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Congress of the United States

Joint Committee on Printing

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TO MEMBERS OF THE INFORMATION COMMUNITY

On April 9, 1987, the Joint Committee on Printing passed a resolution urging the Government Printing Office to initiate a series of pilot projects to test the feasibility and practicality of disseminating government publications to Depository Libraries in electronic formats. As a result of that resolution the Government Printing Office, in consultation with the Joint Committee on Printing, has developed the enclosed plan.

At its meeting on June 29, 1988, the Joint Committee on Printing, agreed that, prior to implementation, this plan should be circulated for public comment. If you have specific comments to make regarding these test projects, please submit them to the Joint Committee on Printing by August 22, 1988.

Sincerely,

Wendell Ford

Wendell H. Ford
Vice Chairman

Frank Annunzio

Frank Annunzio
Chairman



DISSEMINATION OF INFORMATION
IN ELECTRONIC FORMAT
TO FEDERAL DEPOSITORY LIBRARIES

PROPOSED PROJECT DESCRIPTIONS

JUNE 1988

I. INTRODUCTION

In 1983, the Joint Committee on Printing established the Ad Hoc Committee on Depository Library Access to Federal Automated Data Bases. The Ad Hoc Committee submitted reports in December 1984 and January 1987 strongly recommending implementation of demonstration projects within the depository library community as a means of accurately assessing both effectiveness and economic feasibility.^{1,2/} The Ad Hoc Committee also recommended that the Joint Committee on Printing submit a request for funding for the projects and that GPO be responsible for the "planning, administration and implementation of the projects...."^{3/} At the direction of the Joint Committee on Printing, GPO requested \$800,000 for fiscal year 1988 for electronic dissemination pilot projects, however, these funds were not allowed by Congress.

On April 9, 1987, the Joint Committee accepted the Ad Hoc Committee's reports and passed a resolution calling for "a series of pilot projects [to] be implemented to test the feasibility and practicality of disseminating government publications to depository libraries in electronic formats."^{4/}

II. BACKGROUND

Responsibility of the Government Printing Office

As authorized under Title 44 of the U.S. Code, the Government Printing Office (GPO) serves as the Federal Government's printer and primary distributor of Government publications. For purposes of distribution to the Depository Library Program, Government publications are defined as "informational matter which is published as an individual document at Government expense, or as required by law.^{5/} The Depository Library Program guarantees public accessibility to Federal information at no cost to the user.

Government publications are provided to depository libraries in the most usable, cost effective format. Over the past ten years, Congress has authorized GPO to distribute an increasing number of suitable publications in microfiche format, in order to contain costs for the Depository Library Program. The House Appropriations Committee recently indicated its support for cost effective methods of electronic dissemination to depository libraries such as CD-ROM (Compact Disc - Read Only Memory) format.^{6/}

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More recently, the Association of Research Libraries (ARL) issued a report compiled by the Task Force on Government Information in Electronic Format, which supported the earlier findings of the Ad Hoc Committee. ARL believes that the Depository Library Program has reached a critical juncture -- a crossroads, if you will, to the future. ARL vigorously urges GPO, in cooperation with other Federal agencies, to institute immediate action thereby enabling depository libraries to begin receiving Government documents in electronic format.8/

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be able to utilize a "gateway" to search DOE files and/or commercial systems, download data, and communicate via electronic mail. A subsequent phase might provide electronic access to the thousands of DOE reports currently sent to depository libraries on microfiche.

As microcomputers become more and more widely used, the number of data bases containing Government information is also growing. Usually, data entered into microcomputers is administrative in nature and would not qualify for depository distribution. However, instances have been reported where agencies have discontinued printing reports in favor of distributing flexible ("floppy") disks. Future efforts may include distribution of published reports on floppy disks.

The project descriptions presented in the following pages identify costs that can be attributed to individual projects. If these projects are implemented, some additional resources may be required to support the overall program. For example, some additional equipment will be needed, such as a CD-ROM drive (\$845) and a modem (\$350). It is also estimated that the Library Programs Service would initially require the equivalent of one additional staff year to support the successful implementation of these projects.

