Our lead article this month reports on a recent symposium on trends impacting the business-side of higher education presented by NACUBO (the National Association of College and University Business Officers) and KPMG. As you’ll see the themes are universal. One message we hear is that the new business model will be enabled by information technology, with standards at the core. This is where NISO fits in. As the author points out, over five hundred years ago Guttenberg fundamentally changed communication and learning. Today NISO’s challenge is to create those standards that will enable the modern-day Guttenberg Moment. Could it be the OpenURL?
— Pat Harris

A Guttenberg Moment

By Donna Klinger

Johannes Guttenberg invented moveable type in 1450, but it would be another 50 years before his invention was in mass use with print shops dotting Europe. He introduced a new form of mass communication—the printed word. Thomas Edison invented the incandescent lamp in 1879, but much of the public remained (literally) in the dark for 46 years. The personal computer, released in 1981 by IBM, took only 16 years to truly gain mass use. E-learning, which has been identified by many as the next “killer app,” will flood the market even more quickly and will make e-mail look like a rounding error. Higher education is ripe for a Guttenberg moment.

The rapidly developing knowledge economy and explosion in e-learning will require higher education leaders to adopt new business models to meet soaring expectations, according to speakers at the recently held 21st Century Executive Symposium, presented jointly by NACUBO and KPMG in Washington, D.C. The demise of a number of dot.coms offers an object lesson for colleges and universities. Being well managed is critical to survival in today’s economy; these failed companies were built using business models that simply were not sound. Higher education leaders need to accept this as a lesson learned in order to avoid making the same mistakes.

“We’re moving into a brave new world where business models change every six months,” said Jonathon D. Levy, vice president of e-learning programs at Harvard Business School Publishing. “The Internet is the most powerful communication device ever seen on the face of the planet.”

“There’s a change in the delivery model from seat based to competency based,” said Greg Baroni, senior vice president for KPMG Consulting’s public sector practice. “It’s a complex business model with a number of markets, new business processes, and soaring expectations. Change is faster and more unpredictable, eroding barriers of time and space.”
“Closing the gap will require innovation and adoption of new models for business, compensation, and funding, and doing so with the speed and agility of the new economy,” Baroni added.

Baroni encouraged colleges and universities to consider an information technology enabling business model with ubiquitous information access and effective leveraging of the Internet. He sees four phases of Internet development—as a placeholder and information source (www.info.com), as a place to interact (message boards, e-mail lists), as a place to conduct transactions (e-business), and as a transformative tool (business architecture, portals, e-learning).

The information technology (IT) enabling business model is built on three core concepts:

- Integration—“It’s all about standards,” Baroni said.
- Reliability—This involves striving to be as reliable as MaBell in dial-tone capability.
- Speed—Rollouts in weeks or months rather than years are critical.

Higher education institutions are at different stages in their technology journey, but Baroni sees the following robust activities in the market:

- Continuing implementation of core enterprisewide applications
- Adopting and integrating portals
- Integrating the applications (distributed learning, portals, and ERP applications)
- Implementing e-learning platforms and strategies
- Developing e-commerce and e-procurement solutions

How should colleges and universities respond to IT developments? Baroni urges leaders to start with where they are headed and map solutions to meet objectives.

“Assess/review/anticipate/visualize and choose a migration path that makes sense given your resources,” Baroni advised. “Prioritize solutions into quick win initiatives, phase in the initiatives, and execute in a manner that is consistent with your philosophy.”

E-Learning

In the e-learning arena, Jonathon Levy of Harvard Business School Publishing envisions a granular learning model that is just for you, just enough, and just in time. “This is dynamic learning, learning driven by the learner,” Levy said.

Levy is encouraging colleges and universities to reassess the business model for teaching, research, and outreach in an e-learning environment. Levy challenged higher education leaders to consider partnering with corporations to offer “fusion education.” “The corporation has the investment capital and academe has intellectual capital,” Levy explained. “Fusion education requires a new organization and culture. We need to leave our respective cultures and traditions behind.” Adoption of this model will be difficult for colleges and universities, predicted Levy, who said that higher education leaders require a gnomon, or a point of reference as in a sundial.

