

1983: CLR Supports Work to Develop Standard Network Interconnection to Permit Linking of Large Databases

For years, CLR supported work to create a comprehensive nationwide bibliographic system, which depended on linking computer systems. In 1983, CLR awarded \$82,652 to the Library of Congress for work with the Research Libraries Group and Washington Library Network to create protocols for a standard network interconnection (SNI) that would permit the linking of large bibliographic databases. Protocol specifications were completed that year and participants were prepared for full SNI testing. OCLC ultimately joined the effort, and by June of 1986, the first application of the link, transferring authority records, was in the early stages of operation, and work on a second application, the transfer of bibliographic records, was under way.

The following description of SNI is taken from CLR's annual report ending June 30, 1983, p. 13. A description of the broader Bibliographic Service Development Program (BSDP), provided on the following page, is taken from page 12 of the same report.

Standard Network Interconnection (SNI)

Building a comprehensive nationwide bibliographic record system requires linking computer systems. In order to do so, it is necessary to establish telecommunication protocols, or sets of rules that govern how information is transferred from one computer to another. In the BSDP Linked Systems Project (LSP), the Research Libraries Group (RLG), the Washington Library Network (WLN), and the Library of Congress (LC) are developing and implementing these rules as the Standard Network Interconnection. The OCLC Online Computer Library Center has participated in technical planning, but has no present commitment to use the protocols.

International principles for computer linkage have been specified in the International Standards Organization/American National Standards Institute Reference Model for Open Systems Interconnection. The model is designed as a logical structure consisting of seven layers, or sets of rules. Each layer accepts information from the layer preceding it, performs needed functions, and transmits results on to the next layer. Because the lower layer protocols already have been formulated, the SNI project concentrates on the upper layers. When completed, the computer system links also can be used for purposes other than the exchange of bibliographic records.

During fiscal 1983, protocol specifications were completed and participants prepared for full SNI testing. A successful communication link between the LC and RLG computers early in the year utilized a portion of the protocols. Work done in the BSDP Linked Systems Project is being coordinated with the American National Standards Institute Committee Z-39, Subcommittee D (Computer-to-Computer Protocols).

Bibliographic Services

The Council seeks to encourage the development of a comprehensive, accessible, nationwide bibliographic record system. Providing ready access to bibliographic information, improving bibliographic products, and stabilizing costs of bibliographic processes in individual libraries are the primary objectives. The Bibliographic Service Development Program (BSDP) has made steady progress toward achieving these goals and, as a result, the National Endowment for the Humanities in 1983 made a \$600,000 award for the program, to be matched by funds already committed by the Andrew W. Mellon Foundation. The award supplements a previous NEH/Mellon grant and other grants from the Carnegie Corporation of New York, the Commonwealth Fund, the Ford Foundation, the William and Flora Hewlett Foundation, the Lilly Endowment, and the Alfred P. Sloan Foundation. The total program budget is \$6.2 million.

CLR relies on many expert individuals and groups to help plan and implement project activities. The Program Committee, a key force in guiding BSDP development, includes chief operating officers of the shared cataloging services and leaders in the library profession and in library technical services development.¹ Others help identify needed work by participating in conferences on such topics as subject access to bibliographic records and costs and features of online catalogs. BSDP support for the work of the Library of Congress Network Advisory Committee similarly has proved important for understanding current concerns and exploring possible courses of action.

Currently the Council's largest program, the BSDP made 18 new grants during fiscal 1983, and 24 grants were active at the end of the year. Major activities are described below.

Standards And Guides

Standard formats for recording and communicating bibliographic information help ensure compatibility of bibliographic products. Not only local, regional, and national agreements are involved; international commitments also are needed to secure American libraries' access to bibliographic products of other nations. BSDP-sponsored work on standards supports both national and international activities.

¹Members of the BSDP Program Committee are listed on page 38.

Program Committees, Task Forces, And Project Participants

BIBLIOGRAPHIC SERVICE DEVELOPMENT PROGRAM PROGRAM COMMITTEE

Henriette Avram <i>Library of Congress</i>	Carol Ishimoto <i>Harvard University</i>
Rowland Brown <i>OCLC Online Computer Library Center</i>	Frederick Kilgour <i>OCLC Online Computer Library Center</i>
Joan Gotwals <i>University of Pennsylvania</i>	Richard McCoy <i>Research Libraries Group</i>
James Govan <i>University of North Carolina</i>	Roderick Swartz <i>Washington State Library</i>

BIBLIOGRAPHIC SERVICE DEVELOPMENT PROGRAM TASK FORCE ON A NAME AUTHORITY FILE SERVICE

Raymond DeBuse <i>Washington Library Network</i>	Penny Mattern <i>OCLC Online Computer Library Center</i>
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BIBLIOGRAPHIC SERVICE DEVELOPMENT PROGRAM LINKED SYSTEMS PROJECT

<i>Library of Congress</i> Principal Investigator and Program Officer: Project Directors:	Henriette Avram Sally McCallum, Authorities Ray Denenberg, Telecommunications
<i>Research Libraries Group</i> Principal Investigator: Project Directors:	Richard McCoy Tina Kass, Authorities Wayne Davison, Telecommunications
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