

It's Time to Think Again about Resource Sharing: A Discussion Paper

Prepared by a small group of individuals who are thinking about the future

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I. Introduction and Goals

The goal of this document is to induce serious discussion in the library community about the future of resource sharing. We chose the phrase “resource sharing” to underscore that this conversation is far broader than a targeted reassessment of the current mediated interlibrary loan environment. Changes in resource sharing have already started. The discussion we are encouraging might lead to new approaches and models of resource sharing possibly supported by new or existing technical standards, changes to policies, improvements to current workflow, or the introduction of new products and tools. We hope that this discussion will bring together interlibrary loan (ILL) librarians, library users, vendors and developers of resource sharing systems, library administrators, content providers, and other interested members of the library world to identify how library resources will be shared over the next decades.

We do not advocate any single or group of technical or policy solutions at this time – we feel it is far too early in the exploration process to do that. Rather, we observe that the library world is nearing the end of an era in mediated resource sharing – the era of traditional, mediated interlibrary loan – and is beginning to embark on a new set of resource sharing capabilities, with greater discovery options such as Google, Google Scholar, and linking to open access journals; the increased adoption of web services; widespread adoption of ‘best practices’; improved requesting mechanisms such as user-initiated ILL, circulation-based sharing and consortial delivery services, and improvements in electronic document delivery. These technical capabilities, combined with reconsideration by many libraries of their policies regarding the sharing of materials, combine to provide a unique opportunity to examine resource sharing with a clean slate – a time to reconsider existing paper-originated models of the last 30 years and identify actual, need-based sharing functions appropriate for the future.

We are under no illusions that this will be a rapid or genteel process. We propose a reexamination of processes that have evolved incrementally over the past several decades. Many practitioners feel comfortable with the current model of resource sharing. However, a growing group of librarians is already introducing alternative models as a means of meeting user needs. The comfort zone of current practices and requirements for the future needs to be understood in the context of the larger framework of resource sharing.

The future of resource sharing must be examined, and now is the time to begin. We wrote this paper to contribute to provoke discussion about the future of resource sharing and to move the process of understanding and planning forward.

II. The environment is changing already

Although our impetus for examining resource sharing evolves from participating in the standards process, the environment of resource sharing was already beginning to change. OCLC's excellent **2003 OCLC Environmental Scan: Pattern Recognition** report noted that successful information consumers expected three major conditions: Self service/self sufficiency, Satisfaction in what they had retrieved, and Seamlessness in the process. Further, the report noted that libraries cannot change user behavior, placing the burden of change on the library.

Google and similar resources display the power of the web, and pose questions regarding the relevance of libraries in general. Library users want more from their libraries – expectations directly attributable to the increased access and immediacy brought about by the web. Home- or office library materials delivery, immediate full-text display, and the database metasearch industry have developed in the library space in order to satisfy public insistence, and as a way of keeping libraries relevant to the information delivery process.

Evidence of those points can already be seen in the evolution of some resource sharing models. Some instances:

- While mediated interlibrary loan through traditional bibliographic utilities continues to grow, there is a complementary trend towards unmediated interlibrary loan (in other words, user-initiated circulation)
- Library users are far more capable of discovering, identifying, and acquiring documents from the Web than ever before.
- From the standpoint of simple document availability, the practice of direct linking to the full text of an item, from an index or a reference, has become much more widespread. The distance from citation to document has been made shorter.
- Alternatives to traditional mechanisms for resource sharing – such as SWIFT and other stand-alone statewide initiatives, Borrow Direct (in the Ivy League), and RAPID – are springing up because traditional approaches can be ineffective, slow, or costly.

As these changes and others evolve, what will be the attitudes of librarians? Where does self-service end and library service begin? These questions provide a starting point for examining the larger issue of resource sharing.

III. Who are we to raise this issue? What authority do we have?

Members of the ISO 10160 Advisory Committee, IPIG, and the NCIP Implementer's Group compose the core of this group, joined by leaders and policy makers from library agencies and membership organizations. We are generally technologists well versed in library automation, who have worked for years to make library systems interoperate for the benefit of the end user. Most of us have MLS degrees, and all of us have, at some

point or another in our careers, worked in libraries. We have a keen appreciation for the whole gamut of library processes, and a practical and efficient outlook on the way that processes should work. Collectively, our companies and institutions represent broad constituencies from school to public to large academic libraries.