Portals

Colleges and universities that have implemented a portal find that technology is the easy part of the equation. Getting agreement and buy-in on the vision takes considerably more effort, as does content management, according to panelists who discussed choosing and using portals to improve administration.

Although there are many flavors of portals, the panelists generally agreed that a portal, broadly defined, is a door or a gateway to the institution that allows for a personalized interface through a single sign-on authentication.

“It’s a mechanism for enriching people’s relationships to the institution,” said Edward M. Lightfoot, director of information systems at the University of Washington. The U. of Washington is developing its own system using a skunkworks process (“Skunkworks” is a term that evolved from Admiral Grace Hopper, who accomplished much by employing her philosophy, “It’s better to seek forgiveness than to ask permission.” In other words, a skunkworks is an environment that encourages experimentation and supports creative invention.) Students began registering for the portal last year, and employees were more recently added. Additional tools are being developed for faculty.

While the University of Washington is also using the portal to interface with management information from its legacy systems, Weldon Ihrig, executive vice president of the university, sees this as a secondary goal. “Personalization is key,” Ihrig said. “You have to find ways to personalize the experience in a large university.”

Although the legacy system interface is a secondary goal at the U. of Washington, it has opened up employees’ thinking and fostered increased engagement in the university’s operations. “It’s the key that unlocks the information vault,” Ihrig said. “It opens a set of opportunities that we didn’t envision. It’s getting us away from bureaucratic processes.”

“The real work of a portal is integrating systems with the portal so they are exposed to customers,” Lightfoot said.

Dave Swartz, chief information officer at George Washington University, sees his institution’s portal as an “alpha tool to make it happen, a great catalyst that ties it
all together.” George Washington built its portal, unveiled last year, within a framework that it purchased. The university is now looking at how the portal can also be used to build community, Swartz said.

Drexel University rates the top benefit of its portal, purchased from Campus Pipeline, as its ability to improve students’ experience and to move the university from a curriculum-centered to a student-centered institution, according to John A. Bielec, vice president for information resources and technology at Drexel University. Bielec already practices the rapid rollout that Baroni advises. Drexel will not consider any product that takes more than six months to implement.

New Business Architecture
The University of California System is putting considerably more time into development of its new business architecture, designed to manage growth, control costs, improve the work environment, and implement best business practices. The initial planning and implementation of key components of the Web-based business architecture are expected to be completed in 2003—a four-year implementation that is extremely broad in scope.

All reporting and transactions will be Web based, according to Steven W. Relyea, vice chancellor, business affairs at University of California, San Diego, and chair of the New Business Architecture Planning Group. The heart of the new environment will be campus business portals that will integrate components of the new business architecture. Other strategies that UC will employ to achieve its objectives include streamlining policies and procedures, integrating campus financial systems and providing enhanced financial reporting through implementation of emerging technology standards, and leveraging new technology to contain costs and improve services.

“We’re using XML protocol to link all campus financial systems,” Relyea said. “This ‘glue’ is cheaper than ERP. We’re creating an infrastructure that stresses where we are and where we want to be. It allows people to access results and develop action plans.”

According to Relyea, implications of the new architecture include:

• new ways of using resources,
• integration across organizations,
• exposure of broken processes, and
• meeting the high expectations of new students and employees.

“Content is key,” Relyea said. “We’re changing the way we communicate to people and how we get the job done.” Perhaps when the architecture is unveiled, Relyea and others like him across the country who are designing new ways of doing the business of higher education using the Internet will be heralded as modern-day Guttenbergs.

Guttenberg died in default on a loan and without reaping the riches that he expected from his invention. In our modern-day story, only those colleges and universities who do not change how they operate to adapt to the knowledge economy could potentially share Guttenberg’s fate.