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Finally, this project will not entail the issue of software licensing. (Service bureaus which develop CD-ROM products under contract sometimes charge substantial fees per disc copy for use of their retrieval software.) The Census Bureau software is in the public domain.

COST PROJECTION: The total cost for this project, including materials, postage, and labor, would be approximately \$14,027 for 1,400 libraries. Contractor costs for duplicating copies of CD-ROMs and floppy disks are estimated at \$2.75 and \$5 respectively. The documentation (estimated at 100 pages) would cost about \$51 per 100 copies. Postage and handling costs are based on distributing the materials via United Parcel Service (UPS).

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PROJECT: Distribute the Toxic Release Inventory (TRI) to be published by the Environmental Protection Agency (EPA) in February 1989 to depository libraries in CD-ROM format.

DESCRIPTION: The EPA was established in 1970 to safeguard the environment through development of effective Government standards and regulations, research, monitoring, and education. As part of the Superfund Amendments and Reauthorization Act of 1986 (SARA), Congress charged the EPA with collecting and making available to the public information about over 300 toxic chemicals that are being released to the environment. Certain chemical manufacturers, processors, and users are required to submit annually a toxic chemical release form to the EPA. The release forms provide information to the Federal, state, and local governments and the public. EPA is required to make this data accessible by computer telecommunications and other means.

Between 160,000 and 300,000 release forms will be submitted to the EPA by July 1, 1988. Data collection will not be completed until about February 1989. EPA proposes to publish a CD-ROM containing the TRI data base for distribution to their field offices, as well as depository libraries.

CD-ROM format was selected for the TRI data base because of size, content, update frequency, and search requirements. EPA would contract for designing the layout of the CD-ROM and development of search software. Disc replication would be through a GPO contract.

EPA also plans to publish the TRI in printed format. It would probably be distributed to depository libraries in microfiche format, at a cost of approximately \$70,257. Distribution of this data to depository libraries in CD-ROM format instead would offer significant cost savings.

COST PROJECTION: The total cost for this project, including materials, fees, postage, and labor is estimated at \$22,319 for 400 libraries. Most of this amount, \$20,000, is to purchase software licenses to entitle disc users to use contractor-developed software. (Some companies allow publishers to purchase rights to the software outright, but licensing seems to be more prevalent in the industry.) Costs for software licenses seem to vary a great deal depending on the company, product, and the number of disc copies produced. The figure used here (\$50 per disc copy) seems to be a reasonable amount based on a recent survey of CD-ROM producers. The software license fee would include the cost of the floppy disk and documentation to support the software.

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PROJECT: Distribute the final (bound) edition of the Congressional Record published by the U.S. Congress to depository libraries in CD-ROM format.

DESCRIPTION: The Congressional Record is published in two editions: 1) a daily edition is produced when Congress is in session; and 2) a cumulated final edition is prepared after the conclusion of each session of Congress.

Indexes to the daily Record are published on a biweekly basis. Indexes to the final editions of the Record are created by cumulating the biweekly indexes for each session of Congress. The cumulated indexes are edited to reflect the page numbers that appear in the final Record.

Currently, the Congressional Record is published in three formats: 1) paper (daily on newsprint, cumulated final on 40 lb offset); 2) microfiche (daily and final on 24X diazo fiche); and 3) electronic (standard 1600 BPI, ASCII, IBM compatible, 9 track magnetic tape).

While the magnetic tape format has never been offered through the Depository Library Program, until 1986 the bound Record was made available to libraries on dual format distribution (i.e., selective depositories could choose either paper or microfiche; regional depositories received both paper and microfiche). In early 1986, depository distribution of the bound Record was changed from dual format to microfiche-only, as a cost-savings response to budget cuts mandated by Gramm-Rudman-Hollings.

Recent advances in the use of CD-ROM technology seem to indicate that this format may be an appropriate alternative to microfiche distribution. Not only does CD-ROM provide much greater research capabilities to the user, it also appears that it will be less costly than microfiche. The following analysis presents the projected costs and considerations of employing CD-ROM as an alternative to microfiche for depository distribution of the Congressional Record.

