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Next Issue Deadline: ....March 1, 1989

Welcome to Information Standards Quarterly

Now that NISO has several years of independent existence, we also have a new journal of record. With this issue, Information Standards Quarterly replaces Voice of Z39 as the primary informational publication of the National Information Standards Organization.

ISQ—as this publication will frequently be called (serials catalogers take note)—will continue the primary mission of Voice of Z39: keeping NISO members informed on the progress of standards development, deadlines, activities and other NISO information. It will also serve as an ongoing source of information on NISO and information standards for potential members of NISO, students, libraries and others.

The new publication differs from the old in several ways:
• ISQ will appear quarterly, in January, April, July and October of each year.
• When urgent information must be disseminated between issues of ISQ, the occasional Information Standards Bulletin will appear from the Executive Director’s office.
• A volunteer editor and editorial staff will prepare ISQ, depending heavily on the Executive Director and others in NISO for information, but freeing the Executive Director from the burdens of editing and page makeup. Where Voice of Z39 was staff-produced on the model of corporate newsletters, Information Standards Quarterly follows the model of many professional association journals and newsletters.
Many articles will be signed. While ISQ will be the journal of record and most copy will be reporting of one form or another, there will be room for comment, controversy and opinion.

ISQ will provide an annual base of information on NISO in four quarterly segments, one in each issue, so that any volume of ISQ will serve as an overview of the organization and its current operations.

ISQ is available by subscription and as part of NISO membership fees.

While ISQ begins as a newsletter, the eventual scope of the periodical is not limited to those elements covered in Voice of Z39. ISQ will be what NISO members and ISQ volunteers make it.

We will continue to use desktop publishing techniques and a type family that is historically related to the one used in the last two volumes of Voice of Z39 (see the Editor’s Notebook for more details). During the first editor’s term, expect ISQ to reflect a conservative design, heavy on text and light on graphics.

Contributors Needed

Information Standards Quarterly is your publication, and will be what you make it. We need contributing editors to establish and maintain a Publication Watch, citing and annotating articles and books that deal specifically with NISO-related activities. We need contributing editors from the publishing, bookselling and information services areas, and more editors from libraries. We need frequent conference-attendees in various fields to provide brief reports on conference programs related to information standards.

Please let the editor know if you wish to become a contributing editor. The editor’s name and address always appear in the masthead on page 2. The first editor of ISQ is Walt Crawford, The Research Libraries Group, Inc., 1200 Villa Street, Mountain View, CA 94041-1100; (415) 691-2227; BITNET BR.WCC@RLG.BITNET; FAX (415) 964-0943.

Let us know what you like, what you feel needs more coverage, and what you don’t like. And note the editorial deadlines: they will always appear at the foot of the contents column, and are normally the first of the month before cover date. The deadline for Volume 1, Number 2 is March 1, 1989: all copy should be in the editor’s hands on that date.

OCLC’s EPIC Service Implements CCL

Leah Houser and D.L. Rings

NISO Standards Committee (SC) G developed draft standard Z39.58, Common Command Language for Online Interactive Information Retrieval. This standard provides guidelines for information retrieval systems designers by specifying the vocabulary, syntax, and operational meaning of commands in a command language for use with various database access and search facilities. As users move from system to system, a common command language (CCL), or a

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Editor is Walt Crawford; Associate Editor is Lennie Stovel. Contributing editor for this issue is D. L. Rings. Opinions expressed in signed articles and columns are those of the writers and do not necessarily represent the opinions of NISO or the staff of Information Standards Quarterly.

Information Standards Quarterly is sent free of charge to members of NISO. Nonmembers may subscribe for $40 per year. Subscription requests, requests for back issues and change of address forms should be sent to: National Information Standards Organization, P.O. Box 1056, Bethesda, MD 20817.

Editorial contributions, articles, news releases and letters should be sent to Walt Crawford, The Research Libraries Group, Inc., 1200 Villa Street, Mountain View, CA 94041-1100; (415) 691-2227; BITNET BR.WCC@RLG.BITNET; FAX (415) 964-0943.

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standard user interface consisting of a basic set of commands and rules for their use, would make users' command-driven searches easier.