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STANDARDS NEWS

NISO’s OpenURL Standard Launched

ScienceDirect®, a division of Elsevier Science, announced in June 2002 that that it now supports the OpenURL standard. Adding OpenURL functionality to its online services significantly expands access to the world’s scientific literature via the ScienceDirect platform. It also addresses the growing market need for bi-directional interaction between ScienceDirect and other services via link resolvers.

ScienceDirect’s implementation of the OpenURL standard means that libraries can now link directly from abstracts in ScienceDirect to the content and services from many other resources. Links can easily be enabled from other library resources directly to ScienceDirect. “OpenURL is an important consideration for our customers and their direct feedback was one of the primary reasons for our change of policy. Scientists and librarians will be able to get to the appropriate copy they need a lot more easily and directly, wherever this document is hosted,” said Frank Vrancken Peeters, Managing Director of ScienceDirect. To facilitate easy customer implementation of link resolvers, ScienceDirect is partnering with Endeavor Information Systems and Ex Libris. ScienceDirect’s use of the OpenURL protocol enables direct linking through LinkFinderPlusTM and SFX to its full-text articles. “Any library with LinkFinderPlus installed, now can offer the bi-directional linking that enables end users to navigate with exceptional speed across the breadth of scientific literature to locate the documents they need,” said Jane Burke, President and CEO of Endeavor. Ex Libris’ SFX is also fully supported by
ScienceDirect’s OpenURL implementation. Jenny Walker, Director Sales and Marketing for the Information Services Division of Ex Libris, comments, “This is excellent news for our growing number of mutual customers who will benefit greatly from these developments. By supporting the OpenURL standard, Elsevier Science confirms the importance of context sensitive linking and OpenURL initiatives.” Elsevier Science supports the ongoing development of OpenURL and participates in the NISO committee that is refining the OpenURL standard.

The OpenURL is being developed by NISO Standards Committee AX chaired by Eric Van de Velde (California Institute of Technology). The committee will release the standard as a Draft Standard for Trial Use in late-2002 and will oversee a broad implementation effort. In June some twenty companies attended a briefing for early implementers of the OpenURL. There is tremendous interest in this standard as linking across the literature is recognized as one of the important value-adds enabled in the digital information environment.

Metadata Standard for Digital Still Images Finalized

In June NISO released NISO Z39.87, the Data Dictionary for Technical Metadata for Digital Still Images, for trial use. Standardizing the information will allow users to develop, exchange, and interpret digital image files. The dictionary has been designed to facilitate interoperability between systems, services, and software as well as to support the long-term management of and continuing access to digital image collections.

This new standard meets two important needs for information management. First, it defines the data elements used to control transformations of images against stated metrics for meaningful quality attributes such as detail, tone, color, and size. Second, the standard defines elements that can be used by digital repository managers, curators, or imaging specialists to assess the aesthetic and functional values of an image or collection of images.

NISO collaborated with the Association for Information and Image Management (AIIM) in the development of this standard. Committee co-chairs Robin Dale (RLG) and Oya Y. Reiger (Cornell University) led this standards committee which included Meg Bellinger (OCLC), Dr. Marianne Doerr (Leitung VD17 und Muenchner Digitalisierungszentrum), Betsy Fanning (AIIM International), Dr. Franziska Frey (Image Permanence Institute, Rochester Institute of Technology), Erich Kesse (University of Florida), Matt Kirschenbaum (University of Kentucky), Kelly Russell (University of Leeds), Linda Tadic (HBO), Colin Webb (National Library of Australia) and Herbert J. White (LDS Church-Family History Division). Janet Gertz (Columbia University) was the Standards Development Committee liaison to the committee.

This proposed national standard is being released as a Draft Standard for Trial Use for the period June 1, 2002 through December 31, 2003. Like all NISO standards documents, this document is available for downloading free from the NISO web site at http://www.niso.org/standards/dsftu.html. Additional information about NISO MIX (Metadata for Images in XML) which is being developed in partnership with the Library of Congress' Network Development and MARC Standards Office is available at http://www.loc.gov/standards/mix/.

