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NISO 1992 Annual Meeting at ASIS!

The NISO annual meeting for 1992 took place on October 27 at the ASIS Annual Conference in Pittsburgh. Following the highly successful luncheon for NISO devotees, the annual meeting was well attended, showing the rising interest in information standards in the library and information science fields.

The meeting began with an introduction and welcome from *James Rush*, NISO chair. *Bella Hass Weinberg*, head of the thesaurus standard committee, began the substance of the program. She did not want to repeat the reports she had already been sending in, so although she reported on progress briefly, she also wanted to give her views on the standards process. She began with a chronology of the standard — the impetus in 1987 was for reaffirmation, but Weinberg noted that many changes were needed. She found herself appointed chair of a revision committee in 1988!

A series of meetings began, resulting eventually in a draft that circulated for comments in 1990 — 800 comments were received! The second draft circulated in 1991, and received fewer, but still some, comments. The third draft is being mailed now, which should address all the substantive questions received. Bella hopes devoutly that the standard will end up being published in 1993.

The new edition differs greatly from the last American edition, and from the British and international editions, although it fits in with them fairly well. The major change in focus comes about in response to electronic information needs. The whole-part relationship is the major substantive change in concept for the organization of thesauri. There is more emphasis on broader and narrower relationships, and more allowance for local establishment of related terms. The standard includes many examples in an appendix, and an extensive glossary. Bella likes the concept that the standard can serve as a manual

for the person who knows little or nothing about thesauri.

Weinberg made some personal observations related to her experience with information standards; she has seen the continuity of her information standards work with her impact on the field. However, she noted that she recognizes that the individual realization of her work will be obliterated. She also raised the question of how much of a favor the voting representative who votes yes on a standard without looking at it does for the committee. Those who vote no and/or offer comment put much more work into their relationship with the standard. Perhaps the pressure to vote, and to vote yes, for numerical reasons, should be questioned.

Bella also questions the placing of a charge on the distribution of drafts, although commenters do get free copies. She also has some suggestions to improve format, but she noted that she has had a chance to contribute these suggestions. She closed by reporting that she has learned a great deal by serving on this committee, and she feels that she has been able to do a lot of teaching, too. Her weekends have belonged to NISO for quite a while, but it has been a worthwhile effort.

James Anderson of Rutgers University followed, with a report on the indexing standard, now in version 2.1. He noted that his committee is attempting a major change in the nature of indexing standards — traditionally, these standards have concentrated on human indexing of a single text, or back-of-the-book indexing. He was attracted to this effort because he was asked to look at indexing in the broad view. The use of electronics, including the availability of full text and automatic indexing, really changes the picture.

Database-type indexing, of large collections of documents, and automatic, or algorithmic, indexing are two of the major changes that have to be dealt with in a standard. The committee has met twice so far, and began with idea that it may be able to base its standard on the ISO one that was appearing. It could not do this, as it turns out, because the standard was too mired in the human indexer idea. The indexing committee has begun creating a glossary, appropriating many of the ideas from the thesaurus standard.

Committee members have made an abstract statement about what indexing is supposed to do, and one thing they have done is omit a mention that the index has to be ordered, since this does not make sense in computer terms. One of the big differences in characterizing indexes is not the media they appear in, but rather, is the index displayed to the human eye, or is it a hidden index? They had to redo the section characterizing types of indexes, and came up with a number of new ways of doing this.

They have also added a much more detailed summary of decision points for creating an index. Index scope, display media, documentary units (do you use a page to indicate location or something that is inherent to document structure), exhaustivity, specificity, syntax, vocabulary management — all are among the decision points when looking at indexes. The committee will be meeting again on November 6 in Washington.

Clifford Lynch reported on the CD-ROM Interoperability Standard effort. Interoperability standards are different than what many of us think of as standards. Many of the specifications in them have been the basis for much information industry development — Z39.2, Z39.50, ISO 9660 (which was originally a NISO standard). This helps to illustrate why we need a CD-ROM interoperability standard, and how important it could be. ISO 9660 was an important first step, but now we must go farther, and deal with the question of interoperability of data and search engine on CD-ROM.

This standard effort could help deal with the problem of the end user and librarian having to deal with different interfaces, as well as the effort to connect CD-ROM data to networks. The library could choose the interface to use, and connections could be much more easily made to networks. This effort has much in common with Z39.50, but it was

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not written for this purpose, and comes with much more complexity, addressing connections between two large computers over a network. If the connection will be in one box, so to speak, Z39.50 is overkill.

So this effort should probably end up with an applications interface specification that would help not only CD-ROMs, but other similar situations. What has complicated the situation is that some organizations have already begun to invest in their own solutions, and they want immediate decisions (in their favor.) So far the committee has been trying to analyze the elements involved in each of the four proposals it has been studying (CD- RDx, Z39.50, SFQL, and DES), and see where they have commonalities, and what is important from each. The committee is wrestling with questions of how abstract or specific the standard should be. The next meeting is early next year, and it may take awhile to sort out the solutions. The good news, though, is that this standard is needed greatly, and it holds the potential of greatly impelling the growth of an industry, and benefiting us all.

Cliff was asked about the relation of the standard to CD's other than CD-ROM; it should be possible to extend the standard to these other media, given that it deals with digitized content as opposed to media, but this is in the long term. Also in the long term is consideration of how the standard will deal with compressed data; Cliff suspects this will have to be dealt with on the client end for practical performance considerations, but again, this is down the road.

Nolan Pope, interim chair of the Standards Development Committee, gave its annual report. He noted the standards that have been published this year, and said that the committee still wrestles with the question of how to speed up the standards process. Members are considering hiring consultants to write first drafts, send drafts out over the Internet, and figuring out ways to deal better with voluminous comments. SDC is also about to review its technical plan.

Heike Kordisch, Treasurer, reported on NISO's financial situation. Income continues to be largely from dues, publications, and interest, but two grants were received. NISO is fairly safe in its finances, but the board continues to look for funding sources, since its sources tend to be static. It was noted that NISO does not make any profits from publishing the standards. All the money received goes to the publisher, since the sales level has not reached that which would provide royalties.

Questions arose on the extent of NISO communication done on electronic lists, and this will increase in the future, with the development of a NISO electronic mailing list and the circulation of drafts on the Internet. The meeting closed on this hopeful note.

ASIS Session on Index Standard

As another NISO-related part of ASIS, on the morning of Wednesday, October 28, 1992, *James Anderson* of Rutgers University moderated a session on "Standards for Information Retrieval Indexes." As previously mentioned, Anderson is chairing the committee which is revising the ANSI/NISO standard on indexing. He defines indexing as anything which indicates the content or subject of a work, so the new standard will deal with a much broader view of indexing than in the past. No other national or international standard is much help in this effort, since they focus on traditional indexing. Arrangement of entries, extent of the matter, syntax, medium of index, periodicity of index, author of index — all are considered by the new standard as types of indexes, and there are even more.

Marcia Bates of UCLA was the first commenter on the draft standard. She pointed out that the trickiest part of this standards effort is the indexing of online systems, which is still in flux, and therefore difficult to pin down. "Implicit" indexes is the term that is used to refer to hidden, non-displayed indexes in online searching, but it is possible for searchers to call these up and look at them, so is this a displayed index or not? She also noted that proximity operators and truncation are referred to in the standard as syntaxes, but they are also search capabilities that determine how the user can interact with the online indexes. This is what allows meaningful use of the online index, so it should be specified to a greater extent.

The following six components need to be addressed when thinking of online indexes — the implicit indexes themselves; conceptual definition of search capabilities; the means by which users carry out the search capabilities (actually the syntax); display, review, and modification abilities; search strategy pros and cons; and help capabilities. The standard should specify how documentation should show these features. The question is, should standards specify these factors? It is probably too early to take such a tremendous step.

Raya Fidel of the University of Washington commented on the standard in light of the two sometimes conflicting purposes of standards: to bring about compatibility, and to give people guidelines on what constitutes a good example of something. She felt that this standard moves well between these two purposes, which can often lead to something that is too specific or too general. It has a good balance, too, between being prescriptive and descriptive.

One of the problems she sees is the difficulty of setting general principles of indexing that everyone agrees with — they inevitably reflect bias of the committee. In addition, she doesn't think the standard

deals adequately with the electronic indexing aspect. For example, one of the principles given in the draft says that greater specificity increases precision, but lowers recall, and this is not always true; it depends on the information need. Fidel is also interested in stating the importance of ordering indexes, to make them easier to use; Anderson does not necessarily agree with the importance of ordering.

She feels that the standard tries to take ideas which apply to printed indexes and generalize them for electronics by simply not referring to print specifically. Sometimes the standard applies concepts only to electronics — for example, weighting of subject headings — when it could also be applied to print. It would generally better to divide the standard into sections that explicitly deal with print indexes and online indexes. Another example is the statement of a general idea that if an indexing term has more than five occurrences, one should apply more specific terms — how would this work in a database? Would a new term be needed for every subject heading that came up with more than five postings?

Fidel feels that the standard should deal with principles for humanly seen indexes, and principles for computer-used indexes. Then the committee could see which ideas apply only to print, which apply to electronics, and which are truly general.

Bella Weinberg of St. John's University was the third reactor to the standard. She pointed out that the draft was essentially written by Anderson, and now he is getting committee and general professional comments. She knows it will end up taking a great deal of time for him to deal with all the feedback he'll get!

Weinberg specifically addressed differences between the thesaurus standard, of which she led the development, and the index standard. One of the main differences is the filing order for thesaurus entries and index entries. She feels the order given in the indexing standard is not correct. In addition, the parenthetical qualifier should be used only for the disambiguation of homophones.

She feels that the approach of the standard is not sufficiently comprehensive. It is a simple listing of features, and she is not sure what purpose the whole thing will serve. People could not sit down and use this standard to help them develop an index — the approach she took with the thesaurus standard. The standard does not deal with the importance of cross referencing either. It may be that it will be necessary to have several standards, since even the current draft is getting unwieldy, and much more needs to be dealt with.