This article briefly describes how OCLC (Online Computer Library Center, a major U.S. bibliographic service) adapted Z39.58 for EPIC, an online reference system. EPIC consists of OCLC-developed database indexing and retrieval software, a menu-based user interface, and a command interface, implemented on an IBM 4381 system. In January 1989, OCLC will begin field-testing the EPIC service. EPIC’s command interface is based on the May 1987 draft of Z39.58-198x.

The original project requirements for EPIC actually specified the ISO/DIS 8777 Documentation—Commands for Interactive Text Searching. OCLC worked with the ISO command language for several weeks, but felt that the NISO CCL was superior, based on the following points:

- The NISO CCL syntax is less complex, requiring fewer special characters, operators, and reserved keywords.
- The NISO CCL includes a larger number of commands, making fewer extensions to the basic command set necessary.
- OCLC’s initial customer base would find NISO CCL more familiar than ISO’s language, which seems predominantly influenced by European retrieval systems.

Design Philosophy

OCLC is committed to following national and international standards, so a salient goal for EPIC was full compliance with NISO CCL. This goal made it easier to resist the temptation to rename commands or change syntax. In the handful of areas where OCLC disagreed with the CCL, both CCL and EPIC versions were implemented. As an example, the system provides several synonyms for STOP such as BYE and LOGOFF.

Another goal was parsimony, a feature valued by expert users. To reduce keystrokes, any unambiguous abbreviation of a command or command keyword will be accepted, in cases where more than one command begins with the same letter, the most likely command will be executed. Although CCL is already a concise language, we continued by further relaxing demands for commas and blanks, and by defining user input as correct whenever the user’s meaning could be reasonably understood.

An additional goal for the EPIC command set was ease of use. Error messages resulting from command syntax errors will point to the location of the error. Entering “help” from here will bring help about the syntax error. Likewise, entering an erroneous SET command will result in a list of the valid SET values.

Extensions to CCL

Although CCL is not intended to be an exhaustive list of all possible commands that could be provided in a retrieval system, it provided almost all of the nomenclature for EPIC. Below is a partial list of extensions made:

- The CCL proposal states that a list of scan identifiers can be selected for searching by entering the identifiers following a SCAN display. Since EPIC’s default searching operator is adjacency, entering “11 12 13” should translate to a search line “FIND work worked working”—probably not the intent of the user. EPIC’s scan identifiers must always be entered as part of an explicit FIND command. The CCL proposal was extended, however, so that a displayed set of scan identifiers will be valid within any FIND until the next SCAN is performed.
- A “=” extension to field labels in FIND and SCAN commands specifies a phrase index. This allows both author keyword and author phrase indexes to be denoted as “AU,” for example. “FIND AU=Darwin Charles, 1752” searches the author phrase index.
- An optional “;” extension to field labels in FIND and SCAN commands was added to request error messages for invalid field labels. If “FIND TI:myth” is entered, and TI is not a valid field label, the system will search for the phrase “TI myth.” The command “FIND TI:myth” would receive an error message.
- FORWARD and BACK commands were clarified to refer to scrolling the smallest unit of any object, such as help text, scan display, or news. Entering FORWARD while viewing a single record retrieves the next page of that record. To see the next record within a set, for example, “DISPLAY NEXT” or “D N” can be used.
- The PRINT command was extended to allow sorting the set offline, before printing.
- A CONTINUE command was added to return users to previous work after perusing HELP or EXPLAIN text.
• A CORRECT command was added to correct and re-enter erroneous commands.
• The following installation-specific SET and SHOW objects were added: address, password, device, interface type, default database, verification, display format, user-defined display format, default print parameters.

Not Provided

While defining the scope of EPIC for a reasonable first release, some functions listed in NISO CCL were deemed non-essential. These functions included the DEFINE command, specification of individual records in the DELETE and KEEP commands, and sorting part of a record set. The RELATE command was not implemented because a thesaurus file was not available for our first database offerings. It is probable that some of these commands will be implemented in future EPIC service releases.

