Using Standards to Serve Diverse Populations

"Transforming Libraries" was the theme of the 1996 LITA/LAMA (Library and Information Technology Association/Library Administration and Management Association) National Conference, held October 13-16, 1996 in Pittsburgh. The program described here was sponsored by TESLA, the Technical Standards for Library Automation Committee of LITA. This is the first of two programs from TESLA on the automation of non-Roman scripts. The second program will be presented during the ALA conference in June 1997 in San Francisco.

Gary Strong, Director of the Queens Borough (NY) Public Library, described the Queens Borough Public Library's experience in serving diverse populations with the help of new electronic standards.

According to Strong, Queens Borough, New York, is a community of immigrants and the most ethnically diverse county in the U.S. Forty-four percent of Queens residents speak a language other than English in the home, and 36% were born in another country. Queens residents are avid library patrons who are proud of their heritage, history and cultures and want to educate their children about their country of origin. Many want to keep in touch with their native lands.

In the 1960s, the Queens Library collection of books in languages other than English was insignificant. In the 1980s the library started a New Americans Program to serve the burgeoning population of Queens residents whose primary language is not English. The New Americans Program links ethnic communities with existing neighborhood and system-wide library services and creates new programs to meet their needs. Through this program, popular books and materials in immigrant languages are purchased, cataloged and distributed to branch libraries.

Long term collection development has been undertaken in various languages as the need has arisen.
Today, the Queens library has the largest Chinese and Spanish collections for general readers in the U.S. The Spanish collection contains over 88,000 items in the central library and 20 branches, and the Chinese collections include 83,000 items in central libraries and 28 branches. The library also has started building Korean collections as well as collections in Urdu, Bengali, and other Indic languages.

The Program also sponsors lectures and workshops designed to help immigrants adjust to life in the U.S. Topics include immigration law, tenants’ rights, career planning, and parenting. There are also music, dance, performances and poetry readings.

The library’s commitment to provide open electronic access to its customers in languages other than English poses significant technical challenges. Traditional cataloging techniques do not allow for native language access, so the library’s goal is to expand its use of technology to better serve all library patrons and facilitate access to library services in native languages. For the Queens library to realize its vision, it must be able to access and display information in native language script and bring it to the desktop for the customer. To that end, the library is engaging in several initiatives.

In March, the library premiered a Web site to kick off its centennial celebration. The library has had an on-line catalog since the 1980s and is moving aggressively to provide Internet access.

The library also is establishing an international resource center which, it is hoped, will become the premier resource in the U.S. for the public to learn about immigrant populations. A major goal is to extend the resource center collections and services by providing world wide access to its collections. Another goal is to make the library’s public programs, classes, and exhibitions accessible through video-conference networks. The center will provide access to the adult learning center and ESL (English as a Second Language) classrooms, multipurpose rooms, and the general and children’s reading rooms.

The library is also making its Web site available in Chinese, Japanese and other languages. The Web site offers a “CJK” page which allows users to conduct searches in English, Chinese, Japanese or Korean. A software package called Union Way provides mapping for the scripts. The Web site includes information about how to read Chinese, Japanese and Korean on the Internet. Through the Web site, users can get background information on how to read the various languages on the Internet and how to find the software necessary to make that work.

The library has been building new partnerships to fund its new collections. Through one such partnership, the Himalaya Foundation in Taiwan has donated $90,000 to develop a core collection about China. One half of the material will be in English and one half will be in Chinese and displayed in vernacular Chinese text.

According to Strong, native language access is critical to the success of the Queens Library. “We cannot level the playing field for our customers without it,” he said. “We want not only to provide access to our holdings and display the results in native languages, but to open access to services in home countries, new services in native languages and Web sites of current relevance to our customers." I believe that librarians and professionals on our staff in concert with the new communities and connections will make this a reality. We can’t wait for the vendors to provide it to us because they are not providing it fast enough.”

“Standards are absolutely critical” to the library’s efforts, Strong continued. “We will be abiding by them as we move along. We have been included in the newest round of Microsoft’s library on-line grants which will bring much-needed expertise to partner with us. Our collaboration with Nynex to build our frame relay and ISDN networks will give us the platform for connectivity. We will continue to seek beneficial partnerships to build world wide access and expand our CJK and Spanish Language collections.”