Weinberg disagrees with some of the concepts expressed in the draft — for example, the idea of Boolean indexes. There cannot be an index which is a priori Boolean. She thinks "online concordance" is a better term than "implicit index" for online indexes, since implicit index implies some kind of conceptual index, when it is really more of automatic, word-by-word indexing. Weinberg had a number of other criticisms of the draft that were comparatively minor, but she concluded by wishing Jim and the committee much good luck!

ISQ

NISO News and Notes

Library Statistics Standard Out For Review

The national standard for collecting statistics for library and information centers in the United States, Z39.7-1983, has been revised and is now available for comment from the National Information Standards Organization (NISO). The draft is priced at $30. It can be ordered from: NISO, P.O. Box 1056, Bethesda, MD 20827.

The standard identifies the data categories that apply to the four basic types of libraries (academic, public, school, and special) and provides associated definitions of terms. The standard defines the institutional reporting unit and target population, human resources, collection resources, physical facilities, finances, service, and activity measures. The standard also identifies additional categories that may be collected by one or more types of libraries.

All interested persons are invited to participate in the review of this revised standard. The review period ends January 15, 1993.

The following persons are members of the NISO standards committee which revised the statistics standard: Mary Jo Lynch (American Library Association) and Peter R. Young (National Commission on Libraries and Information Science), Committee co-Chairs; Tobi Brimsek (Special Libraries Association), Jan Feye-Stukas (Minnesota State Library), Dean Hollister (R.R. Bowker Company), Richard Lyders (Houston Academy of Medicine-Texas Medical Center Library), Marilyn Miller (University of North Carolina at Greensboro), Kendon Stubbs (University of Virginia), Ann Thompson (Special Libraries Association).

Proposed National Standard on Thesauri Issued

The national standard for the Construction, Format, and Management of Monolingual Thesauri , ANSI Z39.19, has been revised and is now available for comment from the National Information Stan-

Recent Standards Literature

Below is listed recent literature dealing with standards and standards-related issues. Readers are invited to send citations and copies of items to the editor for inclusion. Reviews of any information standards-related books and other literature sources are welcome.

Cataloging

John Attig, "MARBI (Machine-Readable Bibliographic Information) Committee, ALCTS/LITA/RASD," *LITA Yearbook 1992* (1992): 97-100.
This American Library Association committee report describes a year of MARBI's work in USMARC advisory consideration, including information on format integration, new and expanded formats, and future prospects for the group's work.

Priscilla Caplan, "Casting the Net Column: USMARC Format Integration, Part I: What, Why, and When?" 3 *The Public-Access Computer Systems Review* (issue 5, 1992): 33-36. To retrieve this article, send the following e-mail message to LISTSERV@UHUPVM1 or LISTSERV@UHUPVM1.UH.EDU: GET CAPLAN PRV3N5 F=MAIL.
Caplan's clear and humorous column describes what MARC format integration is, and what it is not. Format integration "allow cataloging for materials with characteristics of more than one format to fully represent those materials. Common cases include main items with accompanying materials...."

Pat Ensor. "The Community Information Format, Or MARC Goes Alien!" 12 *Technicalities* (September 1992): 9-11.
This column describes the Community Information Format, a MARC format based on Z39.2, a standard for information interchange. It also describes an implementation of the format in an academic library, and discusses the future of the draft format.

Anne Hudson, "Using the Community Information Format to Access Non-Bibliographic Data," *LITA Yearbook 1992* (1992): 31-36.
This conference report describes an American Library Association Annual Meeting program which covered Community Information Format "development and current status, standards development and integration of a new format standard into online systems, and its use in academic and public library settings."

EDI

James J. Michael, "Standard Fare -- Current Work on a Binding Standard," 14 *LITA Newsletter* (Winter 1993): 18.
Michael describes work by the Automation Vendors Information & Advisory Committee to develop necessary elements for "automating a bindery module and for transmitting binding information electronically between libraries and binderies."

Sandra K. Paul, "Standard Fare -- BISAC and SISAC: Another Year Later," 14 *LITA Newsletter* (Winter 1993): 17-18.
Paul describes the last year of work of Book and Serial Industry Systems Advisory Committees, including reports on EDI in North America, international EDI, and barcoding.

Joe Santosuosso, "Electronic Data Interchange (EDI) for Libraries and Publishers," 19 *ASIS Bulletin* (October 1992): 15-17.
This article describes EDI as used by Faxon in the library world, and how it may improve some library acquisition functions.

Information Retrieval Interface

F. John Bowers and Neil R. Shapiro, "CD-ROM Standards: Essential for Progress," 7 *CD-ROM Librarian* (September 1992): 33-36.
This article describes the problems with using CD-ROMs in the aircraft and airline industries, which have led to the Air Transport Association proposal for achieving interface independence. This is one of the proposals being considered by NISO Standards Committee AD.

(Continued)

Recent Standards Literature Continued

Peter D. Ciuffetti, "CD-ROM Data Exchange Standard (DXS) Version 1.0 Overview," 7 *CD-ROM Librarian* (September 1992): 26-32.
A SilverPlatter executive gives a detailed overview of his company's proposed standard for separating the information retrieval interface from the search engine using a client/server architecture. This is one of the proposals being considered by NISO Standards Committee AD.

Information Standards
Sylvia Carson, "Technical Standards for Library Automation Committee (TESLA)," *LITA Yearbook 1992* (1992): 115-117.
The Library and Information Technology Association of the American Library Association has a committee, TESLA, whose chair provides an annual report focusing on program planning efforts, and work on setting up standards-related computerized discussion listservs on BITNET.

Interoperability and Networks
Mark Hinnebusch, "A Primer on Z39.50: Part Eight" 9 *Academic and Library Computing* (October 1992): 24-28.
This is the last of a series on Z39.50. Hinnebusch provides a technical description of a Z39.50 search and retrieval process.

Karen M.G. Howell, "Z39.50 -- Here and Now!" *LITA Yearbook 1992* (1992): 63-71.
Howell summarizes an American Library Association Annual Meeting program presented by the Technical Standards for Library Automation committee of the Library and Information Technology Association. The panel of speakers educated the audience on "the significance of Z39.50, its functionality, limitations and future direction."

John A. Kunze, "Nonbibliographic Applications of Z39.50," 3 *The Public-Access Computer Systems Review* (issue 5, 1992): 4-30. To retrieve this article, send the following e-mail message to LISTSERV@UHUPVM1 or LISTSERV@UHUPVM1.UH.EDU: GET KUNZE PRV3N5 F=MAIL.
Kunze describes "how Z39.50 is being used as the basis for a networked campus information system called Infocal at the University of California at Berkeley." This entails making Z39.50 work for nonbibliographic applications. They needed to make it work for data of unknown, but learnable, semantics; full text documents; nonbibliographic databases; and nontextual documents. In addition, they needed it "to support the following types of retrieval: hierarchical browsing; hypermedia links; and retrieval by object/document ID."

Local Area Networks
Karen J. Starr, "CD-ROM Networks: What's Now, What's New, What's Coming," *Online/CD-ROM'92 Proceedings* (October 1992): 173-178.
This paper given at a conference surveys technological developments in CD-ROM LANs, including a mention of telecommunication standards developing to facilitate faster information transfer in networks.

Optical Technologies
Ka-Neng Au, "CD-ROM Interoperability," 7 *CD-ROM Librarian* (September 1992): 22-25.
Au describes a government and industry gathering in February to discuss "the need for and applications of standards for CD-ROm interoperability." The report includes information on the CD-ROM Standard Architectural Profile, proposals for facilitating information interchange, the Rock Ridge and Frankfurt Groups, and end user perspectives.

Frederick P. Meyer, "Standards: Out with the Old, in with the New -- Why CD-ROM May Have a New Standard," 5 *CD-ROM Professional* (September 1992): 150-152.
Meyer describes the development of the CD-ROM Red Book, Yellow Book, Orange Book, and ISO 9660 standards and their influence on optical media growth. He finishes with a description of the Frankfurt Proposal, which is intended to expand on ISO 9660 to allow for CD-Recordable formats and meet deficiencies in dealing with UNIX.

(Continued)

Recent Standards Literature Continued

Eric W. Sarjeant, "The MPC (Multimedia PC): Upgrading to the New Standard," 5 *CD-ROM Professional* (September 1992): 22-30.
Sarjeant feels that "the MPC has been misunderstood and misrepresented...In order for computer users to implement multimedia, it is important to understand the MPC standard and the extent of this standard." The article examines the hardware and software options for upgrading a computer to the MPC standard.

SGML

Mary Ann O'Connor, "Databasics: Markup, SGML, and Hypertext for Full-Text Databases -- Part III," 5 *CD-ROM Professional* (November 1992): 130-131.
The third part of this series from a column on database development focuses on guidelines for hypertext use in database creation.

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dards Organization (NISO). This proposed revised standard is priced at $30. It can be ordered from: NISO, P.O. Box 1056, Bethesda, MD 20827.

This standard provides guidelines for constructing monolingual thesauri: formulating the descriptors, establishing relationships among terms, and effectively presenting the information to users in print and on a screen. The standard also includes thesaurus maintenance procedures and recommended features of thesaurus management systems. The standard points out both the advantages and disadvantages of various formats for thesaurus structure and display and illustrates many of these formats.

All interested persons are invited to participate in the review of this revised standard. The review period will end January 15, 1993.

The NISO standards Committee which developed this standard had the following members: Bella Hass Weinberg, Chair (Professor, St. John's University); Ronald L. Buchnan, (NASA Scientific and Technical Information Program); Lois Lyman, (Digital Equipment Corporation); Toni Peterson, (Art and Architecture Thesaurus); Caroline Reyes, (NewsBank/Readex); Peri Schulyer, (National Library of Medicine); Hans H. Wellisch, (University of Maryland - Emeritus).