Considerations in Publishing the final Record on CD-ROM

1. Size of data base

A year of the Congressional Record is made up of approximately 413 million keystrokes, which translates to about 500 megabytes of information. In addition, the index and bill digest for a year's Record will comprise approximately 22 additional megabytes. A single, 4-3/4 inch CD will hold up to 660 megabytes of data.

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(Postage and handling costs are based upon distributing materials via United Parcel Service.) The estimated cost for 1,305 microfiche copies of the final Record for a single session of Congress is \$158,203. For a detailed comparison, see the table below.

Estimated Cost Comparisons
For 1,305 Depository Libraries for One Year

	<u>Microfiche</u>	<u>CD-ROM 10/</u>
Printing Costs		
<u>Record</u> Text	\$ 0	\$ 0
<u>Record</u> Index	39,542	39,542
Production Costs		
Master Copy	5,048	1,700
Duplicate Copies		
Fiche	36,892	0
CD-ROM	0	2,610
Floppy Disk	0	6,525
Postage		
<u>Record</u> Text	1,109	1,945
<u>Record</u> Index	4,085	4,085
Handling		
<u>Record</u> Text	71,123	78
<u>Record</u> Index	404	404
Documentation	<u>0</u>	<u>653</u>
Total	<u>\$158,203</u>	<u>\$ 57,542</u>

House Report 100-621 (Legislative Branch Appropriation Bill, 1989) provides the following guidance for choosing an appropriate depository format for the bound Record: "The Committee agrees with providing cost-effective methods of electronic dissemination of information to depository libraries such as CD-ROMS."11/ Thus, the choice of CD-ROM format for depository distribution of the bound Record appears to be fully consistent with the Committee's direction.

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PROJECT: Provide online access to the Economic Bulletin Board sponsored by the Department of Commerce.

DESCRIPTION: The Department of Commerce offers a wide variety of programs aimed at monitoring the nation's economy and promoting economic growth through international trade, free enterprise, and technological advancement. One facet of the Department's job is to collect, analyze, and disseminate statistics representing the state of the nation's economy. This information is provided to business and Government planners to enable them to respond to national economic conditions.

One of the primary ways utilized by the Commerce Department and other Federal agencies to distribute economic news is through press releases. Such press releases sometimes contain important Government information, for example, the Consumer Price Index and national unemployment statistics. Even though press releases are clearly within the scope of the Depository Library Program as defined by Title 44 USC, it is often difficult to obtain copies for depository distribution. Agencies frequently reproduce press releases in limited quantities for immediate distribution. Attempts to acquire copies later are costly and very often futile. Even when copies can eventually be obtained, they are of less value to depository libraries because the news is no longer timely.

Another medium used to disseminate economic information is an electronic bulletin board sponsored by the Department of Commerce. The Economic Bulletin Board contains economic news and statistics published by several bureaus within the Department of Commerce, including the Bureau of Economic Analysis, Census Bureau, International Trade Administration, and NTIS, as well as the Federal Reserve Board, Bureau of Labor Statistics (Labor Department), and the Internal Revenue Service (Treasury Department). The information is contained in about 300 files which are updated within a few minutes of their release time. Updates are monthly or quarterly, depending on the release; employment statistics, for example, are updated monthly. There are currently about 900 subscribers, including about 100 libraries. The only equipment required is a "dumb" terminal, however, most subscribers use personal computers to download data to floppy disk for subsequent review and manipulation. The current equipment configuration at the Commerce Department will accommodate up to 16 simultaneous users, using 2400, 1200, or 300 baud communication.

The Commerce Department has indicated their willingness to extend access to selected depository libraries. Officials there have proposed that 100 libraries be given the opportunity to use the Economic Bulletin Board for a period of six months.

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Publication Title: Economic Bulletin Board

Source Agency: Department of Commerce

Project Description: Provide unlimited online access to the Economic Bulletin Board to 100 depository libraries for a period of six months.

