

## COMPTROLLER GENERAL OF THE UNITED STATES WASHINGTON, D.C. 20548





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JULY 6. 1979

The Honorable James Sasser R ' Chairman, Subcommittee on Legislative Branch SEN 00309 Committee on Appropriations United States Senate

SEN00325

The Honorable Adam Benjamin, Jr. Chairman, Subcommittee on Legislative Branch Committee on Appropriations House of Representatives [Comments on)

Pursuant to the request by the Library of Congress, this letter transmits its report Alternate Methods for Transmitting Machine-Readable Bibliographic Data: A Feasibility Study and our comments on its work. Both were requested in the August 9, 1978, House conference report 95-1457, which accompanied the act making appropriations for the legislative branch for fiscal year 1979.

The conference report suggested that the Library of Congress "conduct a feasibility study of the alternatives available to accomplish an efficient exchange of bibliographic material with other libraries \* \* \*. " The report further stated that "\* \* \* the General Accounting Office should be consulted in regard to the methodology to be used in conducting such a study and should be asked to validate the results."

On October 30, 1978, the Deputy Librarian of Congress wrote us and requested our assistance in a "joint effort" on this project. We responded on November 21, 1978, by offering our assistance to the Library. We later agreed that the Library would develop the study and that we would concurrently review it as it was being completed and validate the results.

Since the middle of December, we have met periodically with the Library of Congress staff members to review and validate the information as it was developed by the Library. The Library sent us a complete draft on March 15, 1979, and the final report (copy enclosed) on May 9, 1979, for final

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review and validation of the information contained in the report. Our comments follow.

The Library examined three basic alternatives in its feasibility study. They were (1) the Tape Service (the present tape system), (2) the Batch Online Service, and (3) the Online Interactive Service. The third alternative was further divided into three separate computer configurations:

- --A single computer system (processor and data base) shared by congressional, Library, and external online users.
- --Separate processors, one for Library and congressional users and one for external online users, both sharing a common data base.
- -- Two separate computer systems (both processors and data bases), one for congressional and Library users and one for external online users.

In the last configuration, the system for external users is referred to as the Separate System. The Separate System actually would not be a completely new Library computer system, but would be a modification of the Library's present Cataloging Distribution System to allow for online interactive processing. The costs, benefits, impact to congressional and internal Library users, systems growth, and data security were analyzed for each alternative.

The Library selected the Separate System as its recommended alternative. Although this system would cost more to implement, the Library determined that (1) the availability of the Library's automated resources to congressional and internal Library users would not be adversely affected, (2) the number of external online users would be controlled so that the existing Separate System processing unit would be adequate for at least 3 years, and (3) the security of the present congressional and Library data bases would not be jeopardized. No Government funding would be needed since all operational costs would be recovered from user charges and startup costs would be obtained from private grants—a procedure the Library used in the past. The costs for communications would be the responsibility of the user.

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The Library has determined that potential benefits are significant for both the Library and outside users if an

efficient and timely exchange of bibliographic data can be developed. Further, the Library believes that the Separate System, if implemented, can obtain these benefits. The benefits include (1) making bibliographic information more available, (2) reducing duplicate cataloging currently being done by most libraries, (3) increasing resource sharing among participating libraries, and (4) increasing standardization among libraries.

We agree that the potential benefits as defined by the Library of Congress are significant. In our opinion, the alternatives the Library examined are reasonable, and the costs, benefits, impact, and security of the data are presented accurately. We also agree that the Separate System would (1) reduce the impact to congressional and Library users, (2) not pose any significant security or privacy problem, and (3) allow for adequate systems growth. We also believe that anticipated costs could be reasonably recovered from user charges. Additional cost savings from a reduction of duplicate cataloging made possible by increased cooperation and resource sharing among libraries could also be significant for the Library.

We note that the <u>Library plans to make additional studies</u> before implementing this system, if approved by the <u>Congress</u>. They include detailed requirements analysis, feasibility of alternate communications services, the appropriate method of transferring data between data bases, and the best method of cost recovery. The Library also (1) does not plan to add any new congressional or sensitive data bases without appropriate congressional approval and (2) intends to control systems growth to allow for a planned and orderly expansion. We concur in this approach.

We suggest that the Library (1) evaluate costs, benefits, and revenues periodically to determine the need for management actions to improve system performance, (2) make a thorough risk analysis before implementing the Separate System, and (3) justify the cost of any new procurements. We also suggest that the Library not connect the Separate System to its internal computer system unless proper security measures are employed and a second risk analysis is developed. These risk analyses should consider the possible damage from circumvention of security procedures and the likelihood of such an action occurring. They should also show the necessary and cost-effective safe-guards needed to offset potential vulnerabilities. Finally, to

take full advantage of resource sharing, we believe that the Library should enter into formal cooperative agreements with other participants with the aim of defining each participant's responsibilities.

We have discussed this report with Library officials and there were no disagreements. It was our pleasure to work with the staff of the Library of Congress on this project.

We will be pleased to assist you further in this matter if you so desire.

Comptroller General of the United States

Enclosure