Standards Development Committee

Nolan Pope who is serving as interim chair of the SDC, will be conducting a review of the NISO standards program and Technical Plan during 1993. The committee's first meeting of the year was held January 7 in Washington DC. New members joining the committee include: Barbara Lawrence of the AIAA, whose special expertise is in book and serial publishing and database design and management; Pam Andre, the Associate Director of Automation and Acting Director of Technical Services at the National Agricultural Library, and Margaret Byrnes, head of the Preservation Office at the National Library of Medicine.

Guides to Microform Sets

Katha Massey, University of Georgia, chair of this standards committee, reports that the committee intends to distribute a survey to gather information on the uses of microform sets. If you would like to provide comments to the committee you can request a copy of the survey form from Katha Massey, University of Georgia, Athens GA 30602.

Library Binding and Library Prebound Books

Debra Conrad reports that the committee met December 6-7, 1992, in Rochester NY. In addition to discussing particulars related to the proposed standard the group was able to fit in a tour of the Image Permanence Institute.

Environmental Conditions for the Exhibition of Library Materials

The committee has completed a survey phase and is continuing with the drafting of the standard; a draft may be released by mid-1993. The committee chair is Cathy Henderson.

Other Committee News

Mark Roosa, Preservation Officer at the Huntington Library, San Marino, California has agreed to chair Standards Committee SS, developing a NISO standard for "Information to be included in Advertise-

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ZIG Document List

Below is a current list of the Z39.50 Implementor's Group Documents (ZIGs). Some of the ZIG numbers have been assigned to pre-existing documents for reference purposes. It is the goal, not wholly realized, to maintain text of the ZIG documents on the ftp server at Thinking Machines. To access the server, do:

```
ftp think.com
login anonymous, guest
cd z3950
cd zig
dir
```

ZIG90-0000 *Z39.50 Implementation Meeting Notes*, Washington DC, March 12, 1990.

ZIG90-0001 *Application Profile for Z39.50*. March 1990. (First Draft).

ZIG90-0002 *Profile PICS Proforma for Z39.50*. March 1990. (First Draft). Not available on Thinking Machines ftp server.

ZIG90-0003 *Z39.50 Maintenance Agency Terms of Reference and Procedures*. November 1989.

ZIG90-0004 *Documentation - Search and Retrieve Service Definition.* ISO/DIS 10162. Available from ANSI. Not available on Thinking Machines ftp server.

ZIG90-0005 *Documentation - Search and Retrieve Protocol Specification.* ISO/DIS 10163. Available from ANSI. Not available on Thinking Machines ftp server.

ZIG90-0006 *5. Addressing Requirements*. (Extract from GOSIP documentation). Available from Government Printing Office.

ZIG90-0007 *Image and Full-text Transfer under Z39.50 — Issues for Discussion*. June 1990. (Clifford A. Lynch).

ZIG90-0008 *Contributions on: Z39.50 PICS Proforma, Agenda Items, Stop Words, Z39.50 Profile, Attributes*. June 1990. (D. MacKinnon and J. Zeeman, Software Kinetics Ltd.)

ZIG90-0009 *Extensions to ISO DP 10162/10163 to Support an Explain Service*. December 9, 1989. (Clifford A. Lynch.)

ZIG90-0010 *ANSI Z39.50 Version 2 Draft*. September 1990. (Not available in machine readable form.)

ZIG90-0011 *Profile PICS Proforma for Z39.50*. June 1990. (Second Draft. Revises ZIG90-002.)

ZIG90-0012 *NISO Z39.50 Maintenance Agency Change Proposal Submission Form*. September 1990.

ZIG90-0013 *NISO Z39.50 Maintenance Agency Defect Report Submission Form*. September 1990.

ZIG90-0014 *Z35.50 Implementers Group Meeting Notes*. June 1990.

ZIG90-0015 *Software Kinetics Ltd. Agenda Item on Browse and Known Item Retrieval*. September 1990.

ZIG90-0016 *Z39.50 Implementers Group Meeting Notes*. September 1990.

ZIG91-0001 *ANSI Z39.50 Version 2*. January 1991. (Second Draft.) Not available on Thinking Machines ftp server.

ZIG91-0002 *Z39.50 Maintenance Agency Implementors List (Preliminary)*. January 1991. Not available on Thinking Machines ftp server.

ZIG91-0003 *ASN.1 Type "External."* January 1991. (Wayne Davidson.)

ZIG91-0004 *Transfer Syntax for Brief Bibliographic Records*. February 11, 1991. (Mark Hinnebusch.)

ZIG91-0005 *Transfer Syntax for OPAC Use*. February 11, 1991. (Mark Hinnebusch.)

ZIG91-0006 *Proximity Searching*. February 11, 1991. (Mark Hinnebusch.)

ZIG91-0007 *Z39.50 Implementors Group Meeting Notes*. January 1991.

ZIG91-0008 *ANSI Z39.50 Version 2*. May 1991. (Third Draft.)

ZIG91-0009 *Attribute Set Bib-1*. May 17, 1991. (Draft.)

ZIG91-0010 *Z39.50 Maintenance Agency Implementors List (Preliminary — Version 2)*. May 1991.

ZIG91-0011 *Meeting Topics Submitted to the Z39.50 Implementors' Group*, Library of Congress, Washington DC. May 20, 1991. (John Kunze.)

ZIG91-0012 *Connectionless Z39.50 Service Requirements and Periodic Query Service Requirements*. (Mead Data Central.)

ZIG91-0013 *Extensions to ISO Search and Retrieve to Support Batching Requests and to Transfer Search Requests and Responses on Separate Applications* (ISO/TC 46/SC 4/WG 4 N177). Submitted by Canada.

ZIG91-0014 *U.S. Position on Canadian Batch Proposal.*
ZIG91-0015 *Modified Specification of Proximity Searching Operator Proposal for Inclusion in Z39.50 Version 3.* (Mark Hinnebusch.)
ZIG91-0016 *Document Identifiers or International Standard Book Numbers for the Electronic Age.* May 9, 1990. (Brewster Kahle.)
ZIG91-0017 *ANSI Z39.50: Information Retrieval Service and Protocol Final Draft* (Z39.50-1992). September 1991.
ZIG91-0018 *Z39.50 PICS Proforma* (Z39.50-MA-008) Final Draft. September 1991.
ZIG91-0019 *ZIG PRL: Profile Protocol Implementation Conformance Statement Requirements List.* September 1991.
ZIG91-0020 *Z39.50 Maintenance Agency Document List* (Z39.50-MA-001). September 1991.
ZIG91-0021 *Z39.50 Register of Implementors* (Z39.50-MA-005). September 1991. (Draft.)
ZIG91-0022 *Z39.50 Register of Implementors Instructions to Implementors* (Z39.50-MA-006). September 1991.
ZIG91-0023 *Z39.50 Register of Implementors Registration Request* (Z39.50-MA-007). September 1991.
ZIG91-0024 *Z39.50 Proposed Enhancements* (Z39.50-MA-009). September 1991.
ZIG91-0025 *Meeting Topics Submitted to the Z39.50 Implementors' Group. I. Identifying Implementation Types. II. Wildcard Matching in Z39.50.* September 8, 1991. (John Kunze.)
ZIG91-0026 *Explain Proposal Draft.* September 4, 1991. (Clifford Lynch.)
ZIG91-0027 *Draft Addendum to ISO DIS 10162 for the Browse Service* (ISO/TC 46/SC 4/WG 4/ N196.)
ZIG91-0028 *Draft Addendum to ISO DIS 10163 for the Browse Service* (ISO/TC 46/SC 4/WG 4/ N196.)
ZIG91-0029 *Modified Specification of Proximity Searching Operator Proposal for Inclusion in Z39.50 Version 3.* September 1991. (Mark Hinnebusch.)
ZIG91-0030 *The NIST Workshop for Implementors of OSI Procedures Manual,* Effective September 9, 1991. (U.S. Department of Commerce, National Institute of Standards and Technology, Computer Systems Laboratory.)
ZIG91-0031 *Proposed Z39.50 Extensions Required to Support Persistent Result Sets.* September 5, 1991. (Peter Ryall.)
ZIG91-0032 *Proposed Z39.50 Extensions Required for Periodic Query Service.* September 5, 1991. (Peter Ryall.)
ZIG91-0033 *Proposed Z39.50 Use Attribute Set for Company/News Information.* September 5, 1991. (Peter Ryall.)
ZIG91-0034 *Modified Specification of Proximity Searching Operator Proposal for Inclusion in Z39.50 Version 3.* September 10, 1991. (Mark Hinnebusch.)
ZIG91-0035 *OCLC Technical Documentation (2) Data Structures (2.1) DBIREAD Command Modifications.* August 6, 1991. (Ralph LeVan.)
ZIG91-0036 *Abstract Syntax for Brief, or Summary Bibliographic Data.* September 5, 1991. (Mark Hinnebusch.)
ZIG91-0037 *Abstract Syntax for Augmented Bibliographic Data.* September 5, 1991. (Mark Hinnebusch.)
ZIG91-0038 *Handling Image Files in the Internet.* February 11, 1991. (Draft.) (Alan Katz and Danny Cohen.)
ZIG91-0039 *The National Library of Canada's SR Kernel Project.* December 5, 1991. (Software Kinetics.)
ZIG91-0040 *Z39.50 Version 3: Feature Description,* First Draft, Maintenance Agency (Z39.50-MA-012). December 1991.
ZIG91-0041 *ANSI/NISO Z39.50-199X Ballot Version.* 1991. (NISO.)
ZIG91-0042 Not Used
ZIG91-0043 *Z39.50 Proposed Enhancements,* Maintenance Agency (Z39.50-MA-013). December 1991.
ZIG91-0044 *Z39.50 Maintenance Agency Document List* (Z39.50-MA-001). December 1991.
ZIG91-0045 *Meeting Topics Submitted to the Z39.50 Implementors' Group.* December 9, 1991. (John Kunze.)
ZIG91-0046 *Document Identifiers or International Standard Book Numbers for the Electronic Age.* September 1991. (Brewster Kahle.)
(Continued on next page)