In conclusion, Strong said that the Queens library is striving to “think globally and act locally” by providing end user access directly in languages that are understood by its customers.

Doug Kranch, Director of Library and Institutional Research at Ambassador University in Big Sandy, Texas, gave a technical tutorial on how software encodes scripts and translates them into characters. His speech also addressed the technical challenges of making the computer culturally neutral.

Kranch explained that most computers use the American Standard Code for Information Interchange (ASCII) to encode the letters and other characters that people use. For engineering reasons, computers were...
originally designed and built to store and retrieve information in groups of eight units or bits (the group is called a byte). Computers like to move information in chunks of eight at a time.

ASCII originally had only seven bits available for encoding purposes, because the last bit was reserved as a "parity bit" to check for errors. Therefore, the earliest version of ASCII encodes each letter or character as a seven-bit string of ones and zeros, which provides a maximum range of 128 different characters.

Today, better ways are available to check for errors, so ASCII's eighth bit is freed for other uses, so the range of characters that ASCII can understand and translate has been doubled to a maximum of 256. [ANSI/NISO Z39.47, "Extended Latin Alphabet Coded Character Set for Bibliographic Use (ANSEL)," is an example of an 8-bit ASCII-based character set.]

One of the first problems that must be addressed in developing an encoding for text is to define what constitutes a character. In English, different codes have been assigned to designate capital and lower case letters. In addition, codes are assigned for punctuation marks, numbers, and various symbols used in written English.

However, the encoding demands of English are minuscule when compared to the demands of languages such as Arabic, Chinese, Japanese, Korean, and Vietnamese. Arabic, for example, has 28 different letters, but each letter has a different shape depending on whether it appears at the beginning, middle, or end of a word or is standing alone. In addition to Arabic itself, a host of other languages are written in Arabic script.

The nature of Arabic script raises some interesting questions. Do we have to create another character set and assign different codes for each alphabet of languages? Can all Arabic-based alphabets be combined and encoded as a single collection of Arabic letters? Another question is: Does each positional shape of a letter have to be given its own code? Or is it enough to encode just the conceptual letters? Can software be developed that instructs the computer how to combine the character sets in the proper way? (The answer to these last questions is "yes." USMARC encodes only conceptual letters for Arabic; the positional shapes are provided by the software and fonts in library systems, e.g., RLIN.)

The Chinese, Japanese, Korean and historical Vietnamese languages together use tens of thousands of logographic characters. According to one expert, these languages use more than 121,000 characters. Transliteration of logographic characters into the Roman alphabet presents problems, because different characters with the same pronunciation cannot be distinguished when transliterated. Even if transliteration were technically feasible, there is cultural resistance to it.

The dominance of English as the "lingua franca" of the computer world has become a sensitive matter. Other cultures believe that they should not have to learn the English alphabet to be able to use a computer. We would not doubt agree if we were told we had to convert our alphabet into Greek characters in order to be able to use a computer.

Kranch said that these are just a few examples of many that are driving efforts to develop the means for computers to display characters as they appear in the literature in which they were created.

ASCII clearly is insufficient to meet the encoding demands of the world's many languages. One solution is to increase the number of bits for encoding a character. A code based on 16 bits can encode 65,000 characters. One that allots 24 bits per character would be able to encode over 16 million characters. A 32-bit code would be capable of encoding over four billion distinct characters. But as more bytes are used in an encoding, more computer storage is needed for text using that encoding.

Once it has been determined what is to be encoded and how to encode it, software and hardware are required to transmit, sort, display and print the characters. Computers that are limited to an 8-bit repertoire cannot handle the demands of 16-bit (or wider) code. If you try to put raw 16 bit encoded data into an 8-bit environment, the computer will look at 8 bits at one time and try to impose some kind of meaning onto it with unpredictable results.

The Unicode Standard, Kranch explained, is the international 16-bit character set, harmonized with ISO 10646, that includes the major scripts of the world. Unicode attempts to address the challenges described. It is being used by major manufacturers and software developers, including Sun (for Java) and Microsoft (for Windows NT). [NOTE: "The Unicode Standard, Version 2.0" is available through NISO Press for $59.00. The book has 960 pages of text, a CD-ROM which includes the Unicode character properties database, and mapping tables for other character sets.]