Closing Thoughts

The NISO CCL proposal provided a reasonable and complete working base for the EPIC command language. CCL's syntax and policies did not interfere with the addition of EPIC extensions, which numbered few. Changes in SC G leadership may have made it difficult to obtain quick answers to resolve ambiguities in the standard or in our understanding of the proposal. This was our chief difficulty in working with CCL. Our choice of NISO CCL has not produced regrets.—Leah Houser is a systems analyst, D.L. Rings an information analyst, both at OCLC.

Message from the Chair

Mary Ellen Jacob,
Chairperson, NISO

This is the first issue of the new Information Standards Quarterly (ISQ), edited by Walt Crawford. It marks an important milestone for the National Information Standards Organization Z39 (NISO). The change includes the title, the editor, the publishing schedule, and most important of all, the content.

There has been a need for some time for a newsletter or journal devoted to standards in the areas of libraries, publishing, library equipment, and information services. Occasional pieces appear in professional and association publications, but no one publication is devoted solely to standards. ISQ will fill this need.

ISQ will continue the news and brief reports featured in the Voice of Z39 and provide longer, in-depth articles looking at various standards under development, at the standards process itself, and the application of existing standards. I strongly encourage readers who are interested in contributing to ISQ to contact ISQ's editor, Walt Crawford, Research Libraries Group, 1200 Villa Street, Mountain View, CA 94041-1100, (415) 691-2227.

In May of 1989, NISO will host the Plenary Meeting of the International Organization for Standardization (ISO) Technical Committee (TC) 46 at the Library of Congress in Washington, D.C. As the international standards process gradually affects more organizations, U.S. participation has assumed a greater importance. A number of TC 46 Subcommittees and Working Groups will meet in conjunction with the Plenary Meeting. Some of the topics to be reviewed include the status of international standards for application protocols for information retrieval and interlibrary loan, index construction, serial holdings statements, and progress in the approval of an international standard for paper permanence. The U.S. will be participating actively in all of the TC 46 meetings. The next issue of ISQ will report on the final meeting agenda and those topics of special importance to U.S. interests.

Early in 1989 NISO will hold elections for new NISO officers including a Vice-Chair/Chair-Elect. We will be appointing a Nominating Committee and nominations may be sent to them. Pat Harris will be forwarding the appropriate forms in the Spring. The current Chair-Elect, Paul Evan Peters, New York Public Library, will take office in July 1989.

We, as voting members can attest, are continuing to form new standards committees and to ballot new or revised standards. This activity shows no decrease. As the number of NISO standards grows so does NISO's maintenance activity, since all standards must be reviewed and reaffirmed, revised, or withdrawn at five year intervals after publication. It also attests to the use and continuing need for standards. Another positive sign is the number of conference sessions now devoted to standards activity and the larger audiences that attend these and participate in the discussions.

The coming year promises to be an active one and we will be seeking approval of a num-
ber of new or revised standards. I urge all voting members to be sure and return their ballots and to remember that abstentions cannot be counted as approvals. Instead, they act as negative ballots under our current procedures. Without a majority of yes votes, a standard being balloted for reaffirmation cannot remain and a new draft standard cannot become a NISO standard. Your ballots are important.

From the Executive Director
Pat Harris

In the six years that I have been Executive Director of NISO, I have been a part of all the changes that NISO has experienced. I have seen NISO mature as an organization, grow in membership and support, and begin to take a leadership role in some significant standards development work in the U.S. and internationally. In 1989 we will start to see the first results of this development and redirection.

First, in 1989 the first two NISO standards to be copyrighted and published by NISO will be issued. NISO's role as a standards developer is truly solidified as NISO establishes its presence as the publisher of its own standards. NISO standards will continue to be approved by the American National Standards Institute and issued as American National Standards. However, NISO will have control over the marketing, distribution, and sales. Our standards will continue to have a uniform appearance, but I promise you an updated look that will catch your attention and interest.

Second, 1989 will see the final development of a number of standards that mark many years of effort by many NISO volunteers: the Common Command Language and the standard for Non-Serial Holdings. Two established NISO standards will be revised and reissued: Z39.1, Periodicals: Format and Arrangement and Z39.29, Bibliographic References. With these revisions, these two standards are brought into the information age of the 1980s, and will reflect the tremendous impact that new technologies have had on the creation, storage, and retrieval of information.

