doubt that the solution has to be based on bi- and multilateral agreements establishing the "right of pursuit" across national borders in respect of data and processed data; otherwise there is a risk that every country will raise protectionist barriers against the transfer of bank or accounting data.

While there is little difference between information transmitted through the computer and information transmitted by other, more traditional, means of communication, the matter of scale makes this a serious issue.

Another key issue arising from the introduction of transborder data flow is that of information sharing, an issue which, like the question of "right of pursuit," is at once political and moral in implication. For example, advanced satellites now have the ability to detect vital information regarding the agricultural prospects of developing nations—nations heavily dependent on international trade in

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Please note that changes of address should now be sent to: Worldview Subscription Dept., P.O. Box 1935, Marion, Ohio 43305. To ensure uninterrupted delivery, it is best to give six-weeks notice of your move and to include the address label from a past issue. commodities for their foreign exchange earnings. What is to become of this information—say, about a possible crop failure in some Third World nation? Should it be available only to those companies and governments with the advanced software for processing such satellite data, whatever the damage to the economy of the less-developed nation? Or is there a moral responsibility to share this information with those who do not possess the technological means themselves? And if it is agreed that data should be shared, how can we assure it will be?

## THE TRADE IN INFORMATION

Clearly more is at stake than the ability to send messages and exchange information. It is not only data that are being transmitted through microwaves and over high-speed phone lines. As the world shifts to a service-oriented economy, vast amounts of money, goods and services, and jobs are being circulated as well. In the past few years, breakthroughs in satellites and high-speed computing have given leading users a tremendous economic advantage over those who have not kept up.

The industrialized trading nations are becoming increasingly dependent on computer communication systems. As an integral part of the trend toward internationalization of economic structures, these communication systems could be severely hampered by such restrictive practices as taxation, censorship, licensing, and discrimination. The developing nations are caught between the desire for access to multinational networks and the best computer resources for their own industrial use on the one hand and the need to protect their own infant electronics industry and provide employment on the other. The degree to which a nation can keep up with new computer services and communications will have a significant effect on the cost of providing goods and services internally as well as on the cost of exchanging them with the rest of the world. As was pointed out in the Alvey Committee's report, A Programme for Advanced Information Technology, commissioned by the United Kingdom's Department of Industry: "Without a world class technology base including advanced design tools [British] industry will be unable to compete."

There are essentially two types of trade in the information sector: technology and equipment and the services such systems provide. Information-technology trade would theoretically be covered under the General Agreement on Tariffs and Trade (GATT), since it is similar to trade in other material goods, and trade-restrictive actions would be prohibited; but this has not been the case. Instead, governments of both developed and developing countries are imposing barriers to trade in information-technology equipment. Some countries do so out of fear of a new international division of labor, whereby high-skill, highprofit jobs and services would be provided by nations that lead in technology, while low-skill jobs, such as keypunching and data-entry, would be transferred via satellite to developing countries to take advantage of cheaper labor costs.

The McBride Commission, operating under United Nations auspices, produced a report that underscored such fears. "Indeed," it said, "since information and communication may today become—as never before—the sources of the creation of wealth, the system responsible for the existing communication gaps and the inequality in this sphere threaten to widen the gulf between the rich and the poor...."

A series of studies by UNESCO-including "World Communications: Press, Radio, Television, Film," published as long ago as 1964 has documented the underdevelopment of information technology in most countries. Forceful arguments are being made about the necessity of viewing all technology transfers as an integral part of international commerce. Thus, in exchange for a license to conduct business in a host country, multinational corporations might one day be required to provide technological expertise. Similar regulations on transborder data flow would provide developing nations with a powerful lever for applying pressure against business. Whatever the merits of a strategy that attempts to reshape the international division of labor, there is clearly a strong temptation to single out international communications as a means of regulating commerce.

The "Declaration of Mexico on Informatics, Development and Peace," drafted by twenty-six nations in Acapulco in June, 1981, supports this view:

Informatics, through its wide possibilities of application in almost all sectors of human activity, offers a powerful tool for the management of technological development and opens up new possibilities for cultural and educational development....Informatics is [also] becoming more and more an instrument of power which affects the political, economic, social and cultural spheres nationally and worldwide and hence is of immediate concern to decision-makers at all levels. One of the important consequences of these changes will be a redistribution of productive and service facilities on a worldwide basis which will pose a series of complex issues for Third World industrialization and development, thus calling for urgent consideration. Among other things, international debates are needed on transborder data flows and their impact on the international division of labor and technological concentration.

Technology permits multinational companies to do all their data processing for finance, administration, sales, and marketing at any location, regardless of where they do business. Local clerical services can be kept to a minimum; engineers can remain safely at home while they monitor production via satellite-transmitted data. In short, multinationals can operate effectively in local economies without hiring many local people. Some may even offer their excess computing capabilities to service bureaus that do computing for other companies and even to local government agencies. A telling example is the fire department alarm system of Malmo, Sweden, controlled by a computer in the United States.

