

Appendix B.—U.S. Information Policies

This appendix briefly reviews the history, current standing, and future prospects of domestic information policy issues to provide a larger context for issues considered in the report. The relationship between domestic information policy and international information policy is noted as well.

The United States does not have a uniform, articulated, national information policy guiding the information activities of the country and, so for the most part, these activities have evolved informally. However, the Government has long been involved in creating, gathering, organizing, and disseminating information.

Three separate constitutional provisions define the role of the Government in relation to publishing. The first amendment denies to the Government the right to abridge freedom of publishing. The other provisions give the Government a specific role in the *promotion* of publishing. The copyright clause empowers Congress to give authors exclusive rights to their products, and the postal clause allows Congress to establish post offices and post roads.

From colonial days through the 19th century the Government supported development of the press in various ways. Postmasters were often the first newspaper publishers, because they had a source of news and a means of distribution. Benjamin Franklin, the first Postmaster General, was the most famous of the postmaster-publishers. Official notice advertising and Government printing was used to support newspapers. Thomas Jefferson, finding no Washington newspaper supporting his administration, brought the Philadelphia publisher, Samuel Harrison Smith, to Washington to start the *National Intelligencer*, and had Congress give it printing contracts. Congress gave newspapers free local distribution through the post office until it substituted second-class mailing rates in the mid-19th century, a revised form of subsidization.

Despite this early concern with information, it was not until after World War II, with the extraordinary growth in science and technology, that the United States expressed a sustained interest in developing a coordinated information policy. As a result of the increased tempo of scientific activities, scientific knowledge had expanded and become unwieldy, and scientists had increasing difficulty keeping informed of new developments. In searching for a way to facilitate full and open communication among scientists, the Federal Government sponsored a series of reports on information policy issues. A common thread running through the studies from 1958 to the late 1960's is the need for improved and coordinated science information services, particularly on the part of Federal

agencies. The studies devoted little attention to the private sector, and then only to individuals and the nonprofit professional societies.

By the mid-1960's the Federal Government had begun to view information as a national resource. Although it remained interested in the improvement and coordination of scientific and technical communication, the Government gradually broadened its perspective on information activities. Information in many fields, such as commerce and law, and varied aspects of information, information communications, information technology, and information economics, were incorporated into the national dialog. At the same time, the private sector began to assume more importance in the policy debate, and the focus shifted from the nonprofit to the profit component of the private sector.

Today, information is so central in our social order, that some observers have termed the United States a "postindustrial society," a "knowledge-based society," and an "information society." Accordingly, information policy concerns have increased rapidly in number, diversity and complexity.

In 1976, information policy was described as having many connotations, including "policy dealing with the regulation of information messages over common carrier facilities, policy with respect to postal rates for the distribution of books throughout the country, policy affecting the information requirements imposed by Federal and State governments, and policy concerning the communication of research results to the scientific and technical community in the public and private sector" (144). By 1981, an OTA report focusing exclusively on computer-based national information systems noted (115):

It would not be possible for any one study to capture succinctly a single set of policy issues that would apply to all national information systems in American society. The specific system applications are too diverse, the potentials and problems too complex, and the parties-at-interest and relevant institutions and legal frameworks too diverse.

The OTA report (115) did identify current policy issue areas concerning national information computerized systems, including:

- privacy;
- security;
- Government management of data processing;
- society's dependence on information systems;
- transborder data flow;
- information gap;
- innovation, productivity and employment;
- constitutional rights;

- computer crime; and
- . regulatory boundaries; and computer software protection.

Many of these issues are not confined to computerized information systems, but extend to other information activities. Some pertain to information activities in the international arena.

The OTA report (115) also noted the absence of a uniform, coherent national information policy. The type of information policy or policies, domestic and international, that would best serve the interests of this country has received considerable attention, but still remains elusive. Most studies regard a national information policy, as prerequisites for effective information pursuits, although it is not a universally held position.

If a national policy were developed, many structural questions would still be undecided, among them: should there be a uniform, monolithic policy for all information activities; should there be a diverse set of policies to account for the wide variation in information activities and issues; should the power for designing and administering domestic or international information policy be centralized or decentralized; if centralized, where should its locus be; and, if decentralized, which Government agencies and departments should be involved.