Looking ahead, Kranch concluded that a new Information Interchange Language, such as Unicode, is needed for the World Wide Web. Libraries, he noted, will need to upgrade their software and hardware to provide access to texts in non-Roman scripts for multilingual user populations. Hardware and software will also have to be changed if libraries are to provide access to the World Wide Web and other ADA-compliant (Americans With Disabilities Act) services. Libraries are in a position to bring the world in its native script to its patrons, but those in control of library budgets must realize that the life span of computer equipment should not depend on whether it still runs. As software
When evaluating software, make sure that you include three different populations — staff, the decision makers, and the community who knows the various languages — are they on staff, will they need volunteers from the community to assist who knows the various languages — are they on staff, or will you create a supplementary fund-raising. Draw on these language experts for assistance in system evaluation, material selection, and cataloging.

In recent years, technology and its associated electronic standards have taken on an international aspect. The large computer companies have realized that there are markets outside the English-speaking world. The Web is also breaking the barriers of national boundaries.

"There are three components to consider: Technology, Standards, and People."
Approximately 100 people attended NISO's 1996 annual meeting on October 22, 1996 held in conjunction with the ASIS annual conference in Baltimore, Maryland. Mike McGill, chairperson of the NISO Board, welcomed attendees and introduced NISO's board members. NISO board member Nolan Pope then provided a lively overview of the standards development process.

The Standards Development Process
The standards development process requires that numerous constituencies reach consensus on a solution that benefits as many people as possible. This consensus-building process is, by its very nature, a lengthy one. As a result, it can take several years — and sometimes longer — to finalize a single standard.

One of NISO's top priorities is to improve and speed up the overall standards creation process. In recent years, NISO has made greater use of e-mail and electronic distribution of standards-related correspondence to shorten the development timeline.

All standards are reviewed at least every five years to determine if they can be reaffirmed or if they need to be revised to reflect technological or other changes in the environment.

NISO's Standards Development Program is overseen and coordinated by a Standards Development Committee (SDC). The SDC continually evaluates proposals for new standards in various areas and coordinates the activities of twenty other standards committees that focus on specific areas of interest.

Current NISO Standards Development Activities
Pope reported that NISO has ten new standards in development, several of which will be balloted in 1997. These include:

1. Record Format for Patron Records for Automated Library Systems. The development of this standard will be coordinated with the revision and updates to the interlibrary loan (ILL) standard, which shares many common data elements with the patron records standard.


3. Holding Statements for Bibliographic Records combining the serials (Z39.44) and non-serials (Z39.57) holdings standards.

4. A new standard for Alphabetical Arrangement and Sorting will be of tremendous value to retrieval system vendors as they develop new products and to producers of printed indexes and products. Several preservation standards are also scheduled for ballot in 1997, including one on Library Binding (a joint effort with the Library Binding Institute). In addition, NISO is developing a standard for downloading records from bibliographic and abstracting and indexing services that will be balloted in 1997.

NISO will publish the Serial Item Contribution Identifier (also known as the SICI Code) standard in late 1996. The SICI Code creates a unique identifier for articles. It enables users to search multiple citation databases and then algorithmically create a key that will go across multiple full-text databases. Since the code cannot be created until the item has been published, a parallel standard will be developed for books.

A big issue in the standards world today is that of data element standards vs. protocols. Recently, NISO has focused on data element standards because it was difficult to achieve consensus on protocols. Yet, with more and more interlinking among systems of full text, journal citations, databases and delivery services, it is apparent that protocols are needed as well. There are sure to be more discussions concerning the tradeoffs and consensus will need to be reached on these issues.

Pope concluded his presentation by saying that the standards development process depends on the work of volunteers. NISO is continually looking for people with pertinent expertise who can help develop standards. Interested volunteers should contact Nolan Pope (email: pope@macc.wisc.edu), NISO Executive Director Pat Harris (phone: 301/654-2512), or any member of the NISO Board or SDC for further information.

Report of NISO's Executive Director
NISO Executive Director Patricia Harris reported that NISO ended 1995 in a very strong financial position with assets in excess of $450,000 — an increase of 18% over 1994.