Circulation Interchange Protocol Released

NISO has released for ballot the NISO Circulation Interchange Protocol (NCIP) and its accompanying Implementation Profile #1 developed by NISO Standards Committee AT. This new standard, NISO Z39.83, describes the transactions that support circulation activities among independent library systems such as patron and item inquiry and update transactions, hold or reserve functions, check-out, renewal, and check-in. It will also support the circulation of printed and electronic materials and will facilitate direct patron borrowing, remote patron authentication, on-line payment, and controlled access to electronic documents. The balloting period for this proposed standard is May 24 through July 8, 2002, and NISO encourages the all interested parties to submit comments.

The NCIP Committee website at http://www.niso.org/committees/committee_at.html contains in depth resources about the standard. A thorough presentation given by Pat Stevens at the American Library Association 2002 Midwinter Conference is available as are the meeting minutes, the official charge and the committee roster. The complete proposed standard is freely available in PDF version on the NISO website.

In announcing the balloting period, Pat Stevens of OCLC, Inc., the committee’s chair, said, “For many years exchanging circulation information was enabled by proprietary and disparate systems that offered limited interoperability. Today, with the rapid evolution of Web-based library services and the growing number of resource sharing arrangements among libraries, a greater level of interoperability is required. NISO Z39.83 delivers this interoperability. Z39.83 provides an open standard for the exchange of circulation information. Systems implementing this standard will be able to exchange information about library users, the items borrowed, the owners of the items, and the relationships among these three entities.”
Z39.50 Maintenance Revision Approved

In June 2002 the NISO Voting members approved a maintenance revision of ANSI/NISO Z39.50. This revision incorporates defect reports and non-substantive changes that have emerged since the standard was last approved. The changes approved in this maintenance revision will not impact any current implementations. The revised standard will be designated ANSI/NISO Z39.50-2002 and released in late-2002.

Statistics Standard Revised

NISO’s Library Statistics standard (Z39.7) has been revised and is now available as a Draft Standard for Trial Use on the NISO website: http://www.niso.org/emetrics. To reflect the Standard’s broadened scope this new edition of Z39.7 has been titled: Information Services and Use: Metrics and statistics for libraries and information providers—Data Dictionary.

Over the next twelve months implementation is encouraged; questions, comments, suggestions, and other feedback will be collected. The revised standard has been expanded to include terms for measurement of electronic resources and services; this is the first time that emetrics has been covered in a formal consensus standard. In addition the standard incorporates de facto library metrics as well as definitions and methods of measurement adopted by international standards groups and US library associations, bringing the standard into alignment with the larger community.

As a web-accessible document Z39.7 offers bells and whistles you won’t find in a hard-copy standard:

- It is fully searchable.
- It includes links to all the major emetrics projects in the U.S. and internationally
- You can comment online
- A change log is automatically maintained so you can see how the document is developing.
- You can subscribe to an accompanying listserv so you can track and participate in the buzz about the Standard.

The revision of Z39.7 was done in record time (about a year) by a cross industry team representing public, academic, national, and state libraries, consortia, and information providers. Congratulations to Denise Davis (NCLIS), the committee chair and her very able and high-energy committee members: Brian Auger (Howard County (MD) Public Library); John Carlo Bertot (Information Use Management and Policy Institute Florida State University-SIS); Dianne Carty (Massachusetts Board of Library Commissioners); Oliver Pesch (EBSCO Publishing); Sue Phillips (University of Texas at Austin); Sherrie Schmidt (Arizona State University Libraries); Ann Carlson Weeks (University of Maryland); Barratt Wilkins (State Library of Florida); Peter R. Young (National Agricultural Library).

Observers: Martha Kyriillidou (ARL Statistics and Measurement Program), Mary Jo Lynch (American Library Association).

MEMBER SPOTLIGHT

Setting Standards – Adherence: the Measure of Success

~ EBSCO Publishing Leads by Example in Standards Compliance ~

By Oliver Pesch, Chief Architect, Senior Vice President, EBSCO Publishing

Identifying, developing and maintaining standards designed to manage information is a daunting task that needs nearly constant refinement. NISO and its affiliates put forth such standards for the purpose of improving information resources and their access for end-users. The “burden” then falls on the information providers to adhere to these standards for the betterment of their products and services. EBSCO Publishing recognizes the importance of standards, as evidenced by our active involvement with NISO. We both contribute to the process of creating standards as well as develop practical applications to take advantage of them.