The present pluralistic and undefined domestic information policy is considered by some to hinder the ability of the United States to devise and effect strategies concerning information and communication in the international arena. Whereas the majority of foreign administrations dominate their domestic communications activities, in the United States, communication and information functions are exercised by both the Government and the private sectors. Although this pluralistic approach to communications and information has contributed to the eminent position of the United States in telecommunications, it has complicated the definition of a domestic and international information policy. In addition, international information policy is tightly intertwined with foreign policy, and is viewed as a negotiating tool from some perspectives.

The formulation of an international information policy is becoming more and more important as technological developments stimulate international information activities. Projections suggest that within two decades an integrated global network for information transmission will be developed and that a person with a universal terminal will be able to access the network from almost any place in the world to obtain information on nearly any subject (127). Other technologies, such as video disks, may increase the ease of

transmitting information globally even earlier, with less need for international telecommunication networks (133). These developments force attention to many international information issues, such as privacy, copyright and restraint of trade.

The current responsibility for information activities is fragmented in numerous Government agencies. There is no coordinating mechanism for intragovernmental policy issues, nor is there an opportunity or locus for Government and private dialog about matters of mutual concern. The Paperwork Reduction Act of 1980 (Public Law 96-511) gives the Office of Management and Budget (OMB) the major responsibility for regulating executive agencies regarding information acquisition and distribution; OMB directives concerning information activities appear to be focused on saving the Government costs in a time of extreme budgetary constraints and placing reliance on the private sector for goods and services needed by the Government and U.S. citizens. They do not provide the broad perspective required to address the complex issues of an information age.

Because of the interlocking nature of these international and domestic information issues, it has been suggested that they be addressed in a coordinated fashion by a high-level centralized executive body. However, the prospect for an integrated approach to information issues appears small. Rep. George E. Brown, Jr., notes the need for involving the executive and congressional branches in an understanding of information policy issues (23):

Few members of Congress appreciate the potential contributions and consequences of information science and technology. Nor are they aware . . . of policy issues and the need to plan for the changes to come.

A 1981 OTA study (115) supports this conclusion and comments on the lack of interest among present policy-makers in a uniform Federal information policy to address the many problems that might conceivably occur from the use of data systems.

List of Selected Domestic Information Policy Activities

1952.—Title V of the Independent Office Appropriations Act (31 U.S. C. 483a) provides that agencies set prices to recover as fully as possible the entire costs of providing a service, taking into account the public good and the benefit to the user. Although the Independent Office Appropriations Act is not confined to information services, charges for data bases and dissemination services fall under its purview. The guidance it provides is very general and open to interpretation.

1956.—The National Library of Medicine (NLM) is established as a national library and resource for biomedical information by the National Library of Medicine Act (Public Law 84-941).

1958.—The Baker Report (122) affirms the need for a free flow of scientific information and recommends a Federal research and development coordination mechanism.

1959.—OMB issues Circular A-25 (48) to implement the Independent Office Appropriations Act by requiring that charges be made to each identifiable recipient of a Government service from which a special benefit is derived, and that the Government recover full costs in rendering the service. Exceptions are made when the activity is designed for public safety, health or welfare. The circular is difficult to interpret with respect to who and how much should be charged.

1960.—The Subcommittee on Government Reorganization and International Organization's report, "Documentation, Indexing and Retrieval of Scientific Information" (147), recommends improved Federal and private information services, and strengthened coordination.

1962.—The Crawford Report (142), prepared for the Federal Council on Science and Technology, recommends that each agency have a single office responsible for science information activities.

1962.—The Surgeon General's Conference on Health Communications issues a report (138) on the need for improved communications of scientific research results, research training, and the use of libraries as communication centers and resources.

1963.—The Weinberg Report (120) asserts that the Federal Government should assure the ready availability of information concerning research in progress, through a network of Government information centers of the Federal Council for Science and Technology. Nongovernmental information systems were to be examined for overlap with Government systems.

1963.—The National Academy of Sciences/National Research Council's report *Communications Problems in Biomedical Research* (111) stresses the biomedical community's responsibility for improved facilities, research and development, training, and coordination for the biomedical information complex.