ZIG91-0047 *Proposal for Explicit Range Support.* December 1991. (Michael Thwaites.)
ZIG91-0048 *Proposal for Specific Security Challenge Types for Access Control.* December 10, 1991. (Andy Bensky and Ed Miller.)
ZIG91-0049 *A Proposal for Structured Access Control Information.* December 1991. (Eric Bivona and Michael Thwaites.)
ZIG92-0001 *NISO, the Z39.50 Maintenance Agency, the Z39.50 Implementors' Group and the Coalition for Network Information's Z39.50 Interoperability Testbed: Terms of Reference.* March 20, 1992. (Draft.) (Clifford Lynch.)
ZIG92-0002 *Explain Service for Z39.50.* March 23, 1992. (Draft.) (Clifford Lynch.)
ZIG92-0003 *Object Access/Processing Service*, Version 1.0. March 24, 1992. (Peter Ryall.)
ZIG92-0004 *Non-Bibliographic Applications of Z39.50.* March 17, 1992. (John A. Kunze.)
ZIG92-0005 *Z39.50 Maintenance Agency Document List* (Z39.50-MA-001). January 1992.
ZIG92-0006 *Z39.50 Maintenance Agency Proposed Amendments* (Z39.50-MA-019). March 1992.
ZIG92-0007 *Z39.50 Version 3: Feature Description*, Second Draft, Maintenance Agency (Z39.50-MA-018). March 1992.
ZIG92-0008 *Draft Description of Information Retrieval for GOSIP.* January 27, 1992. (Ray Denenberg.)
ZIG92-0009 *Z39.50 Register of Implementors*, Z39.50 Maintenance Agency (Z39.50-MA-020). March 1992. (Draft.)
ZIG92-0010 *Abstract Syntax for SummaryRecord.* March 1992. (Mark Hinnebusch.)
ZIG92-0011 *New Structure Attribute for Bib-1: Structured Number.* March 1992. (John Kunze.)
ZIG92-0012 *Abstract Syntax of ErrorInfo Extension to PDUs.* March 1992.
ZIG92-0013 *USMARC Brief Element Set - RLG Version.* March 16, 1992. (Lennie Stovel.)
ZIG92-0014 *Mapping BriefBib/Summary record to Info-1.* March 28, 1992. (John Kunze.)
ZIG92-0015 through ZIG92-0024 are unassigned.
ZIG92-0025 *Z39.50 Maintenance Agency Document List*, Maintenance Agency (Z39.50-MA-001). June 1992.
ZIG92-0026 *Z39.50 Version 3: Feature Description*, Third Draft, Maintenance Agency (Z39.50-MA-021). June 1992.
ZIG92-0027 *Z39.50 Proposed Enhancements*, Maintenance Agency (Z39.50-MA-022). June 1992.
ZIG92-0028 *Z39.50 Register of Implementors*, Maintenance Agency (Z39.50-MA-023.) June 1992.
ZIG92-0029 *Registration of Z39.50 OSI Object Identifiers*, Maintenance Agency (Z39.50-MA-024). June 1992.
ZIG92-0030 *Version 3 Survey*, Maintenance Agency (Z39.50-MA-025PROV). June 1992.
ZIG92-0031 *Dialogues and Concurrent Operations in Z39.50.* June 1992.
ZIG92-0032 *IR-Object-Access Facility.* May 1992. (Peter Ryall.)
ZIG92-0033 *Sort.* May 27, 1992. (Rich Fuchs.)
ZIG92-0034 *Fragmentation of Information in Z39.50* (frag.nr.x). May 29, 1992. (John Kunze.)
ZIG92-0035 *Z39.50 Search and Retrieval with Info-1* (gen.nr.x). May 29, 1992. (John Kunze.)
ZIG92-0036 *Variant and Document Retrieval* (var.nr.x). May 29, 1992. (John Kunze.)
ZIG92-0037 *Expressing Preferences and Defaults in Z39.50* (pref.nr.x). May 29, 1992. (John Kunze.)
ZIG92-0038 *Processing Retrieved Information in Z39.50* (proc.nr.x). May 29, 1992. (John Kunze.)
ZIG92-0039 *ZIG Coding Guidelines for ASN.1* (asn.nr.x). May 29, 1992. (John Kunze.)
ZIG92-0040 through ZIG92-0099 are unassigned.
ZIG92-0100 *Z39.50 Version 3: Feature Description*, Fourth Draft, Maintenance Agency (Z39.50-MA-028). September 1992.
ZIG92-0101 *Version 3 Survey: Report*, Maintenance Agency (Z39.50-MA-029). September 1992.
ZIG92-0102 *Version 3 Survey: Results Matrix*, Maintenance Agency. September 1992.
ZIG92-0103 *Sort Proposal.* September 1992. (Rich Fuchs and Lennie Stovel.)
ZIG92-0104 *Version 3 Survey - Enhancement Categories.* September 24, 1992. (Bill Cattey.)
ZIG92-0105 *An Explain Facility for Z39.50.* September 23, 1992. (Clifford Lynch.)
ZIG92-0106 *Agenda_Background_jak.* September 22, 1992. (John Kunze.)
ZIG92-0107 *Z39.50 Search and Retrieval with Info-1.* September 22, 1992. (John Kunze.)

ments, Catalogs, Promotional Materials, and Packaging for Products used for the Storage, Binding, or Repair of Library Materials." Mark Roosa is replacing Wesley Boomgaarden who served as committee chair since 1989.

Standards Committee QQ is being reorganized under the direction of committee chair Ellen Cunningham-Kruppa, Preservation Officer at the University of Texas at Austin.

NISO Elections 1993

The NISO Nominating Committee, chaired by Board member Shirley Baker, is seeking nominations for members of the NISO Board of Directors. Four positions will be filled in the May election: Vice-chair/Chairperson-elect and three Directors representing Libraries, Publishing, and Information Services.

Nominations must be submitted to the Nominating Committee by March 3. If you wish to place a name in nomination contact Shirley Baker at -- Internet: baker@wulibs.wustl.edu; (314)935-5400; Fax: (314)935-5400.

NOTIS Systems NISO's Newest Member

NISO starts off the new year by welcoming its newest Voting Member: NOTIS Systems, Inc. Serving as the NOTIS representatives to NISO are John Kolman and Jane Burke (Alternate Voting Representative).

NISO Listserv

The new NISO listserv called NISOL will be up and running on March 1, 1993. Look to the listserv for up-to-the-minute news on the status of balloting and new projects entering the NISO standards program.

ISQ

Pisa Conference Includes Standards

Jack Kessler

The idea of a "Network 'Services' Conference" came to Europe last week. It hasn't arrived in the US or elsewhere, yet, and in all cases is a bit overdue. There was much of interest for anyone who loves libraries, books, networked information, or European ways of looking at things, and for anyone blessed or cursed with the need for working on a computer.

The Pisa conference brought some leading lights from North American information networking — Peter Deutsch, creator of "Archie" (not the comic book, although he carries that with him), and John "Matrix" Quarterman — together with network leaders from all over Europe, to discuss what to do about a new topic: the users. There were many librarians there: most of us were left fascinated, but also shaking our heads and groaning. It seems that the great amount of work so far done to help users on the networks leaves much still to be done, in both Europe and elsewhere.

The conference, sponsored by "EARN / the European Academic and Research Network" and several other organizations, attracted 360 participants, from 46 countries, and by all accounts was highly provocative and successful. There will be another one next year, it seems. Sessions covered "New Global Information Tools" (World-Wide Web, WAIS, Gopher, "Hyper-G", Archie, and the "Soft Pages Project"), "Beyond ASCII" (imaging, and ISO standards), "The Electronic Library" (projects in Israel and France, "The Virtual Library," Project "PegUn/Janus" at Columbia University), "Delivering Messages to the Desktop," "Central and Eastern Europe," "User Support," "Special Interest Communities," "Managing Network Information Services," and "Information Overload." It was for me a very different European version of the birthpangs of this technology's application.

Imaging Projects

Anne Mumford, in "Beyond ASCII," pointed out that the problem with images arriving now is their use, rather than the more technical problems of their storage: image users will want to cut and paste, insert, catalog, index, and change formats, just as they now do with ASCII, she said.

She mentioned CARL's Group 3 fax format journal project, "CORE / Chemistry Online Retrieval Experiment" which stores the page and ASCII and a picture caption index, Northern Telecom's "CGM / Computer Graphics Metafile" format, and Elsevier's project for issuing 35 imaged journals on cd-rom.

Standards: First Round

Borka Jerman-Blazic described the Herculean / Augean effort currently going in to develop international standards for software. The world has over 3000 spoken languages, she pointed out, over 100 of these written: 50% use the Latin alphabet, but the other 50% use over 23 different alphabets, counting only those which have over 1 million users. So users

come to the networks familiar with Latin diacritic and non-diacritic alphabets, non-Latin alphabets (Cyrillic, Greek), diacritical scripts (Arabic, Hebrew), and syllabic (Kanna Japanese) and ideographic (Chinese) written modes of expression.

One may just make them all learn American English, but then again they may not want to, and they simply may not do it. ISO 10646, a standard on which she's working, specifies over 65,000 characters in world languages: she bravely asserted both that it will accomodate UNICODE, and that conforming commercial products will begin to appear next year.

The French — Libraries and ILL

Christine Deschamps delivered an elegant overview of the vast array of current events in France. She described their work on a national ILL "union catalog": SQL request handling, an X.25 ILL system which batches requests, and a project to develop an "OSI / Interlending OSI Network" (ISO 10161 and 10162) to connect their effort to similar projects in the Netherlands and the UK.

In document delivery, she mentioned the now-ended "FOUDRE" project, which used digital scanning and attempted to capture and store text, as it was scanned, for future digital use: this ran into both money and copyright problems. A newer "EDIL / Electronic Document Interchange for Libraries" project, with the UK, Germany, the Netherlands, and Portugal is proceeding, although there still are copyright problems, she said.

A Comprehensive Approach at Columbia Law

Willem Scholten presented Project Janus, Columbia University law library's effort to, 1) avoid microforms, 2) bring the library to the user (Manhattan presents critical space problems), and, 3) adapt to changing patterns of information distribution. The project involves participation by Thinking Machines Corp., the university's main and health sciences libraries, the law library, and the United Nations library human rights collection.

