## **Executive Summary**

As libraries have worked to incorporate electronic resources into their collections, services, and operations, most of them have found that their existing integrated library systems (ILSs) are not capable of supporting these new resources. A 2001 study by Jewell<sup>1</sup> determined that a number of libraries had begun developing local systems to overcome these shortcomings. The Digital Library Federation (DLF) Electronic Resource Management Initiative (ERMI) was organized to support the rapid development of such systems by producing a series of interrelated documents to define needs and to help establish data standards.

A National Information Standards Organization (NISO) and DLF workshop in May 2002 led to the creation of a steering group that would guide the development of the ERMI. In addition, the DLF invited librarians, library-system vendors, and representatives of related organizations to serve on two project advisory groups. The steering group shared draft versions of the documents it was developing with members of these two reactor panels. The drafts were also made publicly available via Cornell University's Web Hub for Developing Administrative Metadata for Electronic Resource Management (available from http://www.library.cornell.edu/cts/elicensestudy/).

This publication contains the report and appendixes developed by the steering committee during the course of its work. The report itself is intended to serve as a road map for electronic resource management (ERM). It outlines ERM system needs and discusses and illustrates screens from systems that are already in place at such institutions as the Massachusetts Institute of Technology (MIT), University of California, Los Angeles (UCLA), and the Johns Hopkins University (JHU). Appendix A summarizes in detail some 50 functional requirements of an effective ERM. Appendix B provides a diagram that outlines some differences between workflows for print and electronic resources. This appendix also contains diagrams for more specific phases of the e-resource life cycle.

Appendixes C, D, and E are closely linked. Appendix C is an entity-relationship diagram that illustrates how groups of data elements relate to one another. Appendix D is a data dictionary encompassing more than 300 elements. Appendix E covers data structure, grouping the data elements by entity and keying them to the functional requirements. The concluding XML investigation discusses and compares some existing rights expression languages (RELs). It notes that while it is desirable for libraries, publishers, and vendors to have a standardized, XML-based way to describe key terms of license agreements, no current RELs or schemas seem practical or usable without major modification. To fill this need, the authors propose creation of a *native* ERM schema based on the ERMI data dictionary.

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<sup>&</sup>lt;sup>1</sup> Jewell, Timothy D. *Selection and Presentation of Commercially Available Electronic Resources*. Washington, D.C.: Digital Library Federation and Council on Library and Information Resources, 2001. Available at http://www.clir.org/pubs/abstract/pub99abst.html.

The work of the ERMI has been received very favorably by both librarians and vendors, several of whom are already developing systems based in large part on this report and appendixes. Among several areas needing additional work are functional requirements for consortia, specifications for incorporation and reporting of usage data, and further development of data standards.