1964.—The Committee on Scientific and Technical Information (COSATI), established by the Federal Council on Science and Technology to coordinate a wide range of activities, commissions a report (145) examining alternative means for developing a Federal information program. Because of its charter, COSATI focused totally on the governmental components.

1965.—The President's Commission on Heart Disease, Cancer, and Stroke stresses the need for better communication of biomedical research and im-

proved medical libraries to prevent the loss of new scientific knowledge (121).

1965.—The Medical Library Assistance Act (Public Law 89-241) is passed to improve the production and dissemination of information in the health field.

1967.—A report by Stafford L. Warren (158) to the President on a National Library of Science System recommends that NLM be one subsystem of an overall science system.

1968.—The Lister Hill National Center for Biomedical Communications is established as part of NLM to improve biomedical communications through advanced technologies.

1969.—The National Academy of Sciences and the National Academy of Engineering jointly commission the Scientific and Technical Communication (SATCOM) Report (95). The report calls for a non-governmental body to be responsible for national information policy, at least in the area of science and technology, as a joint commission of the National Academy of Sciences and the National Academy of Engineering. The SATCOM Report explicitly recommends close cooperation between the public and private sectors in future development, and suggests Government financial support for information services operated by professional and scientific societies. The needs of the for-profit sector are less clearly defined. Coordinating mechanisms for the Government (COSATI) and the private sector (SATCOM) are established to promote interrelated activities.

1971.—The Kozmetsky Report (73), explicitly recognizes the general value of information as a critical resource, both nationally and internationally, rather than limiting it merely to the realm of scientific and technical contexts.

1972.—The Greenberger Report (59), done for the Federal Council on Science and Technology and the National Science Foundation, examines the role of COSATI, and concludes that the Government is not well organized to deal with the problems in developing information as a national resource. It recommends that new policy mechanisms be created *and* that the private sector have input in policy and program development.

1975.—The National Commission on Libraries and Information Science (NCLIS) presents *Toward a National Program for Library and Information Services* (97), a report based on extensive public hearings and meetings throughout the country. This report considers a broad range of information needs, including those of the general public, science, technology, business and industry, and education. Like earlier reports, it identifies the need for cooperation among the several sectors in developing information as a national resource. It also suggests a governmental role in providing tech-

nical inducements and finding incentives for the private sector and State governments.

1976.—The Oettinger Report (114) reviews issues related to fragmentation, confusion, and contradiction in present Federal information policies.

1976.—The Becker Report (15), done for the National Science Foundation, summarizes the history of information policy and reiterates the need for a coordinated national effort, with Government sponsorship for an institute for information policy and program planning in which private organizations can be accommodated.

1976.—The report *National Information Policy (141)*, prepared by the Domestic Council Committee on the Right of Privacy, is published by NCLIS. It identifies issues affecting the relationship between the Government and the private sector in the production and dissemination of information and argues for a standard set of policies clarifying the relationship between the two sectors. It recommends a strong information policy group in the Executive Office of the President and the creation of appropriate intergovernmental and non-Federal committees.

1976.—The SCATT Report (2) provides a comprehensive plan for integrating the various public and private components in the production and dissemination of scientific and technical information.

1978.—Into the *Information Age: A Perspective on Federal Action on information* (60), a study commissioned by the American Library Association, calls for Federal leadership in developing information to meet societal needs such as air quality, energy, economic well-being, public safety, and environmental preservation.

1978.—The National Telecommunications and Information Administration is established in the Department of Commerce to examine broad information policy questions.

1979.—OMB distributes Circular A-76 revised (49), "Policies for Acquiring Commercial or Industrial Products and Services Needed by the Government." It declares that the general policy of the Government is to "rely on competitive private enterprise to supply the products and services it needs."

1979.—The Library of Congress surveys the publications policies of executive branch agencies.

1979.—The congressional Joint Committee on Printing publishes *Federal Government Printing and Publishing: Policy Issues (143)*, identifying issues with respect to: 1) administration of policy, 2) Federal Government printing production and procurement, 3) impact of new technology, 4) access to and distribution of Government information, 5) the depository library program, and 6) the pricing of Government information.