One critical goal was preservation of the law library's unique and rapidly-deteriorating collections of Nuremberg (375,000 double-sided pages) and Rosenberg (250,000 double-sided pages) trial documents. Their solution uses a special "XWAIS," a highly-customized version of the publicly-available WAIS tool, digitization with ocr, optical and magnetic tape, and Z39.50 and ISO's SR/1, two "Sun Sparc workstation networks," a "Xerox Docutech 7000 scanner and ocr system," and a "CM2-32K Thinking Machines parallel processing super-computer": all the latest stuff.

Many hands have been in on the project: the law school publishes 13 legal periodicals, for example, and the goal of getting such publishing costs back in-house is being approached through SGML and e-publishing on the system. The reference desk is interested in information which has time value and takes too long to get into print: the system loaded the North American Free Trade Agreement recently and at last count was getting 200-250 "hits" per day on that resource, and similar figures have been achieved for online versions of the Maastricht Treaty and the papers of the Rio Conference on the Environment.

One other library dream, of loading fulltext direct from commercial publishers, also at least is under discussion with Simon & Schuster: user licences for the library, based on a flat fee with royalties for downloading.

Closing: John "Matrix" Quarterman — the Global View

John Quarterman began his conference-closing keynote address with the warning that he wouldn't make predictions — "my crystal ball's kinda cloudy", he said — and then proceeded to make them. He has put together a wonderfully-interesting series of maps, all using data taken from various domain-name registries and servers, showing where all the network use is taking place in the world (surprising activity patterns in Iceland, Australia, Moscow, Hong Kong), and suggesting a continuing rate of usage growth so phenomenal as to be catastrophic for both the networks and librarians.

It seems still that only Quarterman, despite his good influence exerted since the 1988 publication of his book, "The Matrix," has the breadth of vision, and the patience, to look at all the world's information networks — Internet, EARN, BITNET, etc. — as a whole.

- Conclusions? 1 — the impending invasion of the commercial market: The real problem, lurking behind most of the conference talk, is what to do about the impending invasion of the commercial market. The commercial publishers are poised to plunge into the little world of academic networking, we heard again and again. Quarterman showed us a fascinating map, on which the portion of world network use devoted to "purely academic" activity — which represented *all* network use a short time ago — now is small and is shrinking rapidly: "academic use" will become an insignificant part of networking as a whole, shortly, he asserted.

- Conclusions? 2 — "the academic model will not scale": The problem, then, acknowledged again and

again by US and non-US attendees, is that "the academic model will not scale": as network use grows, the tools and structures and carefully-developed "standards" — think of MARC, SGML, ftp, telnet, opac user interfaces, even ASCII — will not satisfy a non-academic, international, user public: a despairing conclusion — one which left several librarian-users in the audience feeling a little abandoned. "Information overload" then, inevitably, was debated: several people felt that a bad network situation in this respect is about to get much, much, worse.

Conclusions? 3 — "the academic model had *better* scale": Some braver souls, though, insisted that private industry will need some standards as well: if not necessarily for sharing information easily as an altruistic goal, as the academic world wants, then at least for ensuring the compatibility of its own hardware, software, and services with a particular marketing structure: IBM products and services talking to each other, Siemens' doing the same, all the components of a local or wide-are network — serving fulltext newspapers to northern California, Shakespeare to the entire Ivy League, or Montaigne (or Simenon) to Touraine — able to communicate among themselves. Private industry will have to start somewhere in all this, and that beginning may well be made with at least some of the elaborate tools and standards which have been asembled by the careful academic community today. Such, at least, is the hope.

Conclusions? 4 — the Atlantic is a very wide pond: It was very interesting for this American to note the fundamental difference between the US and the European approaches on the standards point. Much good work on standards is being done on both sides of the Atlantic. But the intense preoccupation with standards and consensus-building in general is markedly different in Europe than it is in the US. Great levels of bureaucracy, much tedious negotiation, and great levels of frustration, all are devoted to accomplishing the smallest point of agreement in Europe, ruled constantly by the conviction that without some sort of "top-down" agreement, no "bottom-up" effort will succeed. Not that bureaucracy and haggling don't take place in the US context; but there seems to be more in Europe, and it's much more intense, and deemed to be much more necessary.

Law students everywhere learn that Anglo-American law may be built piecemeal, upon the "Common Law," and upon individual cases, while Continental law is a seamless web of "codes," which are thought to cover all conceivable instances. There is this same longing for "codification" in European networking standards work: piecemeal, such as has characterized the evolution of the Internet, will not do in Europe — they need "top-down" codes and standards, before they can proceed rather than after — a major difference from the US approach.

Conference chair Jennings mused about this, pointedly, to the several US attendees and speakers: "You must remember that you are one, gigantic, country, while we are by comparison a very large, but still very disunited, collection of very small countries." It is interesting to consider whether the US or the European "consensus-model" will more readily "scale up" to the rapidly-evolving world information matrix.

Jack Kessler may be contacted at kessler@well.sf.ca.us.

ISQ

RLG Develops Z39.50 Server for Internet Use

The Research Libraries Group (RLG) has developed a Z39.50 server for searching its RLIN and CitaDel databases, and 14 institutions nationwide have now successfully tested the server over the Internet. The Z39.50 server, when fully implemented, will make it easier for users of other online catalogs to search RLG's databases.

The server runs on the RLG Amdahl 5990-500 mainframe and is coded in Pascal/VS. The databases are stored in the format of the SPIRES database management system developed by Stanford University. The server runs under the Orvyl time-sharing monitor and the Milten intra-system communication software.

The RLG Z39.50 server supports version 2 and later versions of ANSI Z39.50-1992, American National Standard Information Retrieval Application Service Definition and Protocol Specification for Open Systems Interconnection.

The server communicates with Z39.50 version 2 client programs over TCP/IP. Z39.50 protocol data units (PDUs) are encoded using Basic Encoding Rules (BER) according to ISO 8825.

Z39.50 is a national standard (ANSI/NISO Z39.50) for computer-to-computer information retrieval that enables users to search other online library catalogs and information sources using the same commands they use to search their local online catalog. As more and more information providers implement this standard, the goal of global information resource sharing will come closer to attainment.

The Z39.50 protocol translates commands back and forth between the requesting system (called a "client") and the system with the database being searched (called a "server"), even if the two systems run on different hardware or use different commands and screen displays. As long as both systems support Z39.50, users of one system can search on the other as if it were their local system.

Institutions that have tested RLG's server include AT&T Bell Laboratories, Data Research Asso-

Standards Status: January 15, 1993*

Page	Status	Standard or Committee	
	Revision	Z39.1-199x	Periodicals: Format & Arrangement
	Resolution	Z39.2-199x	Information Interchange
	Revision	Z39.4-1984	Basic Criteria for Indexes
15	Resolution	Z39.5-199x	Abbreviations of Titles of Publications
	SDC Review	Z39.6-1983	Trade Catalogs
15	Balloting	Z39.7-199x	Library Statistics
	SDC Review	Z39.8-1977(R1982)	Compiling Book Publishing Statistics
	SDC Review	Z39.10-1971(R1977)	Directories of Libraries and Information Centers
	SDC Review	Z39.13-1979(R1984)	Advertising of Books
	Revision	Z39.14-1979(R1986)	Writing Abstracts
	Balloted	Z39.16-1979(R1985)	Preparation of Scientific Papers...
15	Balloting	Z39.19-199x	Guidelines for Thesaurus Structure, Construction and Use
	Resolution	Z39.20-199x	Criteria for Price Indexes for Library Materials
	SDC Review	Z39.26-1981	Advertising of Micropublications
	Revision	Z39.29-199x	Bibliographic References
	SDC Review	Z39.31-1976(R1983)	Format for Scientific and Technical Translations
	Revision	Z39.32-1981	Information on Microfiche Headings
	SDC Review	Z39.45-1983	Claims for Missing Issues of Serials
	SDC Review	Z39.46-1983	Patent Documents—Identification of Bibliographic Data
	Resolution	Z39.47-199x	Extended Latin...Alphabet for Bibliographic Use (ANSEL)
	SDC Review	Z39.52-1987	Standard Order Form for Multiple Titles of Library Materials
15	Reaffirmed	Z39.53-1987	Codes for the Representation of Lang. for Information Interchange
	Development	Z39.54-199x	Env. Conditions for Storage of Paper-based Library... Materials
	SDC Review	Z39.61-1987	Recording Use and Display of Patent Application Data
15	Approved	Z39.62-199x	Eye-Legible Information on Microfilm Leaders, etc.
	Resolution	Z39.67-199x	Computer Software Description
15	Resolution	Z39.69-199x	Patron Record Data Elements
13	Comment	Z39.70-199x	Format for Circulation Transactions
15	Resolution	Z39.71-199x	Holdings Statements for Bibliographic Items
	Resolution	Z39.72-199x	Format for Submission of Data for Multimedia CD-ROM Mastering
	To be revised	Z85.1-1980	Permanent and Durable Library Catalog Cards
	Development	SC MM	Env. Conditions for the Exhibition of Library... Materials
	Formation	SC QQ	Physical Preparation of Theses and Dissertations...
	Formation	SC SS	Information to be Included in Ads [etc.] for Products Used for the Storage, Binding or Repair of Library Materials
	Development	SC ZZ	Library Binding and Library Prebound Books
	Development	SC AC	Guides to Microform Sets
	Development	SC AD	Interface-Independent Retrieval Protocol for CD-ROM
	Formation	SC AF	Acquisitions Data Elements

Note: this list* **does not *include current, approved standards not being revised.*

ciates, Innovative Interfaces, Library of Congress, NOTIS, Pennsylvania State University, Stanford University, University of California at Berkeley, and University of California Division of Library Automation — all are members of a Z39.50 implementation group established by the Coalition for Networked Information (CNI) and provide feedback to each other on testing. Others who have tested the RLG server are Brown University, Dartmouth College, Gaylord Brothers, OCLC, and University of Tennessee at Knoxville. All testers have their own Z39.50 clients.