Third, NISO will host the 1989 Plenary Meeting of Technical Committee 46, NISO's counterpart standards developer at the international level. This is the first time that the U.S. has hosted a TC 46 Plenary. NISO's involvement is a sign of the active role the U.S. is now taking in international standards development. It is especially important that the U.S. be a part of the standards deliberations at the international level. At this time the European countries are working together to create a consolidated European market by 1992. Common standards are a key tool being used to create this unified system. If the U.S. information community wants to contribute to a consistent worldwide information system, then it is primary to our interests that the U.S. standards be closely aligned with emerging international and European standards.

With NISO's growth in programs and ambitions, I see some new challenges on NISO's horizon. The desire for program growth brings the need for more and new support—an increased financial base, new staff, and more space. These are realities that NISO's Board of Directors will be addressing as NISO approaches its first half-century.

I think standards development and implementation is one of the most important challenges we face as information providers, yet it is one of the great unsung areas of professional contribution. This, too, is beginning to change. This newsletter will communicate the excitement, controversy, and sometimes, conflict that are part of the standards development process. Along the way it is our hope to convince you, our reader and supporter, to deepen your commitment to NISO and standards. Stay with us—some great times are ahead!

Support NISO and Support Standards

NISO is thriving today because of the support it gets from a diverse group of organizations and individuals that have one thing in common: a strong commitment to standards. You, too, can be a part of the NISO team: as a Voting Member, an Information Associate or a Subscriber.

NISO Voting Members are associations, libraries, government agencies, publishers and information providers that are national in scope and have a direct and material interest in the standards developed and maintained by NISO. NISO's first Voting Members were the American Library Association, the American Association of Law Libraries, the Medical Li-
brary Association and the Special Libraries Association. Today, as NISO prepares to celebrate its first fifty years as a standards developer, sixty-five Voting Members support NISO.

NISO's Voting Members are on the front-line of standards development: Voting Members receive all of the U.S. and, on request, international standards circulated for comment or ballot and are required to vote on each proposed standard. Voting Members vote on proposed new standards to be developed by NISO, receive ISQ and all published NISO standards, elect NISO's officers and Board of Directors and, as members of NISO, guide the organization's program. Voting Members pay annual membership fees based on the member organization's annual budgeted expenditures; this fee ranges from $200 to $4000 depending on the size of the member organization. A list of Voting Members as of December 1, 1988, appears below.

As a NISO Information Associate an organization or individual receives all of the draft standards distributed for ballot or comment but does not vote. Information Associates also receive ISQ. The annual Information Associate fee is $500. Information Associates can track NISO's interests but do not vote and are not obligated to respond to requests for comment.

NISO's publications are also available to Subscribers. Information Standards Quarterly (four issues per year) is available to subscribers for $40 per year. NISO also offers to libraries only an Information Subscription for $100 per year which entitles the library to receive Information Standards Quarterly and all of the draft standards issued by NISO. NISO's draft standards and final, approved American National Standards are sold individually.

To become a NISO member or receive any of NISO's publications contact the NISO office: NISO, P.O. Box 1056, Bethesda, MD 20817; Telephone: (301) 975-2814.

NISO Voting Members

The following institutions are Voting Members of the National Information Standards Organization as of December 1, 1988.
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.
Aspen Systems Corporation
Association for Information and Image Management (AIIM)
The Association for Recorded Sound Collections (ARSC)
Association of American Publishers (AAP)
Association of American University Presses (AAUP)
Association of Information and Dissemination Centers
Association of Jewish Libraries
Association of Research Libraries
AT&T Bell Laboratories
The Blue Bear Group, Inc.
Book Manufacturers' Institute
CAPCON Library Network
Catholic Library Association
Colorado Alliance of Research Libraries (CARL)
Cooperative College Library Center (CCLC)
Council of Biology Editors
Council of National Library and Information Associations
Data Research Associates, Inc.
DYNIX, Inc.
EBSCONET
Faxon, Inc.
Geovision, Inc.
Indiana Cooperative Library Services Authority (INCOLSA)
Information Industry Association
Information Workstation Group, Inc.
JERA, Inc.
Library Binding Institute
Library of Congress
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
Introducing ISQ