1979.—The General Accounting Office publishes, *Better Information Management Policies Needed: A Study of Scientific and Technical Bibliographic Services (55)*, confirming the need for better Government management of information centers, and identifying duplicative services and facilities, failures to recover costs, and inconsistent cost recovery procedures among agencies. It recommends that the Director of OMB direct each department and agency to designate a high level official responsible for information management, that Congress consider more precise language when authorizing information centers to alleviate duplication and provide more specific guidance on which information services should be exempt from cost recovery requirements.

1979.—The President announces measures to "help ensure our country's continued role as the world leader in industrial innovation" including "enhancing the transfer of knowledge" and "increasing technical knowledge." One of the actions taken to ease and encourage the flow of technical knowledge and information establishes the Center for Utilization of Federal Technology at the National Technical Information Service (Department of Commerce) to improve the transfer of knowledge from Federal laboratories and, through the Departments of State and Commerce, to increase the availability of technical information developed in foreign countries.

1980.—OMB Bulletin No. 81-16, "Elimination of Wasteful Spending on Government Periodicals, Pamphlets, and Audiovisual Products," imposes an immediate moratorium and institutes a comprehensive review of the production, procurement, and dissemination of new audiovisual products, periodicals, and pamphlets, and calls for user fees to recover the costs of production.

1980.—An OMB draft circular, "Information Management and Dissemination of Federal Information," outlines a cost recovery program for information provided by the Government. The proposal covers all costs associated with dissemination, including printing, processing, and retention, but excludes the cost of producing or creating the information. The policy is not made official, though some aspects are included in the Paperwork Reduction Act of 1980.

1980.—The Working Group on Private Sector/Government Relationships for Scientific and Technical Information, of the Federal Coordinating Committee on Science, Engineering, and Technology identifies the four key issues in private sector/Government relationships: 1) the different philosophical views of information as a resource; 2) determination of Government's legitimate role in the operation of services for a given philosophical view; 3) the historical and future role of Government as a risk-taker in the development of

technologies and markets; and 4) the kind of platform or mechanism through which agencies and the private sector can resolve differences. The group concludes that attempts to develop guidelines for resolving differences across Government agencies and between sectors is not feasible, as neither sector acts and reacts as a single entity.

1980.—OMB issues Circular A-121 to “establish policies that promote effective and efficient management and use of certain data processing facilities” by instituting business-like procedures of cost accounting, cost recovery, and interagency sharing of data processing facilities.

1980.—The Paperwork Reduction Act (Public Law 96-511) establishes an Office of Information and Regulatory Affairs within OMB to regulate and coordinate the activities of executive branch agencies with respect to information acquisition and distribution. It requires that each agency have a single authority, at the assistant secretary level, responsible for information activities within the agency. It also authorizes the establishment of a Federal Information Locator System, to be composed of a directory of information resources, a data element dictionary, and an information referral service.

1981.—Issues in *Information Policy* (38), a report of the National Telecommunications and Information Administration (Department of Commerce), divides information policy issues into two groups: 1) those encompassing constitutional and statutory authority for permitting, requiring, or inhibiting the availability and accessibility of information; and 2) those focusing on economic policies for inhibiting, managing, or facili-

tating the distribution of information to certain sectors of society.

1981.—The OTA report, *Computer-Based National Information Systems: Technical and Public Policy Issues* (115) describes how future applications of computerized information systems may intensify or alter the character of the policy debate and the need for new or revised laws and policies.

1981.—The Public Sector/Private Sector Task Force of NCLIS (see app. F) concludes that the four major issues in the conflict between the sectors rest on the need for the Federal Government: 1) to take a position of leadership in facilitating the development and fostering the use of information products and services; 2) to encourage private sector investment in information resources, products and services; 3) not to engage in commercial information activities unless there are compelling reasons for it to do so (and there must be well-defined procedures for determining that such reasons indeed are present); and 4) to protect private sector property rights in any package of governmentally distributed information, that includes private information resources, products, or services.

1981.—OMB releases Memorandum 81-14, providing criteria for the evaluation of Federal information centers by executive departments and agencies conducted under the Paperwork Reduction Act. The criteria are used to determine whether an information center duplicates private endeavors or can be consolidated with other centers, and whether centers should provide information on a full cost recovery basis.