RLG plans to make the server available for general use in mid-1993. Pricing for searching will be announced at that time.

For more information about RLG's Z39.50 server, please contact: Lennie Stovel, Research Libraries Group, 1200 Villa Street, Mountain View, CA 94041-1100; phone (415)691-2259; FAX 964-0943; e-mail BL.MDS@RLG.BITNET or BL.MDS@RLG.STANFORD.EDU (Internet).

ISQ

OCLC Sitesearch Software Provides Seamless Interface to Reference Databases Regardless of Where They're Mounted

Libraries can now augment their own locally mounted reference databases and consolidate them under a single user interface with the OCLC SiteSearch system, a site-mounted version of the OCLC FirstSearch Catalog. This flexible new system links a variety of user workstations to a library's unique offerings of bibliographic, citation, and full-text databases, as well as databases available on OCLC's FirstSearch Catalog.

The OCLC SiteSearch software runs on UNIX systems, includes the FirstSearch user interface and database search engine, and uses the Z39.50 protocol. It enables libraries to build and maintain databases on their own computers and provides seamless connectivity to The FirstSearch Catalog for access to reference databases that aren't held locally.

Terry Noreault, director, OCLC Reference Services Development Division, said the major advantage the OCLC SiteSearch system offers libraries is the ability to integrate local data with the resources maintained at OCLC. "The user sees a list of databases and has access to them all, whether they're mounted at the library or at OCLC. It's an important step toward the ideal of one-stop information service."

According to Tam Dalrymple, OCLC Reference Services Division, OCLC is adding over a dozen databases to the FirstSearch Catalog each year. "The databases chosen for FirstSearch are among the most popular and most useful reference databases for library users," she said. "They provide breadth of subject coverage as well as OCLC holdings information and will soon offer document ordering and an optional link to OCLC ILL."

Ms. Dalrymple said a library can choose FirstSearch databases to complement locally mounted databases that have been created by the library or leased from commercial services.

Taylor Surface, manager of the Distributed System Section, which is developing OCLC SiteSearch, said, "We have a very powerful and flexible system in the first OCLC SiteSearch release. Many types of textual data can be put into databases in the system; everything from bibliographic records to the full text of journal articles. Also, the FirstSearch interface is easy to learn and will adequately serve many different types of terminals and workstations."

Mr. Surface said that future OCLC SiteSearch enhancements will include increasing the number of information sources and services available, adding a graphical user interface, and augmenting the data capabilities of the system with respect to full text and images.

Lehigh University in Bethlehem PA, is the first library to install OCLC SiteSearch.

For more information, contact Taylor Surface at (614)761-5145, or Nita Dean at (614)761-5002.

ISQ

1993 Balloting and Review Calendar

This calendar replaces the calendar published in *ISQ* v.4, no. 4. In each case, balloting *begins* in the month stated. Copies of these drafts may be ordered, for $30.00 each (purchase order or prepaid, in U.S. funds), from NISO. All drafts are sent at no charge to NISO Voting Members and Information Associates.

February 1993

Z39.70-199x: Format for Circulation Transactions

March 1993

Z39.21-1988: Book Numbering (Five year review ballot)

April 1993

Z39.73-199x: Shelving Standard

ISQ

Standards Activity

These notes summarize standards activity between October 2, 1992, and January 1, 1993.

Standards Being Balloted

Z39.5-199x: Abbreviations of Titles of Publications (Revision). The ballot period for this standard was August 3 to November 3, 1992. *Next steps:* The comments and ballots have been referred to the standards committee for review and resolution.

Final Results:

23	Yes
10	Yes with comments (ALA, ASIS, ATLA, ARLIS/NA, Faxon, LC, MLA, Music LA, NFAIS, NLM
2	No (AJL, DOE-OSTI)
3	Abstain (BMI, NARA, SAA)
2	Comments from interested parties

Z39.7-199x: Library Statistics. The ballot period for this standard was October 15, 1992 to January 15, 1993.

Partial Results:

12	Yes
4	Yes with comments (Gaylord, NAL, NLM, Ohionet)
0	No
0	Abstain
6	Comments from interested parties

Z39.19-199x: Construction, Format and Management of Monolingual Thesauri. The ballot period for this standard was October 15, 1992 to January 15, 1993.

Partial Results:

9	Yes
2	Yes with comments (APA, Ohionet)
0	No
2	Abstain
1	Comments from interested parties

Z39.53-1987: Codes for the Representation of Languages for Information Interchange. This standard was balloted for its five-year review March-June 1992, and has been reaffirmed by the NISO membership. A complementary international standard is now in development as a joint project of ISO TC 46 and TC 37 (Terminology). The intention is to review the NISO standard after the development of the ISO standard is completed, and at that point determine if any changes need to be introduced so the standards can be aligned.

Z39.62-199x: Eye Legible Information on Microfilm Headers, Etc. Committee Chair Charles Louis Willard has resolved the outstanding negative votes and responded to all commenters. The final text is now being prepared for submission to the ANSI Board of Standards Review for ANSI review of balloting history.

Z39.69-199x: Patron Record Data Elements. This proposed standard was balloted February 14 to May 16, 1992. *Next steps:* Debbie Conrad, the committee chair, reports that the committee is continuing its discussions with the ACS to resolve the ACS negative vote. The negative votes submitted by the AJL and Faxon have been resolved. It is anticipated that the standard will be approved by NISO by June 1993 and then submitted to ANSI.

Final Results:

29	Yes
4	Yes with comments (DRA, INCOLSA, MLA, OCLC)
3	No (ACS, AJL, Faxon)
4	Abstain
3	Comments from interested parties

Z39.71-199x: Holdings Statements for Bibliographic Items. Julia Blixrud, recently appointed program officer at the Council for Library Resources, has agreed to chair a NISO ad hoc group to review the comments submitted during the 1991 review of the proposed new standard for Holdings Statements which is intended to replace Z39.44 and Z39.57. The task force will hold its first meeting shortly.

ISQ

NISO Voting Members

The following institutions are Voting Members of the National Information Standards Association as of January 31, 1993.

American Association of Law Libraries

American Chemical Society

American Library Association

American Psychological Association

American Society for Information Science

American Society of Indexers

American Theological Library Association

Apple Computer, Inc.

Art Libraries Society of North America

Association for Information and Image Management (AIIM)

The Association for Recorded Sound Collections

Association of American University Presses

Association of Information and Dissemination Centers

Association of Jewish Libraries

Association of Research Libraries

AT&T Bell Labs

Baker & Taylor Books

Book Manufacturers' Institute

CARL Systems, Inc.

CLSI, Inc.

Council of National Library and Information Associates

Data Research Associates, Inc.

Digital Equipment Corporation

DYNIX, Inc.

EBSCO Subscription Services

Engineering Information, Inc.

Faxon, Inc.

Gaylord Information Systems

GEAC Computers, Inc.

IBM Corporation

Indiana Cooperative Library Services Authority

Library Binding Institute

Library of Congress

Mead Data Central

Medical Library Association

MINITEX

Music Library Association

National Agricultural Library

National Archives and Records Administration

National Institute of Standards and Technology Research Information Center, Information Resources and Services Division

National Commission on Libraries and Information Science

National Federation of Abstracting and Information Services

National Library of Medicine

NOTIS Systems, Inc.

OCLC, Inc.

OHIONET

Optical Publishing Association

PALINET

Pittsburgh Regional Library Center

Readmore Academic Services

Research Libraries Group, Inc.

Society for Technical Communication

Society of American Archivists

Software AG of North America, Inc.

Special Libraries Association

SUNY/OCLC Network

Unisys Corporation

U.S. Department of Commerce, Printing and Publishing Division

U.S. Department of Defense Defense Standardization Program Office

U.S. Department of Energy, Office of Scientific & Technical Information

U.S. ISBN Maintenance Agency

University Microfilms, Inc.

VTLS, Inc.

H.W. Wilson Co.

NISO Information Associates

The following institutions are Information Associates of the National Information Standards Organization as of January 31, 1993.

Ameritech Information Systems

Brodart Automation

CAPCON Library Network

Copyright Clearance Center, Inc.

Council on Library Resources

CWARC-Communications Canada

Data Research Associates Users' Group

Data Trek, Inc.

Digital Equipment Corporation

P.H. Glatfelter Company

Information Handling Services

J.E.S. Library Automation

The Library Corporation

NEXT Computer, Inc.

Public Affairs Information Service

SIRSI Corporation

SOBECO

University of California

University of Missouri

University of Pittsburgh, SLIS

Western Library Network

ISQ

Standards Included in Internet/Document Delivery Conference

The first session of the Document Delivery track of Meckler's Internet/Document Delivery conference (held in Philadelphia on December 7-8, 1992) was on "Document Delivery: Delivery Systems, Delivery Technology, Delivery Trends." It was given by Patricia Sabosik of Choice magazine. Sabosik began her talk by alluding to the signing of the Declaration of Independence; such an item today would have brought live television broadcasts and facsimile transmission all over the globe. Today holds potential for beginning another revolution in electronic information delivery.

Sabosik mentioned two types of document delivery systems, those using electronic formats as secondary sources, such as UMI, and those having electronic format as the primary form, such as ADONIS. All of this is in flux, though, as we adjust to the new technology of delivering parts of a work electronically. There is now confusion over what the original form of a work was and what this means, as well as confusion over delivery means. The importance of the package that information is delivered in, is diminishing.

Document delivery is the one-time delivery of a part or all of a document on demand. Although it has gone on for a long time, the traditional model of distribution has been author to publisher to distribution intermediaries to library to patron. Now, though, distribution intermediaries include document suppliers, as well as subscription agents, book wholesalers, and database suppliers. These divisions into type of business are not precise, of course, with some organizations doing several of these functions.

An important concept in document delivery is the unbundling of things like journals into individual articles. Trends include development of electronic access and delivery methods as front ends to large print collection, and development of new electronic full text products and services. Libraries may now be seen as large collections of individual documents arranged into books and journals, with systems like UMI and CARL being "indexes" into them. New products like delivery systems possible through the Internet and multimedia collections are important factors now, too.