In 1997, NISO will review two critical standards. The standard for common command language (Z39.58), very controversial when it was originally proposed ten years ago, will be readdressed in light of the current state-of-the-art in networking and automation. The standard for permanence of paper (Z39.48) — a standard that is very important to the survival of our cultural heritage — will also be reviewed.

NISO Press, which was launched three years ago, has been very successful. NISO recently issued six new titles, and three new titles will be issued before the end of year.

Harris concluded by noting that three new voting members joined NISO's program in 1996. The new NISO members are: SIRS, an automation vendor serving primarily the school market; GCARI (Graphics Communications Association Research Institute), which is interested in the adoption and promulgation of standards related to electronic publishing, and Amoco Corporation.

Mark Needleman, chair of the ASIS Standards Committee and a member of the NISO Standards Development Committee, introduced the program speakers: Clifford Lynch, Howard Besser, and Linda Hill.
Needleman explained that each speaker would address an aspect of work now underway to create standards for metadata. In simple terms, Needleman explained, metadata are data about data. In the networked environment, metadata is a set of data elements that can be used to describe and represent information objects.

The Dublin Core and the Warwick Framework
Clifford Lynch, current president of ASIS and member of the NISO SDC, gave a fast-paced presentation on two metadata standards initiatives pertaining to information sharing among independent systems. These initiatives, known as the Dublin Core and the Warwick Framework, are in the prestandard stage but will have implications for future development of interoperability standards.

The Dublin Core was started in 1995 by OCLC, the National Center for Supercomputing Applications (NCSA), the Coalition for Networked Information (CNI), the UK Office of Library Networking, and several other groups. Its purpose is to develop a simple set of metadata elements that can be broadly applicable to document-like objects for network information discovery and retrieval.

Most good single-discipline metadata descriptions can be downgraded by discarding massive amounts of information and specificity into Dublin Core descriptions. For example, the bibliographic world makes distinctions in authorship, such as notions of corporate author or personal author. Dublin Core simply has a field for "author," which enables users to map from standard kinds of bibliographic description into Dublin Core.

Dublin Core's early work in 1995 focused on defining data elements. In April 1996, a meeting took place in Warwick, England to validate the Dublin Core's abstract data elements and to develop a means for moving them into something that could be shipped in a system or marked up for somebody to pick up. This meeting also sought to determine what else needed to be added to make the Dublin Core more usable.

Out of the April 1996 Warwick meeting came (1) a series of proposals for how to attach Dublin Core metadata elements to documents or other network objects, specifically how to carry them into Hypertext Markup Language (HTML) using metatags, and (2) proposed Standard Generalized Markup Language (SGML) document type descriptions (DTD) for independent data sets that represented Dublin Core elements.

In addition, the meeting participants considered whether more elements were needed in the Dublin Core. This work went substantially beyond the scope of the Dublin Core, and was named the "Warwick Framework."

The Warwick Framework posits that there are lots of different classes of metadata that have to be maintained by various communities of expertise and which don't fit well in the Dublin Core. The Warwick Framework allows for packages of independently maintained and managed sets of metadata. One such metadata package might pertain to rights management; another might pertain to ratings (for example, motion picture ratings or sex, violence and age suitability ratings applied to network objects).

The significance of the Warwick Framework concept is that it essentially lets you bound a given set of metadata for a specific purpose while recognizing that, in the real world, you'll need other sets of metadata that others can provide.

Recently, there has been a discussion about extending the Dublin Core to images. The scope of the Dublin Core was intended to be limited to "document-like objects" — a term whose meaning is not clear. Scrutiny of the Dublin Core has revealed a number of definition problems but ended with a recognition that resource description is basically resource description, whether it describes textual or image objects.

Other happenings in the metadata world include work on a system called PICS, a distributed rating system for objects, as well as serious work on terms and conditions languages — i.e., ways of defining rights and conditions on metadata. NSF recently hosted a workshop on terms and conditions definitions; this report should be available within a month.

Lynch also noted that the recent completion of the SICI standard (ANSI/NISO Z39.56-1996) is interesting in a metadata context because it involves an interchange format for selected metadata that can be drawn from various metadata schemes. It will be one of a class of algorithms that build on the increasing supply of metadata.