As work on ISO10160 version 3 progressed, we became increasingly uncomfortable with its direction. We felt that a radical reexamination of resource sharing was due. Further, we felt that the (current) ASN.1/BER structure was inappropriate in the current technology development environment. Finally, we were uneasy with approving a new version of the standard that brought little improvement in functionality to the end user, for which there was no business case. As technologist-librarians, we feel that the profession is better served by assessing resource sharing with a clean slate, and designing systems and protocols that support emerging models of library cooperation.

In addition, we share a growing frustration with current levels of interoperability and the proprietary nature of many methodologies used to deliver materials electronically. We see a proliferation of new technical standards, (ZING, SRW/SRU, XML Query, OpenURL, for example) making it more challenging for library automation vendors to support all of them, and for practitioners (and vendors alike) to understand the appropriate interactions between them.

At the time of this writing, we have no official standing. We hope and expect that this important issue -- examining and assessing the evolving resource sharing needs -- will attract the interest and involvement of NISO, the Library of Congress, the American Library Association (ALA), and other interested groups.

IV. Basic Assumptions for the Discussion

The following assumptions (situational truisms) have guided our thinking. We may not like some of them, but we feel that it is important to acknowledge them as part of the environment:

- Mediated ILL will continue to exist, and may be the preferred mechanism for many libraries.
- Because of the comparatively high cost of interlibrary loan, we expect that mediated ILL traffic might diminish, particularly in the US. The move away from mediated interlibrary loan will not be uniform or quick.
- Unmediated interlibrary loan is, in general, less expensive, faster, and produces higher fill rates than mediated interlibrary loan.
- Google (and similar) sources will play an increasingly large role in the discovery of, and access to, documents.
- There is a huge investment in current resource sharing constructs – both in interlibrary loan staff and in automated support systems. Therefore ...
- Any new approaches to resource sharing must be (a) wanted by the library community, (b) better than what is now in use, (c) less expensive than what is now in use, or (d) all of the above.
- No matter what this discussion accomplishes, there are a number of key players in the resource sharing world. Any decisions made as a result of this examination must be taken with the foreknowledge that these powerful institutions have the power to influence or deter them.
- What is good for individual libraries may not necessarily be in the interest of these key players, and vice versa.
- Additional stakeholders in the resource sharing discussion exist. The conversations that we are advocating will benefit from inclusion of all key players into the conversation.

V. What do we want to accomplish?

As noted above, we feel that in order to design systems and mechanisms that will support resource sharing in the future, we must have a better understanding of future needs of the resource sharing world. At this time, we are more interested in “blue sky” approaches than in specific functionality. We want to understand how managers, administrators, and practitioners envision resource sharing fifteen years in the future. We want to listen to and encourage discussion of creative ideas.

To guide the discussion, this is what we are interested in learning:

- How do you define resource sharing?
- Are you sharing resources? How? With whom?
- What works? What doesn't? More importantly, what could work better? (remember, blue sky level, not detailed level)

- If you could change things dealing with resource sharing – anything: costs, software, rules, complexity – what would you change? Why?
- What is Google doing to resource sharing? Amazon?
- How is OpenURL affecting resource sharing?
- What are your plans for NCIP? Where are NCIP's inadequacies?
- Do you see a blurring of roles in your library between circulation-based sharing and mediated ILL?
- How will your sharing patterns change over the next two years? Five years?
- Are there other approaches to resource sharing besides circulation-based and mediated ILL?
- How do your patrons want to make requests? Do they want more options than mediated ILL?
- Etc.

By asking these questions and systematically analyzing the responses, we hope to gain understanding about the perceived needs of people familiar with resource sharing at all levels. Armed with this information, we plan to broaden the discussion to include individuals who are expert in resource sharing, and the collective group expertise of various ALA, ACRL, and other committees. We want to ensure that any new approaches to resource sharing have the understanding and support of those with expertise in the field.

VI. Timeline

We feel that it is the right time to understand the future needs of resource sharing. The confluence of factors outlined in this document make this a propitious time for holding these conversations. Further, we acknowledge that any set of discussions triggered by this effort may take months or years to reach closure. Therefore, we have set out an ambitious schedule for our activities, fully cognizant of the possibility that we are being overly optimistic and unrealistic.