Depository Distribution Cost Comparison:

1. Current Costs

(NOTE: Much of the information contained on the Economic Bulletin Board is not currently being distributed to depository libraries. Also, it contains data supplied by a wide range of Federal agencies, as described in the project description. For these reasons, reliable cost figures for hard copy distribution were not available.)

According to records of system usage compiled by the Department of Commerce, one Federal depository library used the Economic Bulletin Board (EBB) 45 times to download 261 files during the first three months of 1988. The cost for 100 libraries to use the EBB to this extent for six months (a total of 2,400 hours) at regular Commerce Department rates would be about \$15,000.

2. Costs for online access

One-time fee for unlimited usage for six months	\$ 5,000
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*Telecommunications costs (2,400 hours X \$7/hour)	16,800
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TOTAL:	<u>\$ 21,800</u>
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*NOTE: Actual telecommunications costs would depend on the amount of online usage. This cost could be borne by the Federal Government or participating depository libraries.

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depository libraries); (2) increased search capabilities (i.e., more access points); (3) retrieval capability for related information; (4) electronic cataloging information that is currently not available. (GPO is not cataloging these publications in the LC/GPO cataloging format and this material is not part of the Monthly Catalog of U.S. Government Publications.) The development and application of this system could allow realization of significant cost savings at each depository library.

COST PROJECTION: DOE officials have proposed that GPO reimburse DOE for development costs as well as use of the DOE computer by depository libraries for the duration of the project. One-time costs, in the amount of \$100,000, would cover expenses for personnel and other resources needed to adapt the DOE computer system for use by depository libraries, develop the gateway for accessing commercial systems, and conduct the feasibility study for the format of DOE technical reports. The cost for searching files on the DOE computer would be \$16 per hour. Based on 20 libraries searching the DOE computer for two hours a week, the annual recurring cost to GPO would be \$33,280. This expense would be slightly offset by a savings of \$2,155, if participating libraries no longer received printed copies of Energy Research Abstracts. Libraries that choose to utilize commercial systems to search for older DOE materials would pay for those services at the going commercial rate (currently \$85 - \$120/hour).

V. REFERENCES

1/U.S. Congress, Ad Hoc Committee on Depository Library Access to Federal Automated Data Bases, Joint Committee on Printing, Provision of Federal Government Publications in Electronic Format to Depository Libraries, 98th Cong., 2d sess., 1984, pp. (III), 10.

2/U.S. Congress, Ad Hoc Committee on Depository Library Access to Federal Automated Data Bases, Joint Committee on Printing, Report to the Joint Committee on Printing, 100th Cong., 1st sess., 14 January 1987, pp.2-3.

3/Ibid., pp.2-3.

4/U.S. Congress, Joint Committee on Printing, Committee resolution, 100th Cong., 1st sess., 1987.

5/Title 44-Public Printing and Documents, U.S. Code, sec. 1901 (1982 ed.).

6/U.S. Congress, Committee on Appropriations, Legislative Branch Appropriation Bill, 1989, House Report 100-621, 100th Cong., 2d sess., 1988, pp.30-31.

7/Title 44-Public Printing and Documents, U.S. Code, sec. 1901 (1982 ed.), p.543.

8/Task Force on Government Information in Electronic Format, Association of Research Libraries, "Technology and U.S. Government Information Policies: Catalysts for New Partnerships," Washington, D.C., October 1987, p.23.

9/Figures are based on the number of depository libraries currently receiving the final Congressional Record (1,295) plus ten copies for claims. Depository libraries that receive the final Congressional Record in microfiche or CD-ROM would be allowed to receive the Index in paper format.

10/Some additional costs would be incurred for developing or licensing retrieval software for the CD-ROM. Software licensing typically requires a one-time payment and/or royalties on a per disc basis.

11/U.S. Congress, Committee on Appropriations, Legislative Branch Appropriation Bill, 1989, House Report 100-621, 100th Cong., 2d sess., 1988, p.30.