Finally, in the Z39.50 area (the NISO standard for computer-to-computer information retrieval applications) there is work related to structuring attribute sets (i.e., criteria for searching in Z39.50). Based on that work, there will be a move to redesign attribute sets which, it is hoped, will be aligned with various metadata schemes.

Determining Dublin Core's Application to Imaging Standards
Howard Besser (University of California, Berkeley) reported on a recent workshop sponsored by CNI and OCLC that focused on expanding the Dublin Core to the domain of image retrieval. The workshop represents a first effort in what promises to be a series of extensions and initiatives to apply the Dublin Core to other domains.

Besser explained that the Dublin Core sets forth eleven fields, or elements: Title, Subject, Author, Publisher, Other Agent, Object Type, Form, Identifier, Source, Language, Relation, and Coverage. The CNI/OCLC workshop attempted to develop consensus on a set of common elements supporting discovery of document-like elements in a networked environment. At the end of the meeting, it was determined that the Dublin Core and the Image Core could be made to be the same core with some redefinitions of Dublin Core elements and better usage guidelines for particular data elements.

The workshop also sought to clarify how images differ from text, and how different approaches might be needed to extend the Dublin Core to image data. In text-based documents, most metadata needed to identify that document (title, author, date) is intrinsic (i.e., it can be derived...
directly out of the document). By contrast, imaged information is extrinsic — it is not in the work, but must be supplied externally, using human intervention.

The workshop also determined that coding schemes are critical. If a user does not have a viewer to view a particular format of image or multimedia, the user will want to limit what he/she retrieves to things he/she can actually use. This is particularly important when retrieving large image files. A typical user does not want to wait an hour or more to retrieve a file only to learn at the end that it can't be downloaded.

Another important issue has to do with archival journal or audit trails. Users need considerable information about images in order to determine if a specific image is usable or not. For example, an art historian looking for an image of the Mona Lisa will want to ensure that the image retrieved was scanned by the Louvre and has a particular resolution and quality.

The CNI/OCLC workshop concluded that users need the following kinds of information about images to make retrieval decisions:
- how was the image created?
- what is the source material (slide or transparency)?
- who created the image and when?
- who made the present instance of the image available and when?
- content metadata (the "what, when, where" of the image). (A painting of a man hanging up with his arms outstretched on a cross might be described literally as "man on cross," without reference to the religious symbolism that it represents.)
- subject metadata. (The issue of what constitutes subject is a matter of debate. Is content the subject, or is it not?)
- form and format metadata (i.e., the genre or object type).
- context metadata (Why was the image created?)
- structure metadata (encoding, compression, file format, etc.)
- relationship metadata (How does the image relate to a set of other images or other objects in a family?)
- terms and conditions (restrictions on access and use)
- history metadata (where has the image been previously published, referenced, etc.)
- size and viewing requirements.

Although the Dublin Core needs to be modified in all these areas to be extended to images, workshop participants were surprised to learn that the Dublin Core could apply to image data. They concluded that images are document-like objects that have more in common with text in the discovery process than was originally believed.

Issues still to be addressed include: surrogates vs. objects and how things reference one another, developing further detail on collection vs. item level in terms of source, image parentage, and the whole history of image derivation, and, last, how to map the Dublin Core to other element sets such as the MARC format.

The Geospatial Metadata Standard

Linde Hill (Senior Research Specialist, Goddard Space Flight Center) gave an update on the Geospatial Metadata Standard and the work of the Federal Geographic Data Committee (FGDC). First approved in June 1994, the Geospatial Metadata Standard is one of the most mature efforts to develop standard metadata elements. It, therefore, offers a good case example for other metadata development efforts.

All federal agencies must use a geospatial content metadata standard that was adopted by the FGDC in 1994. The USGS has established a clearinghouse to hold and register federal agency data sets so that the data can be retrieved and disseminated.

Various implementations and implementors have geospatial data but want to respond to their own community. Foremost among those is the National Biological Service (NBS), which has its own information infrastructure clearinghouse activity. The NBS took the FGDC content standard and modified it for their purposes. They have now approved their version of the FGDC content metadata standard.