Technology trends include those in telecommunications: packet switching networks, satellite communications, fiber optic lines. There are also important trends in standards, including ISDN, OSI, SICI, and PostScript. ISDN has the potential for increasing transmission throughput and types of electronic information that can be sent. OSI or TCP/IP will be the protocol which allows standardized transmission. SICI is a standard for unique serial identification. PostScript will have an influence on allowing formatting of documents to be transmitted, so that we do not have to depend on simple ASCII text. Specific important, developing document delivery oriented technologies include flat-bed digital scanners, and fax technology. Both technologies are already in use by impor-

tant projects such as RLG's Ariel.

Finishing with a description of document delivery systems, Sabosik divided them into interlibrary loan, online databases, CD-ROM, and networks. Networks like the Internet have begun to allow end users to bypass connections through repositories of large print collections, to achieve direct access to electronic documents on their own, through their own desktop machines; of course, this trend will grow.

Z39.50: the 30 Minute Tour

The final session on Monday in the Internet track was "Interconnectivity: Standards to Create New Gateways." Mark Needleman of the University of California gave a brief tutorial and history of Z39.50. The history includes the Linked Systems Protocol project in the early 1980's, turned over to NISO as the basis for a standard in 1984. In 1988, version 1 of Z39.50 appeared, and it has only been implemented by a few places, one of them being in the WAIS protocol. ISO 10162/10163 appeared, then in 1992, version 2 of Z39.50 has been accepted. This is the version vendors are using.

Needleman characterized the protocol in a variety of ways: as a client/server model, a request response model, an APDU communication model, a database model, a result set model, and a record model. The protocol has also been marked by synchronous communication, the use of the OSI application layer protocol, and of the registered objects model. Services include initialize, search, present, delete, access control, resource control, and abort/release. The protocol does not define specific data types at all.

Mark Hinnebusch brought the progress of Z39.50 up to date by describing the Z39.50 Implementors' Group and the Implementors' Testbed. As it has turned out, the membership of the two groups is almost the same, but they work in different styles. The ZIG is concerned with developing the standard and the ZIT deals with very practical, comparatively mundane matters such as "Why is your new server not working with my client?" The ZIG is currently working with version 3 of the standard.

Version 3 includes a variety of important developments. The Explain service provides a database which contains, basically, everything the client can't find elsewhere, such as a list of databases, access points/attribute sets, format of records returned, and field/search translation. Scan provides a browsing type function. Sort is useful, but no one will be able to afford to support it. Segmentation is another proposed feature, which TCP/IP accommodates, but Z39.50 doesn't.

Concurrent operations would support multiplexing, many operations going on at once. Session closing (as opposed to termination) is being included, allowing temporary endings, and reinitialization is a feature, too. Result set operations are also being worked on, and they're trying to get some ready for version 3. This version should go to ballot in April.

Hinnebusch foresees that Z39.50 implementations will greatly increase pressure on ILL. This should press use of ISO 10160/10161 for ILL, Z39.70, soon to be balloted for remote circulation, and some new document delivery standards. These include ODA (office document architecture) from the OSI world, and MIME (Multipurpose Internet Mail Extensions), which has been created for email, but can be used for other purposes. Z39.50 developments will eventually lead to whole document searching and delivery systems.

Myths and WAIS

On Tuesday, December 8, 1992, James Michael of Data Research enlightened a large audience on "The Myth of Z39.50." He noted that most information is now in electronic form, not print. Networked services are the key to providing access to this. We are now experiencing information overload and data pollution. One has to be a "PC Weeny" just to get to electronic directories of information, for example. Z39.50, or IR (Information Retrieval), as Michael prefers to call it, is absolutely essential for the future of networked information.

IR is the computer to computer answer to the network interface problem. It can also help solve the problem of the growth in networked information. It's a great change from the paradigm of searching databases individually and sequentially. So, what is the myth of Z39.50? It lies in a lack of understanding of what IR does and doesn't do. It is an enabling technology, providing interconnectivity and interoperability. Not enough people know about IR currently, and those that think they do often misunderstand it.

IR must be integrated into the local system, so that one "gateway" takes the user to all available information. The integrated library system must integrate directories into the product. Librarians themselves must be able to find ways to train users, though. Interpretation of data is another need. We must develop tools for this, but IR cannot solve this problem.

Libraries must develop concepts of interdependency which go far beyond resource sharing. It is a myth that each place can do everything on its own. We cannot pin all our hopes on one thing to solve all our problems; the answer is not Z39.50, something found outside ourselves. It lies in our ability to use a variety of tools to help information seekers. IR can make the network invisible, but it cannot solve problems of

interpretation, instruction, and interdependency.

Following this presentation was one on "WAIS (Wide Area Information Servers): New Front Ends," by Vikas Aggarwal of Global Enterprise Services. He provided an overview, information on technology, current capabilities, and available information, in relation to WAIS. WAIS combines two recently popular technologies: client-server linked via a common protocol, and databases of text-based information.

Initial development was by Dow-Jones, Thinking Machines, Apple, and Peat Marwick. In WAIS, a uniform client user interface allows access to text, graphics, audio and other data forms. Multiple platforms are supported. There are three elements to WAIS: the server, the client, and the communication protocol.

The server is characterized by an inverted file indexing system, using word weighting. Searching is case insensitive, fast, and makes use of weighting. Information retrieval provides headlines, with a relevance score, in weighted order. Attributes of the client include that one can select a list of databases to query, and queries are English keywords. The query is sent to the server, then the client retrieves and displays results (text, audio, whatever.)

The WAIS protocol is based on Z39.50, where the client sends a query to the server, the server returns number of matches, and the client requests transfer of results. Terms used in talking about WAIS results: "document" is a record, "hit" is a match, and "score" is relevance. Searching currently allows use of multiple words, Boolean, truncation, literals, and fields, and provides a relevance score.

Information display can be in X-Windows, ASCII, Mac, and other formats. There is a brief mode and full display. Over 300 databases are WAIS-searchable, including such things as mailing lists, library catalogs, congress reports, the Bible, and medical data.

Why WAIS? It is freely available for popular platforms, has a distributed design with a uniform interface, does relevance feedback searches, has very fast indexing and searching, and can handle a wide variety of data. WAIS is certainly worth exploring!

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Index Standard Update

Discussion of Displayed Versus Non-displayed Indexes Dominated Third Meeting of NISO Committee on Standards for Indexing; Second Draft Critiqued at ASIS Annual Meeting

Can indexes that are displayed for searching by visual inspection share standards with "non-displayed" indexes that are searched by means of electronic comparison and matching? This question dominated the first half of the third meeting of the National Information Standards Organization (NISO) committee on standards for indexes (Z39.4-199x), held at the headquarters of the Special Library Association in Washington DC on November 6, 1992.

The majority of the committee concluded that it must continue its efforts to cover both of these fundamental types of indexes in a single standard, but at the same time, it resolved to clarify differences and to specify which recommendations apply to one category of indexes and not the other.

A concerted effort will also be made to eliminate made-up jargon, such as "hidden" or "implicit" indexes. For the time being, at lease, the standard will refer to "displayed" and "non displayed" indexes. Since many electronic indexes are displayed for browsing and searching, this distinction is not based on index medium (e.g., print versus electronic).

Committee chairperson James D. Anderson of Rutgers University will now prepare draft number three, to be considered at a fourth meeting, held in May of 1993. Other members of the committee include Barbara Anderson, DIALOG Information Services, Catherine Grissom, U. S. Department of Energy, Nancy Mulvany, Bayside Indexing Service, Barbara Preschel, Public Affairs Information Service (PAIS), Deborah Swain, IMB, and Hans Wellisch, emeritus professor, University of Maryland. The current standard, Z39.4-1984, was published in 1984 under the title "Basic Criteria for Indexes."

A week before the committee meeting, panelists discussed the draft standard before a capacity crowd during an 8 a.m. session at the annual meeting of the American Society for Information Science in Pittsburgh PA. Chairperson Anderson introduced the draft by describing the goal of the committee to include all kinds of indexes used for information retrieval. Three invited speakers critiqued the draft.

Marcia Bates of the University of California, Los Angeles (UCLA) urged more comprehensive treatment of non-displayed indexes, including not only the terms that may be searched, but also the search interface and the procedures by which such indexes are searched.

Raya Fidel of the University of Washington said that so far, the committee had achieved a good balance between prescriptive and descriptive standards. Because the indexing field has such a long tradition but so little theory, it is especially difficult to reach a consensus on standards. However, the draft is still too heavily slanted toward print media indexes and indexes for books.

Bella Hass Weinberg of St. John's University compared the draft standard for indexes to that for the construction, format, and management of thesauri.

She discussed problems with alphanumeric ordering, urged more attention to processes, such as the control of cross reference, and suggested that he committee address desirable features of indexing software.

Committee chair Anderson Expressed appreciation for the widespread interest in the committee's work and welcomed the many suggestions that came from the panel, the audience, and many other members of the indexing community who had reviewed the second draft.

Persons who would like to receive copies of the third draft in late Spring 1993 may contact Anderson at the School of Communication, Information, and Library Studies, Rutgers The State University of New Jersey, 4 Huntington Street, New Brunswick, NJ 08901, (908)932-7501, Internet: janderson@zodiac.rutgers.edu

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CNIDR and WAIS

Jim Fullton

The U.S. National Science Foundation has funded the creation of the Clearinghouse for Networked Information Discovery and Retrieval. One of the responsibilities of CNIDR is to promote the use and development of tools for discovering and using networked information. The organization has been specifically charged with the task of providing an evolutionary path for the public-domain version of WAIS, the Wide Area Information Server. Therefore, CNIDR has been paying close attention to the remarks and "wish lists" provided by the network community, and is well into a project to try to fulfill those wishes.