Despite such examples, most nations wish to have their own national competence in high-technology industries. Remote computing from outside a nation's borders impedes its own ability to produce and sell computers locally and thus threatens the domestic job market. Consequently, there is strong pressure to promote indigenous electronics industries, including the use of laws to regulate transborder



data flow and promote in-country data processing.

In Brazil, as noted, the transfer to databases outside the country is subject to a rigid licensing procedure. One result is that companies have been forced to purchase inferior, locally produced equipment at high prices in exchange for a license to continue to do business. Canada, a major share of whose data processing was once performed in the United States, has made it illegal to telecommunicate banking information out of Canada for that purpose. France is considering a bill that would tax imported software whether or not that software is available in France. And Sweden has refused to allow computerized mailing lists to be processed in the United Kingdom, even when the same lists are processed manually there.

Other nations have sought remedies short of law. For example, most national telephone companies refuse to purchase foreign-produced equipment, even when it is better and cheaper. Yet many of these same nations have a large stake in world trade. Few can afford to expose themselves to retaliation by individual nations or, worse, to cut themselves off from newly emerging global communications networks.

For some European countries as well as for less-developed nations the broader question is whether they will be left behind in the shift from an "industrialized society," based on the production and distribution of material goods, toward an "information society," based on the production and distribution of information. Will it be possible for "non-informationalized" nations to develop and compete on an equal basis? As the Industrial Revolution altered the global economic balance of the last century, so too, it is feared, will today's technological revolution further accentuate the imbalance between advanced and Third World nations. But there is a fundamental difference between information technology and such resources as energy, the fruits of ocean and space, and funding for development. In these latter areas the international community is faced with limited and diminishing supplies, but information services and technologies are increasing in supply and decreasing in price at dramatic rate. Political arguments built upon the notion of limited resources simply do not apply here.

### THE CHALLENGE

Adding to the complexity of the international communications system are differences in the degree of government involvement. In the United States the great majority of telecommunications systems are within the private domain; but for most of the rest of the world, government-owned telephone and telegraph companies control the means of communication. Through the OECD and the European Community, the leading industrialized nations are moving toward policies that would go far in ensuring reciprocal rights and duties among industrialized nations. Other international bodies are the arena for policy discussions among the Third World nations; these include the Intergovernmental Bureau for Informatics in Rome and such U.N. agencies as UNESCO, the U.N. Industrial Development Organization (UNIDO), and the ITU.

At the same time, and independent of policy-making bodies, information technology itself is providing a powerful social force—perhaps more powerful in the end than the international institutions attempting to regulate it. And it is not only multinational enterprises, but many other organizations, that would object to being denied the best type of information and communications technology. Cultural organizations, academic networks, as well as business enterprises are already challenging governments on the extent of their interference with international communications. Human communication is not easily controlled.

Multinational corporations are probably responsible for most technology transfers and the broadest promotion of international communications. Operating globally, these organizations depend heavily upon the intelligence, inventory control, accounting, and other processes that require data transmitted across borders through worldwide computer/communications networks. For the conduct of business these corporations have a vital interest in reliable, efficient international communications. To the extent that regulations restrict, tax, obstruct, prohibit, or slow down these communications, international commerce is inhibited. Furthermore, the ability of the world business community to respond to sudden crises may be impaired. Right now major networks are being installed that permit instant access and control of data anywhere in the world-as has already been accomplished in banking with the SWIFT network and in the airline industry with global reservation services

During the next few months we can expect increased attention to these issues as the parliaments of Europe address ratification of the COE Convention. For the Third World, plans already have been made for a major meeting of the Intergovernmental Bureau for Informatics in Havana in September, 1984. In the United States, the Office of Technology Assessment will be putting final touches to a blue-ribbon-panel review of the U.S. mechanisms for formulating international information policy. The ITU will be continuing its series of regional conferences aimed at assigning satellite orbits and transmission frequencies and at providing informatics aid projects to Third World countries.

Yet despite such efforts we cannot look forward to a quick settlement of the issues of transborder data flow. The long history of information technology and international communications and the manner in which their particular problems have been handled by the international community suggest otherwise.

The next few years would seem crucial for shaping new global communications systems. Informed participation in the debates surrounding the emerging regulations and constraints is urgently needed if there is to be open communication and access to information for individuals as well as organizations and nations. There is need too for careful assessment of the right of privacy and the equitable distribution of new economic opportunities.

Perhaps most important, there must be wider appreciation of the fact that now, as in the past, the use of new technology raises both hopes and fears. It offers greater global wealth yet risks greater inequality. It offers greater freedom of communication yet raises the specter of restrictions and abuses. Our ability to set and follow humane and rational guidelines is being tested once again. [WV]