User reactions to the Geospatial Metadata Standard are mixed. The standard has more than 300 fields, an unwieldy hierarchy of elements, and repeatable sections. Some users find the standard too complex and would like to have a simple set of core attributes. Others say the standard is not comprehensive because it does not cover remote sensing or hard copy maps, for example. In fact, the Alexandria Digital Library, one of the first implementors of the standard, has added MARC fields to handle remote sensing, aerial photos, and different elements that are needed to point to a printed map.

The geospatial data community is experiencing a great deal of difficulty getting metadata records created for data sets. Users are asking for guidance on implementing the standard and storing it in a database. Users want more training, better workbooks, more examples, more definitions. The underlying problem is that the standard assumes that every creator and holder of a geospatial data set could catalog it. Trained specialists are needed, just as there are specialists who know MARC formats and AARC2.

Users also say that more guidance is needed on how to exchange and share records as this was not defined in the standard. In addition, users are asking for entry software, quality control software and control vocabulary to describe their sets.

The FGDC has also drafted an encoding guideline. The idea is to manage the spatial metadata so that users can access the metadata and the related spatial data. FGDC's proposal does address how to store the metadata. It does say that you have to support the dependencies and the structure specified by the standard.

Concurrently, ISO is working on an international version of the Geospatial Metadata Standard. International standards developers are taking advantage of all the work that has been done and bringing information from international sources. Meanwhile, FGDC is waiting for the ISO to issue its standard with the intention
of adopting it or revising it as necessary to make it an FGDC standard.

FGDC has funded Mitre to evaluate metadata collection tools. It also is gathering input for reviewing the standard and is developing a set of core metadata fields to support “common queries.” The notion of a presentation core is being considered. The FGDC is developing an Implementors’ CD-ROM which will provide an explanation of the standard and accompanying training materials in a single package.

The FGDC, in cooperation with a National States Geographic Information Council, is also involved in an inventory of state and regional data sets. They intend to assess the availability of data that can contribute to the framework, develop institutional arrangements needed to support the framework, and identify incentives to encourage participation. The idea is, “why should we recreate data sets if they exist someplace? Let’s identify and make use of them.” The second phase will be to conduct and maintain dynamic inventories of that data that will be tested in five states.

The Alexandria Digital Library Project, a federally funded digital library initiative, is developing a content standard for gazetteer information that has wide applicability among different fields. A gazetteer is a dictionary of place names. The key component is that the place name will have a footprint—a point, a line, a box, or an irregular perimeter of the place. There are a lot of gazetteers in existence, but there is no common standard to facilitate sharing gazetteer information and provide a way for people to contribute footprint information for places in a standard way. This activity should fill that gap.

**NISO Contact Points**

**TO BUY A NISO STANDARD**

*Call NISO Press: 301-567-9522*

**TO CHECK ON THE STATUS OF A STANDARD-IN-DEVELOPMENT**

*Call NISO headquarters: 301-654-2512*

**TO SUGGEST A NEW TOPIC FOR STANDARDIZATION**

*Contact Nolan Pope, chair of the Standards Development Committee: email: pope@macc.wisc.edu voice: 608-262-6141*

**TO JOIN NISO**

*Call NISO headquarters: 301-654-2512*

**TO VOLUNTEER TO SERVE ON A STANDARDS COMMITTEE**

*Call NISO headquarters: 301-654-2512*

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**NISO NEWS AND NOTES**

**NISO Balloting Calendar:**

**July 1996**

Z39.75-199x New standard: Alphabetical Arrangement of Letters and the Sorting of Numerals and Other Symbols

August 1996

Z39.41-199x Printed Information on Spines (Revision of Z39.41-1990)

October 1996

DIS 11620 ISO Draft International Standard: Library Performance Indicators

Ballot closes: 1/31/97

DIS 11800 ISO Draft International Standard: Requirements for binding materials and methods used in the manufacture of books

Ballot closes: 1/31/97

DIS 15489, Parts 1-6 ISO Adoption of the Records Management Standards developed by Standards Australia