CNIDR is in the early beta test stages of a new generation of WAIS-like systems that build on the heritage of WAIS as released by Thinking Machines, but with quite a bit of extensibility and some new features. Specifically, with the help of many others, CNIDR is creating a Z39.50-92 (soon to be 93) server with full backwards compatibility with current WAIS clients and indexes, and features such as boolean search, formatted searching on fielded text information, thesaurus based synonym substitution, stemming, and a search engine integration toolkit.

While the server maintains compatibility with current WAIS clients, it will also allow searches and retrievals from any Z39.50 client capable of recognizing the BIB-1 or INFO-1 attribute sets. Clients developed for this system will also be able to interact with library automation systems within the constraints of the attribute sets. CNIDR also hopes to provide a tool to make various Z39.50 server maintenance tasks easier.

The project is planned to support the following Z39.50 features:

- BIB-1 and dynamic INFO-1 searches;
- ES-1 element sets, which allow even more retrieval flexibility than the current WAIS server;
- Access and resource control — essentially, this will allow for secure servers and servers that can accept billing information from the user;
- EXPLAIN -- Smart clients can use the EXPLAIN facility in conjunction with their preferred attribute set to provide customized search options for the user.

Configurable basic search engine features include: synonym lookup; stemming; formatted field searches; and Boolean search logic (to be added before release). The organization has not yet begun to create the search engine toolkit since more user input is needed, and the clients are rudimentary at best.

CNIDIR hopes to have the server running and ready for beta-test by February, although alpha code will be available much sooner. Clients wil take somewhat longer as user interface development can be quite time consuming. On the client side, work is progressing on clients for the Macintosh and Unix systems, with a PC client in the wings. The entire system will, of course, be freely available for use and modification by the network community. So, when will this wonderful thing be ready? CNIDR actually has a server running that answers both WAIS and Z39.50-1992 queries on the same port, but returns results in a non-standard transfer syntax. They are in the process of changing this to support INFO-1 generic data records, and hope to have that completed soon.

How can you help? CNIDR has already had quite a bit of help from many people, most notably John Kunze at the University of California at Berkeley and Clifford Lynch at the University of California Library Automation Division. John created most of the server code and designed the INFO-1 attribute set as well as the ES-1 element set structures. I have made the server modifications to support free-text searching and WAIS compatibility, as well as making the necessary changes to the WAIS search engine. Members of Joan Gargano's staff at the University of California at Davis are now working on X Windows clients.

CNIDR is looking for folks willing to work on clients and run beta-test servers with their current WAIS information bases. Once the transfer syntax code is firmed up, trial servers will be made available for this purpose.

As technical manager for the Clearinghouse, I will help coordinate development tasks and incorporate any of your contributions into releases (with attribution, of course). The organization also has staff who will provide documentation and support for

final releases. Comments and suggestions are welcome, and CNIDR looks forward to hearing from interested parties.

Jim Fullton can be reached at the Clearinghouse for Networked Information Discovery and Retrieval, (919)248-9247, fullton@concert.net.

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ITU Documents Go Electronic

Mark Needleman

Many people may be aware of the experiment the ITU (International Telecommunications Union) conducted awhile back to make CCITT standards available electronically through the Internet. This experiment was heavily publicized but then abruptly canceled about one month after it began, for reasons that remain a little vague. Recently a copy of a press release from the ITU (reproduced below) was sent out electronically that seems to indicate that they are going forward again with a new plan to provide electronic access to at least some of their documentation. How far they plan on going in this direction and for how long it will remain a no charge service still remains to be seen. But readers of *ISQ* may be interested in being appraised of this new development.

Wide Range of ITU Documents Now Available Online: ITU Standards to Become Electronically Accessible in Early 1993

An electronic document distribution service providing remote access to ITU documents -- TELEDOC -- became operational last week [early November 1992].

Aimed at providing fast and timely access to ITU information to the world telecommunications and networking community, TELEDOC is a database containing at present:

- CCITT and CCIR administrative documents
- lists of contributions (substantive/proposals) to CCITT study groups
- lists of CCITT reports and Recommendations (i.e. standards)

summaries of CCITT new or revised Recommendations

- CCITT and CCIR meeting schedules and other information concerning Study Groups structures and activities.

As of early 1993, the full texts of all new and revised CCITT Recommendations (i.e. all standards approved after the publication of the Blue Book in 1988) will also be available from TELEDOC. In line with ITU publications policies, it is envisaged to expand TELEDOC information base according to identified needs and available resources.

On TELEDOC's first day of operation, ITU Secretary-General Pekka Tarjanne stated: "The impact of changing telecommunications environment makes it imperative that the ITU develop new approaches to the standardization process and find new ways to improve the efficiency of our work, new ways to disseminate the output of our work throughout the world. The implementation of TELEDOC", he said, "is undoubtedly a right step in this direction. Our ultimate goal is to make available on-line an entire library of ITU documents for a broad and transparent information exchange with all categories of interested users".

TELEDOC is based on a X.400 document server which processes requests sent in by electronic mail. The TELEDOC Auto-Answering Mailbox accepts messages from the two most widely used E-mail systems: X.400 and Internet. Users without direct access to X.400 or Internet mail can use gateway services provided by major service providers (e.g. MCI or Compuserve). The electronic mail address of TELEDOC Auto-Answering Mailbox (TAM) is:

X.400	S=teledoc
	P=itu
	A=arcom
	C=ch
Internet	teledoc@itu.arcom.ch

Document formats which are planned to be made available include ASCII, Microsoft RTF, Word for Windows, Postscript and CCITT ODA/ODIF.

TELEDOC will be available on request, on a trial period of one year, at no access cost.

The International Telecommunication Union (ITU) was founded in 1865 and as such is the oldest intergovernmental organization. In 1947, it became a specialized agency of the United Nations and has a membership of 174 countries (November 4 1992). It is the international organizational organization responsible for the regulation and planning of telecommunications worldwide, for the establishment of equipment and systems operating standards, for the coordination and dissemination of information required of the planning and operation of telecommunications services and within the United Nations system for the promotion of and contribution to the development of

telecommunications and the related infrastructures.

For more information or to obtain a copy of the TELEDOC user's guide, please contact: Mr. Robert Shaw, TELEDOC Project Coordinator, Information Services Department, International Telecommunication Union, 1211 Geneva 20, Switzerland Tel: +41 22 730 5338/5554, Fax: +41 22 730 5337, X.400: G=robert; S=shaw; A=arcom; P=itu; C=ch, Internet: shaw@itu.arcom.ch; or Miss Antoinette Bautista, EDH - CCITT, CCITT Secretariat, International Telecommunication Union, Place des Nations, 1211 Geneva 20, Switzerland, Tel: +41 22 739 5857, Fax: +41 22 730 5853, X.400: G=antoinette;S=bautista; A=arcom; P=itu; C=ch, Internet: bautista@itu.arcom.ch.

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News and Events

Brief notes on meetings, non-NISO standards, NISO-related groups, publications and other items that may be of interest to ISQ readers.

IHS Directories on CD-ROM Available

Information Handling Services is now offering on CD-ROM its worldwide standards directory. The CD-ROM product costs less than $500. IHS Directories on CD-ROM give convenient PC access to the world's largest databases of detailed information on U.S. Industry, non-U.S. National and International standards, U.S. Military and Federal Specifications and Standards, and industrial manufacturers' catalogs, including detailed product information from over 16,000 industrial vendors.

With IHS Directories on CD-ROM you can use the system as much as you like — without worry about variable online charges. And easy, fill-in-the-blank searching makes the system attractive to novice searchers and library patrons. With this powerful system on your PC, you can quickly identify the products you need — and the manufacturers and distributors that supply them. Keyword and subject searching also help you find all of the standards and specifications that apply to your projects. For more information, contact Mary Langston at (800)525-7052, extension 2870.

MARC and Electronic Resources

Discussions are expected at ALA about the addition to MARC of field 856 for electronic location and access. It includes an indicator for form of access; the options are email, ftp, telnet, and other. Subfields include host name, IP address, compression format, path, file name, name of resource, processor, instruction, password, login, contact name, host name, port, file mode, file size, terminal emulation, non-public note, public note, and source of access.

Southwest Center for Codes and Standards Available

The State of New Mexico has designated New Mexico State University as a repository for state, county and municipal technical codes and standards. The Southwest Center for Codes and Standards is also a source for federal documents, national and international industrial and military codes and standards.

The Center has access to over 1 million standards documents from over 390 standards organizations. Its services include:

Obtaining standards documents.

Maintaining a database of available standards.

Standards citation verification.

Standards reference service.

Translation of foreign standards.

Maintaining and updating of standards.

The Center provides a fee-based codes and standards service to engineers, architects, researchers, government vendors, students, designers, consumer organizations, lawyers, manufacturers, construction companies, building and construction inspectors, and anyone with a need for their services. For more information, contact the Center at (505)646-6834.

International News

ISO Drafts out for Ballot

The following ISO draft standards developed in ISO TC 46 are now out for ballot. Copies can be requested from the NISO office. Comments on all drafts are due by March 15, 1993.

- *CD 639-2 Code for the representation of names of languages*
- *CD ISO 10162: 1992/pDAM3 Multiple concurrent operations*
- *CD ISO 10162: 1992/pDAM2 Suspend/resume*

- *CD ISO 10163: 1992/pDAM2 Suspend/resume*
- *CD ISO 10162: 1992/pDAM1 Scan function*
- *CD ISO 10163: 1992/pDAM1 Scan function*

Results of Recent Balloting

DIS 12083 Electronic Manuscript Preparation and Markup

14 Approve, 5 Disapprove (Belgium, France, Germany, Greece, Poland). An editing group will meet in Geneva, February 22-23, 1993, to review the comments received and resolve outstanding negative votes.

Approved

- *CD ISO 10160/pDAM1 Document Delivery*
- *CD ISO 10161/pDAM1 Document Delivery*

These CDs will be advanced as DIS (Draft International Standards.)

Not Approved

- New Work Item proposal for *SGML Application for Headers of Journal Articles*
- NWI proposal for *SGML Application for Bodies of Journal Articles*

NWI proposal for *OSI-Search and Retrieve Terminate Service Definition and Protocol Specification*

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