One of the recommendations of the NISO Futures Committee was that the *Voice of Z39* be produced by a volunteer editor and staff rather than being produced entirely by the Executive Director. A call went out for volunteers. Somewhere along the way, it was suggested that the first such editor really needed to be someone with demonstrated experience in producing such publications. That suggestion, and some creative encouragement by this year’s Chair and next year’s Chair, resulted in an agreement that I would edit NISO’s publication for the next couple of years. And at some point in the process, we all agreed that the publication should have a new name and broader focus: thus, *Information Standards Quarterly*.

Production Techniques

*Information Standards Quarterly* is produced using desktop publishing techniques. Except for the banner and mailing strip, page originals are entirely produced using Ventura Publisher, a Hewlett-Packard LaserJet II, and Bitstream’s *Zapf* Calligraphic family of type. Most editing is done using Microsoft Word on a Stanford Systems 286-12 AT-compatible. The LaserJet II, Ventura Publisher, Logitech Mouse and Bitstream type fonts form the *LITA Newsletter* production system, provided by ALA’s Library and Information Technology Association. The Amdek 1280 full-page monitor used to produce both *ISQ* and the *LITA Newsletter* was provided by NISO. The banner was designed and elements of the publication design were provided by Marilyn Ugiansky (Note: all of this applies only to *ISQ*. *Information Standards Bulletin*, the occasional supplement, will be prepared at the NISO offices, using Aldus Pagemaker, Apple Macintosh and LaserWriter, with Adobe’s *Palatino* as the standard type family. That system was also used to produce the last two volumes of *Voice of Z39*.)

Finally, a few words about the type family. Hermann Zapf designed *Zapf* Calligraphic for Bitstream, Inc., as one of its new type families designed specifically for digital typesetting and for high quality in both medium-resolution (300 dots per inch) and high-resolution (1200-2700 lines per inch) applications. *Zapf* Calligraphic is a redesign of Zapf’s own *Palatino* typeface, so that there is a definite link between the new typeface and that used for the *Voice*. The same type family is used for both headlines and body.

Standards Activity

These brief notes summarize standards activity since *Voice of Z39* v. 9, no. 2-3.

Standards Being Balloted

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*Italics: further information on page noted.*
Standards Approved and Awaiting Publication

- **Z39.21-1988: Book Numbering.** The revised standard has been approved by the ANSI Board of Standards Review and will be published in 1989.

Standards Being Revised

- **Z39.6-1983: Trade Catalogs.** Bill Lofquist, U.S. Dept. of Commerce, will chair Standards Committee VV, which will revise this standard.

Standards Recently Balloted


  **Partial Results:**
  - 26 Yes
  - 1 No (LC)
  - 2 Abstain
  - 4 Communications from interested parties

  Final results will appear in the next issue.

Standards Newly Published

Orders may be placed with Transaction Publishers, Rutgers University, New Brunswick, NJ 08903.


Information Retrieval Protocol Reaches Publication

Lennie Stovel

One of the first NISO standards to be published by Transaction Publishers (NISO’s new pub-

Z39.50-1988 specifies a protocol for inter-system searching, allowing an application on one computer to query databases on another computer. In the terms of the Open Systems Interconnection model for computer-to-computer connections, it is an application layer protocol. It describes the facilities of an information retrieval service and the parameters or fields needed to use each facility. For example, "result-count" is a parameter of the search facility; the system being queried uses this parameter to tell the querying system how many records it retrieved. The standard also sets out how these parameters are organized into the units of information, called Application Protocol Data Units, that are passed between the two systems.

Standards Committee D was formed in 1979. Unlike most NISO committees, it was not formed to work on a particular standard but as an ongoing committee to develop a set of application layer protocols for libraries. During the first three years, it did not focus on a particular protocol, but in May 1983, the committee began work on the information retrieval protocol, basing it on work done by the Linked Systems Project. As a result of some of the negative votes on the initial ballot, the standard was expanded to incorporate some features enabling its possible future use in a message-oriented environment, in which a message is transmitted with no expectation of an immediate reply (as in interlibrary loan activities), as opposed to the interactive association-oriented environment for which it was designed. These "hooks" include the ability to name messages (for example, a search, whose name would be echoed back along with the search result) and to name result sets for later reference in a qualifying search or in a request for records from the result set. The ability to delete a named result set is also incorporated in the standard.