- February 2005: circulate this document to committee, NISO SDC, etc.
- March – April 2005: identify blue sky thinkers to talk to; add them to the conversation and refine goals and objectives
- May 2005: revise document; circulate it more generally. Plan an informal listening session at ALA.
- June 2005: Listen, discuss at ALA in RUSA ILL Discussion Group.
- Summer 2005: Begin to analyze needs and framework.
- Fall 2005: Convene workshop / session under auspices of NISO or similar group.
- Winter 2005: Publish interim report of findings to date.
- January 2006: More listening, follow-up discussions, etc.
- Spring 2006: Present results at annual ILL conference in Colorado and similar venues

- Summer 2006: Begin the “real work” – translating the newly understood resource sharing needs into goals, objectives, and tasks.

VII. Conclusion

Existing resource sharing in libraries works. We realize that there is no crisis pushing interlibrary loan practitioners towards making immediate changes. Nevertheless, we observe changing patron expectations that are stretching current library resource sharing services. We see the information landscape changing – financially, behaviorally, and technically. We have no expectations of what we will find at the end of this search to understand the needs of resource sharing. We do feel that it is time to ask the question.

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Addendum: Some historical background – why now?

Resource sharing (or interlibrary loan) – that is, the lending of materials between libraries – has taken place since libraries were established. Various versions of the National Interlibrary Loan Code have evolved over the years to formalize such exchanges. The first edition, published in 1917 and adopted by ALA in 1919, laid out responsibilities for both the borrowing and lending libraries. The 1917 Code was modified by a major update in 1940 and was modernized again in 1968. The most recent update to the National ILL Code was in 2001. Along with detailed behavioral guidelines outlined in the Code, an “ALA Interlibrary Loan Request Form”, usually printed in a multi-part, multi-colored set, is described as the paper-based means by which interlibrary loan requests are to be transmitted.

Work towards an automated interlibrary loan protocol can be traced to the early 1980s in Canada. The National Library of Canada (now: Libraries and Archives Canada) based the protocol on workflow and practice then in common use in Canadian libraries. The Canadian Standards Association approved the ILL protocol in 1987, and the International Organization for Standardization (ISO) approved it as ISO-10160 (version 1) in 1993. Several US organizations, including the North American Interlibrary Loan and Document Delivery (NAILLD) Project in 1994 and Interlibrary Loan Protocol Implementers Group (IPIG), in 1996, were established to encourage standards-based ILL. A revised version (ISO 10160 version 2) was approved in 1997, but was still largely based on mid-1980s, Canadian ILL practice.

In 2000, the IPIG and the ILL Application Standards Maintenance Agency began work on version 3, which was to include a number of amendments introduced since version 2. It also targeted fixing some problems and bugs, and introduced some new functionality. However, as version 3 development proceeded, the updated standard increasingly diverged from backwards compatibility with version 2. That lack of compatibility, combined with obsolescing architecture (ASN.1/BER structure as opposed to current XML), support of only a single, mediated model of ILL, and the lack of mention of current resource sharing protocols such as NCIP, resulted in ISO appointing a technical expert to determine whether version 3 could be made compatible with version 2. As of this writing, the future of ISO 10160 version 3 is uncertain.

NCIP has already altered the resource sharing environment. In 2002, Z39.83 was approved by the National Information Standards Organization (NISO) membership. This standard, the NISO Circulation Interchange Protocol (NCIP), supports 45 messages and 45 responses that perform many of the circulation functions and transactions performed in library settings. These messages and responses can be organized and implemented within applications profiles. Three profiles currently exist. Many library automation vendors are well along in their development (as of February 2005) of the Direct Consortial Borrowing (DCB) profile, while others are working on the Circ/ILL profile. In short, when libraries upgrade to NCIP-compliant circulation and ILL applications, they will reap the fruit of significant NCIP development that has taken place during the last several years. Resource sharing with known business partners (consortial or state-wide) will be easier than ever before, because it will be based on a circulation model, rather than an ILL model.

Further, NCIP uses XML, a more current technology, as its underlying message structure. XML is in widespread use across all industries, and therefore the library automation industry can take advantage of XML work (and trained personnel) from outside the library world. Maintenance of software using XML data structures thus can be done less expensively than older technologies such as ASN.1/BER. In addition, the NCIP standard recognizes that lending and borrowing is increasingly being done by the end users, themselves, as opposed to libraries acting on their behalf.

Despite the mention above NCIP above, want to make it clear that this paper is in no way an endorsement of NCIP as a solution to resource sharing issues. We do not presuppose that NCIP (or anything else, at this time), will be the approach to resource sharing in the future. We only point it out because it exists.

In conclusion, the limitations of ISO ILL combined with the advent of NCIP and changes in the way that libraries work with each other, provide an opportunity to assess the emerging needs of libraries in the area of resource sharing.