

## Executive Summary

In 1998, the National Information Standards Organization (NISO) funded a research study to compile information about state library agencies' standards policies and practices. The goals of the study were to:

- Help NISO better understand the current use of standards and need for standards information at the state level
- Provide state library agencies with a compilation of state library agencies' policies, practices, and issues related to information technology standards.

The study had the following objectives:

- Survey state library agencies to document existing standards policies and initiatives
- Document existing (or planned) processes and procedures for identifying, learning about, selecting, implementing, and reviewing standards
- Identify key issues and barriers to standards selection, adoption, and use
- Identify critical areas where standards are being used or are needed
- Develop a set of recommendations for NISO, the state library agencies, and their professional organization, the Chief Officers of State Library Agencies (COSLA).

Two phases of data collection occurred. The primary data collection instrument was a questionnaire distributed to all fifty state library agencies and the District of Columbia followed by in-depth telephone interviews with selected agencies.

Thirty-eight state library agencies returned completed questionnaires, a 75% response rate. Detailed profiles of the respondents were developed to highlight key characteristics. Nearly 75% of the respondents are involved standards-related activities such as recommending standards, promoting standards, and identifying standards for use by state libraries. Yet only about 25% of the respondents have legal responsibility for standards setting and have written policies and procedures related to standards. About 50% provide education and training on standards.

Agencies identified many advantages that standards can offer, including: connectivity & networking; effectiveness/improved service; basis for vendor and product selection; assistance in carrying out responsibilities; and compatibility. Yet only two NISO standards are required or recommended by more than 50% of the respondents: Z39.2, MARC (76%) and Z39.50, the Information Retrieval Protocol (63%). A primary driver for the adoption and promotion of standards is the extent the standards assist in mission-critical activities related to resource sharing.

Many of the respondents viewed libraries' increasing use of information technologies and the networked environment leading to more important roles for standards. This networked environment will require investment in infrastructure to ensure systems can connect and interoperate, and there will be more need for education and expertise within the agencies to

provide the leadership role in developing the infrastructure and use of standards. Respondents also identified areas in which standards are needed including digitization, electronic publishing, patron authentication and patron record information, and metadata.

In addition to presenting the findings from the data collection activities, this study analyzed the levels of standards adoption and drivers for standards adoption. The highest utilized NISO standards can be seen as infrastructure standards that underlie a state's abilities to improve resource sharing. The study also identified key issues and challenges for NISO and the agencies that include: providing timely and accessible standards information; integrating the use of many standards; increasing the level of standards adoption; and the determining the roles of state library agencies in national standards development.

Based on the data analysis, the study offers a set of recommendations to NISO and the state library agencies and the COSLA. Associated with the recommendations are specific actions that can be taken.

The recommendations for NISO are:

- Develop appropriate standards information services that address the needs of the state library agencies
- Increase communication and outreach to state library agencies to improve NISO visibility
- Recognize that libraries need standards information on NISO and non-NISO standards to address the challenges of the digital and networked revolution
- Provide a clearinghouse for national projects that utilize NISO standards and assist in coordinating a network of state library "standards junkies"
- Publicize NISO membership options to state library agencies.

Recommendations for State library agencies and COSLA are:

- Support standards implementation by the states' libraries
- Improve communication and information sharing among state library agencies
- Use state library agencies' websites more effectively to promote and share information about standards
- Support NISO through membership and participation in the standards development process.

The roles of the state library agencies are multi-faceted, their organizational structures are diverse, and their responsibilities vary as arbitrators or setters of standards for an individual state's libraries. These agencies play pivotal roles in the use of technology, and therefore standards, in their states. The agencies, although a small customer base in absolute numbers, can or do have positions of influence over a large number of potential NISO customers and customers of technology vendors who are NISO members and implementors of NISO standards. The agencies may constitute a significant market for appropriate, value-added standards information services. Even more importantly, they serve as a conduit for and/or promoter of NISO standards to the individual states' library communities.