After approval, the next step in the life of a standard is implementation. Two well-established projects intend to include implementation among their activities. One is the Linked Systems Project—the Library of Congress, the Research Libraries Group, and OCLC—which had already implemented an earlier version of the information retrieval protocol that is being used to search databases of authority records. The LSP partners will now make the changes necessary to conform to the standard as they expand their activities to include searching bibliographic databases. The other is a joint development by NYSERNet, an educational computing network in New York state, and OCLC. The NYSERNet project will implement Z39.50 on a workstation, together with a gateway between the TCP/IP communication protocols and OSI protocols. These strategies give the implementation the potential for replication in other places.

Ray Denenberg, senior network specialist in the Library of Congress Network Development and MARC Standards Office, chaired Committee D. In a recent interview, he outlined three areas of possible future direction in protocol development.

The original charge to Committee D mentions applications such as interlibrary loan and record transfer, in addition to information retrieval. While Committee D was working on information retrieval, a Canadian group developed an ILL application protocol, and the International Organization for Standardization (ISO) is now working on ILL as well. There is no reason for the U.S. to repeat their work. Opinions differ about whether work on record transfer is needed, especially in the light of work on file transfer protocols at the international level; in any event there is no current movement toward standardization of a protocol for record transfer by NISO.

The text of Z39.50 contains a list of issues that might be considered in the future. One item on the list is the standardization of data structures, some of which are provided in appendixes to the standard and thus are not part of the standard itself. The data structures that could be standardized include attribute lists (an attribute is a characteristic of a search such as whether it is truncated or not), diagnostic record formats, and resource reports that indicate the usage of time and cost of a search. A question to be considered is whether these structures should be embodied in a formal standard or merely codified and registered with a centralized authority and thus made available for reference and use.

There are a host of other questions that could be put on NISO's agenda. Currently ISO Technical Committee 46 is considering draft proposals for the service definition and protocol specification of bibliographic search, retrieve, and update functions. Although the national and international activities have been coordinated to the extent possible, whatever is produced by ISO is bound to differ in some areas from Z39.50. Another question is that of registration authorities and directories, which are being developed to coordinate the assign-
ment of values for parameters in other OSI-based applications nationally and internationally. What similar support is needed for library-related applications and who should provide it? Another area for potential activity is the use of the formal notation and encoding defined by Abstract Syntax Notation (termed "ASN.1") in library applications.

Z39.50-1988 will be published in February. Advance orders can be placed with Transaction Publishers, Rutgers University, New Brunswick, NJ 08903.—Lennie Stovel, a Library Systems Analyst at The Research Libraries Group, Inc., is Associate Editor of ISQ.

Non-Serial Holdings Standard Draft Revised: Notes on Z39.57-198x

When Z39.57-198x was balloted December 1, 1986-March 6, 1987, three NISO members voted yes with comments, one (OCLC) voted no, and a number of comments were received from non-voting members and interested colleagues in the field. A revised standard is currently out for ballot from December 1, 1988 to March 15, 1989. The following comments are abstracted from the memo (by Stephen P. Davis, Acting Assistant Director for Library Systems, Columbia University, chair of SC W) that accompanied the revised draft.

During the last eighteen months SC W has been in the process of rethinking a major aspect of the standard, namely its relationship to Z39.44-1986, Serials Holdings Statements. Prompted in large measure by OCLC's concern about inconsistencies between the two standards, many additions and changes were made to bring Z39.57 as close as possible to the serial standard, without compromising the distinctive needs of monographic items or ignoring recognized conventions for recording monographic holdings.

OCLC has concurred with this approach and indicated its intention of voting yes. It is concerned that implementation of the two standards be monitored, with consideration given to merging Z39.44-1986, Serials Holdings Statements, and Z39.57 when Z39.44 reaches its five-year NISO review. SC W agrees with this approach, while reserving judgment as to whether a merged standard is necessary.