EBSCO Publishing is a leading provider of full text and secondary databases for academic and other library types worldwide. We are widely known as the vendor that offers the largest collections of journals, magazines and other sources in full text. In 1986 we delivered our first database on CD-ROM. Today we offer Web access to nearly 100 different databases. The quality and number of publications offered through these databases has increased at an almost overwhelming pace over the years. For example, our multi-disciplinary scholarly database, Academic Search Premier (ASP), has grown to include indexing and abstracts for over 4,300 titles and full text for more than 3,400 of these sources. The importance placed on the
quality of these sources (not just quantity) is evident in the fact that of the 3,400 titles in full text in ASP, almost 2,600 of these are peer-reviewed. The same can be said for our most inclusive full text business database, Business Source Premier (BSP), which offers the world’s largest collection of scholarly full text business journals. BSP includes indexing and abstracts for more than 3,200 titles and provides full text for over 2,700. Full text peer-reviewed coverage in BSP is much larger than the number included in competing collections.

Though an emphasis is placed on providing both archived and current full text peer-reviewed journals in our scholarly collections (with full text dating from as early as 1922 through the present), it is a combination of both this full text content and our work to produce systems and services that comply with various standards that has allowed us to significantly expand our customer base.

Since inception, EBSCOhost was built to be Z39.50 compliant. Z39.50 is the information retrieval standard which affords our customers with great flexibility in accessing our databases. For example, libraries can use EBSCOhost databases via our web interface or through a web gateway (metasearch engine) such as MetaLib from ExLibris. Users of bibliographic tools like EndNotes can directly search for and organize references.

In the mid 1990s, EBSCOhost began offering an HTML-based interface. With this change, EBSCOhost became a standard Web application, which meant that the need to install and maintain proprietary client software on each workstation was eliminated. It is our belief that standardized Web technologies have provided the greatest advantage to our customers. In addition to greatly simplifying support and maintenance of the application, EBSCOhost is easier for the end users to learn because it is similar to general Web-based search engines often used by end-users.

In recent years, EBSCO has gained acclaim for our flexible linking options, which allow users single-click access to full text and/or other web-based services related to a search result. EBSCO recognized the promise of the OpenURL open linking syntax and began providing support in early 2000 when we demonstrated links to an SFX link server. EBSCOhost now acts as both a source and a target for OpenURL-compliant servers. We are currently involved with the NISO committee charged with making OpenURL an industry standard.

As more of a library’s materials budget is spent on electronic resources, the importance of usage statistics increases. Libraries are required to defend their spending choices to their funding agencies. The comparison and/or consolidation of statistics from like institutions or like products can only be achieved through some level of standardization. EBSCO has long been known for providing high-quality usage statistics. This recognition has been achieved in large part due to our involvement with initiatives such as ARL E-metrics and the attention paid to guidelines put forth by ICOLC. We are actively involved in current initiatives such as Project COUNTER and the revision of NISO Z39.7 Library Statistics standard.

If not for the researching and setting of standards, the quest for information and the overall research process would suffer - at the expense of the end user. Operational characteristics applied by each vendor differ from service to service. But, through standards development, key components act as common threads to shape and define the products that we provide to our library customers. EBSCO’s involvement with NISO has gone a long way toward the betterment of these services. We look forward to continually providing enhanced reference resources to our end users as we strive to meet and exceed standards compliance — and further still — the expectations we have set for ourselves.

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**NISO News and Notes**

**Notes from the NISO/DLF Workshop on Electronic Resource Management**

By Adam Chandler (Cornell University)

On May 10, 2002 NISO, the National Information Standards Organization and the Digital Library Federation co-sponsored a half-day pre-standardization workshop to examine standards needed to facilitate the management of electronic resources. The workshop was held in Chicago at the Wyndham Hotel. Approximately fifty people attended the program.