Ballot closes: 3/3/97

NWI Proposed new work item: International Standard Audio-visual Number

Ballot closes: 12/4/96

NWI Proposed new work item: International Standard Work Code

Ballot closes: 12/4/96

November 1996

DIS 8459-4 ISO Draft International Standard: Bibliographic Data Element Directory: Circulation Applications

Ballot closes: 1/31/97

DIS 3166-2 ISO Draft International Standard: Country Subdivision Codes

Ballot closes: 3/7/97

December 1996

NWI Proposed new work item: Performance specifications for the Talking book

NWI Proposed new work item: BICI: Bibliographic Item Contribution Identifier

Reconsideration Ballot

Z39.4-199x: A one-month ballot to reconsider Z39.4-199x prior to submission to ANSI for approval

January 1997

Z39.26-199x Advertising of Micropublications

A revision of ANSI Z39.26-1980
# NISO Meeting Calendar

**November 1996**
- 11/13 Price Indexes Working Group, Washington, DC
- 11/15 NISO Standards Development Committee, Washington, DC

**February 1997**
- 2/3 U.S. TAG to ISO 3166 Country Codes, Washington, DC
- 2/97 SC AO- Title Pages of Conference Proceedings, Washington, DC

**March 1997**
- 3/25/97 NISO Board of Directors, Chicago

**April 1997**
- 4/29 NISO Standards Development Committee, Washington, DC

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## Recent Balloting Results

### Z39.75-199x Alphabetical Arrangement of Letters and Sorting of Numerals and Other Symbols
- **Ballot period:** July 1 - September 30, 1996
- **Results:**
  - 17 Yes
  - 11 Yes with comments
  - 4 No (DRA, NAL, NLM, RLG)
  - 1 Abstain (OhioNet)
  - 2 Comments from interested parties

The draft has been referred back to the standards committee for consideration of the comments and possible revision.

### Z39.41-199x Printed Information on Spines
- **Ballot period:** August 15 - November 15, 1996
- **Results:**
  - 32 Yes
  - 4 Yes with comments (ALA, AJL, MedLA, STC)
  - 0 No
  - 3 Abstain (Faxon, Lexis/Nexis, Minitex)
  - 0 Comments from interested parties

The standard is approved and will be published by NISO Press in 1997.

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## International Update

### U.S. Votes on Proposed International Standards:

The following recaps the U.S. votes submitted by NISO on ISO draft standards. Copies of comments are available on request from the NISO office.

**DIS 23950**
- ISO adoption of ANSI/NISO Z39.50-1995
- U.S. vote: Approve (no comments)

**DIS 3166-1 Country Codes**
- U.S. vote: Approve (no comments)

**CD 14416**
- Requirements for binding books, periodicals, serials.
- U.S. vote: Approve, with comments

**CD 11798**
- Permanence of writing, printing and copying on paper
- U.S. vote: Approve, with comments

**DIS 639-2 Language Codes**
- U.S. vote: Approve, with comments

### International Standards Under Review

Copies of proposed international standards are available from the NISO office on request.

**DIS 639-2 Language Codes**
- Developed jointly by TC46/SC 4 and TC37/SC 2 (Terminology), DIS 639-2 lists over 400 separate language codes that are harmonized with the MARC language code list.
- Balloting on the DIS closes October 1, 1996.

**DIS 3166-2 Country Subdivision Codes**
- Provides a structure for a code for the representation of names of principal administrative divisions, or similar areas for the countries included in ISO 3166 Part 1. It also contains a list of country subdivision names and a code element for each name.
- Balloting on the DIS closes March 7, 1997

**DIS 8459-4 Data Elements for Circulation Applications**
- A comprehensive data element directory that names and defines 156 data elements and data element groups to support circulation transactions. Developed by ISO TC46/SC4/WG7 chaired by Janifer Gatenby (Australia).
- Balloting on the DIS closes January 31, 1997

**DIS 11800 Requirements for Binding Materials and Methods used in the Manufacture of Books**
- Describes manufacturing methods and materials that will result in durable hardcover and soft cover binding for books manufactured in commercial quantities. Developed by TC46 SC 10.
DIS 11620  Library Performance Indicators
Describes 32 performance indicators that can be used in all types of libraries. Indicators include: user satisfaction, cost per user, cost per library visit, loans per capita, speed of ILL, cost per title cataloged.