Many suggestions came from members of the American Association of Law Libraries, and the revised draft includes many additions to accommodate the special needs of law libraries. In a number of cases, the new provisions may also apply to other complex bibliographic items.

Although the new draft is longer and more complex, its "deep structure" is exactly the same; the simplest of holdings statements will suffice for the largest number of cases. Preliminary analysis also suggests that there should be little difficulty in adding needed data elements to the USMARC Format for Holdings and Locations so that it can accommodate Z39.57 holdings.

The display aspects of the standard (particularly optional punctuation marks and data elements) should be judged in context, namely a field increasingly dominated by customized, varied online displays. This standard and Z39.44 appear to be useful chiefly for their definition of data elements, provision of basic conceptual structure, and as a point of departure for varied forms of display.

Some of the changes in the new draft:

- A status data area has been added, as have new values for type-of-holdings and physical form designators in that area.

- Within the extent of holdings area, physical form designation has been removed as redundant; physical item information has been removed, to be included as specific extent notes or local notes; enumeration is now defined as in Z39.44, and extent-of-unit is explicitly defined.

- All data areas and elements that appear in both Z39.44 and Z39.57 have exactly the same names in both standards. A number of other changes—e.g., in punctuation and organization—bring the two standards into closer alignment. In one case, reproduced provisions from Z39.44 have been replaced by an explicit reference to that standard.

- The new draft makes several distinctions not made in the old draft, e.g., to clarify the concept of bibliographic unit and to distinguish units and parts.

- Display formats have been extensively revised and clarified, and examples have been extensively revised.

In addition to Stephen Davis, members of SC W include Kathleen Bales, Research Libraries Group; Arnold Hirshon, Virginia Commonwealth University; Penny Mattern (1983-86), OCLC; Mary Lou Miller, Library of Congress; Nolan Pope, Univ. of Wisconsin-Madison; Dea...
Patent Application Data Standard Published

D.L. Rings

Z39.61-1987, Recording, Use and Display of Patent Application Data in Printed and Computer-Readable Publications and Services, will soon be published by Transaction Publishers of New Brunswick, NJ. This standard identifies the critical components of patent application data and establishes guidelines for placing them into a single format. It will assist attorneys, authors, editors, information specialists, librarians, and employees at patent offices, data services, and others in various areas of information transfer activity.

NISO appointed Standards Committee (SC) H in 1979 to develop this standard. Members of SC H included Harry Allcock, IFI/Plenum Data Company; Dr. William G. Andrus, Pharmaceutical Manufacturers Association; Joseph P. Daniszewski, Industrial Technical Information Managers Group; Philip M. Dunson, American Intellectual Property Law Association; Sophie K. Hudnut, Dialog Information Services Inc.; Ethan Hurd, consultant; and Thomas F. Lomont, U.S. Patent and Trademark Office. The committee was chaired by Dr. Philip J. Pollick, Chemical Abstracts Service, who said, “This standard puts patent application and priority data from all major countries into a simple and succinct format that is readily usable by all who encounter this data.”

During the development of this standard, SC H took the best from the many works it studied. Formats used by Derwent, INPADOC, Chemical Abstracts Service, online vendors, and various patent offices were scrutinized. In addition to examining these various formats and specific user needs, SC H also explored the World Intellectual Property Organization standard number 34 (WIPO St.34): Recommendations Concerning the Recording of Application Numbers on Magnetic Tape. Dr. Pollick said that WIPO St.34 has serious drawbacks because “it was influenced by nationalistic tendencies that did not allow the development of a single unifying standard. Instead, it merely recites various formats that are used by each country that publishes patent data.”

According to Dr. Pollick, an inventor must file for a patent in each country where protection is sought, so one invention may have several patent applications, each with an application number in a different format. The application number of the first filed application in any country becomes the priority number and links all additional applications together. A single application and priority data format will make it easier to use this information as a search tool with which to locate all records and patent documents associated with a single invention.

Z39.61-1988 will be published in February. Advance orders can be placed with Transaction Publishers, Rutgers University, New Brunswick, NJ 08903.—D.L. Rings is an Information Analyst at OCLC.