DIS 15489, parts 1-6  Records Management
The six-part Australian standard for records management has been proposed for fast-track adoption by ISO and is being balloted by the member bodies of TC 46. The six parts are titled: General, Responsibilities, Strategies, Control, Appraisal and disposal, Storage.

NWI - International Standard Audiovisual Code
This new work item, submitted by the International Confederation of Societies of Authors and Composers headquartered in Paris, is being considered by TC46 SC 9. The ISAN is an identifier proposed for the unique identification of audiovisual works.
U.S. Balloting on the DIS closes December 4, 1996.

NWI - International Standard Work Code
This new work item, submitted by the International Confederation of Societies of Authors and Composers headquartered in Paris, is being considered by TC46 SC 9. The ISWC is an identifier proposed for musical works.
U.S. Balloting on the DIS closes December 4, 1996.

Recently Published ISO Standards
The following ISO standards have been published and are now available. In the U.S., these standards can be purchased from the American National Standards Institute, telephone: 212-642-4900.

ISO 2709: 1996 Format for Information Exchange
Almost identical to ANSI/NISO Z39.2, ISO 2709 is the basic format for the MARC record. Cost: $31.00

ISO 6862: 1996 Mathematical Coded Character Set for Bibliographic Information Interchange
 Specifies a set of 188 graphic characters with their coded representations. It consists of code tables and a legend showing each graphic character together with its name or meaning. Explanatory notes are also included. This new standard was developed by ISO TC46 SC4 WG1 chaired by Randall Barry (Library of Congress). Cost $48.00

Reconsideration Ballot
The proposed revision to the NISO standard for Indexing, Z39.4, has been distributed to the NISO members for a Reconsideration Ballot as of December 15, 1996. The draft standard was last circulated for a second ballot and public review in 1995; the ballot resulted in negative votes from the American Society of Information Science and the American Society of Indexers which have not been successfully resolved. In the Reconsideration Ballot the Voting Members of NISO will be given an opportunity to review the responses sent to the negative voters, as well as the comments those voters submitted with their ballots. Reconsideration Ballots are an important step in the approval process. Standards approval is more than meeting a ballot-threshold, standards approval is about consensus, which is based on achieving common understandings. The Reconsideration Ballot allows each member to take a second look. The Reconsideration Ballot takes place December 16, 1996 - January 17, 1997.
NISO People

Kurt Kopp (University of Missouri) has been designated the voting representative to NISO from the American Society for Information Science. Kopp is chair of the ASIS Standards Committee and replaces Mark Needleman.

To follow up on the July ISQ’s NISO People, take note that it is Cecelia Boone who has stepped in as the Minetex Voting Rep to NISO — our apologies to Cecelia for failing to include her given name in our report. The American Society of Indexers has designated Charlotte Skuster as their alternate voting representative to assist Marie Kascus in the review of NISO standards.

Standards Status: October 1, 1996

This is a capsule status report on each active NISO committee or new standard-in-development. To learn more about each activity, contact the NISO office or visit the NISO web site at: www.niso.org.

This list does not include current, approved standards not being revised.

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NEW FROM NISO PRESS:
Available now to update your standards bookshelf—

Z39.56-1996 Serial Item and Contribution Identifier (SICI)
The SICI is a variable length code which can be used to identify both
print and electronic serial publications. This new edition of the SICI
standard introduces significant changes such as the ability to
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code algorithm make it easier to use and improve the uniqueness
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This newly revised standard defines the specific eye-eligible informa-
tion that should appear on the limited space available on microfiche so
the fiche can be correctly identified and properly filed. The standard
describes where to place the data, the order of the information, and
a recommended type size and contrast to maximize readability. Many
examples show how to use the standard.

Z39.74-1996 Guides to Accompany Microform Sets
This new standard describes the basic requirements for user
guides that accompany microform sets so microform publishers
can provide the most useful and comprehensive guides to their
publications. The standard gives practical information on all of the
details that should be covered, so guides will be complete and
efficiently arranged. Special instructions are given for archival
and manuscript collections and for government documents and
newspapers.

Z39.76-1996 Data Elements for Binding Library Materials
Defines both required and optional data elements that can be used
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