Tim Jewel (University of Washington) began the program with an overview of the issues. Jewel reported that the University of Washington (U-W) library currently spends 18% of its acquisitions budget on electronic resources. That percentage is expected to increase to 25% in 2003. Licensing, Jewel, noted, is replacing purchasing. (For an overview of trends in this area, see Jewel’s DLF study, “Selection and Presentation of Commercially Available Electronic Resources: Issues and Practices” available at: http://www.clir.org/pubs/abstract/pub99abst.html.) The U-W currently approximately 300 different license agreements in paper files. Keeping track of these records is difficult. The current paper-based system does not serve the needs of round-the-clock reference, consortia, or support staff who must keep the databases online.
In response to Jewel’s remarks, Selden Deemer (Emory University Libraries) informed the audience that Emory recently posted a “Request for Proposal”, relevant to this work on e-license management; the RFP is available at: http://libtest.cc.emory.edu:30322/RFP/. The RFP begins: “This document solicits proposals from qualified vendors to provide an electronic journals data file service to be used by Emory University Libraries for management purposes. Ideally, coverage includes all full text electronic journals to which members of the Emory University community have access as a result of subscription arrangements with individual publishers or through aggregators.”

Tim asked vendor representatives in the audience if they think that standards for data sharing will be helpful, or a possible competitive disadvantage. Representatives from Ex Libris USA, Swets Blackwell, Sirsi, Ebco and Endeavor agreed that standards (or best practices) in this area are beneficial and worth pursuing.


Nathan Robertson (Johns Hopkins University) presented a Model/Entity Relationship Diagram that describes a model for managing e-license metadata that includes a base model and a mechanism for expansion with additional functional modules. This presentation is available at: http://www.library.cornell.edu/cts/elicensestudy/nisdelf/nisdelf-robertson-erpresentation.ppt. In discussing description, Nathan suggested that agreeing on metadata of this type for e-license resources is easier than access or licensing, because librarians are more familiar with descriptive metadata. This portion of the program is available at: http://www.library.cornell.edu/cts/elicensestudy/nisdelf/nisdelf-robertson-description.ppt.

Sharon Farb (UCLA) briefed the group on licensing with legal comments about UCITA (http://www.ala.org/washoff/ucita/) and the Hollings bill (http://news.com/2100-1023-886679.html). There is concern among librarians that our fair use rights are being chipped away as resources move to digital. UCLA maintains about 100 licenses, with another 100 coming through the California Digital Library. According to a 1999-2000 ARL study, libraries spend on average 13% of their budgets on electronic resources. The mantra at UCLA for the development of their system is, Farb explained, is “one database, many views.” The goal is to eliminate duplication of effort.


Ivy Anderson (Harvard University) provided a functional overview of the activities and data requirements entailed in administering and supporting access to electronic resources and described some of the challenges for standards development in this area. Her presentation included screenshots from a locally developed system at Harvard that has been in use for several years. Anderson’s presentation is available at: http://www.library.cornell.edu/cts/elicensestudy/nisdelf/nisdelf-anderson-presentation.ppt and a spreadsheet of elements is available at: http://www.library.cornell.edu/cts/elicensestudy/nisdelf/nisdelf-anderson-presentation.ppt.

As expected the Workshop sparked lots of questions, including:

- What about public libraries? What are their needs?
- What about the abstracting and indexing community?
- What about institutional software licensing?
- How does this impact the maintenance of bibliographic records in the catalog?
- What about consortial relationships?

In closing the event Tim Jewel reminded the attendees that this initiative is a work-in-progress and will require their continued involvement as best practices, guidelines, or standards begin to take shape.

**NISO at ALA**

**NISO Statistics Forum**

NISO hosted a Statistics Forum during the American Library Association Annual Conference in Atlanta to preview the revised Library Statistics Standard and brief the library and information community on the new directions the standard is taking. “We are introducing some major changes,” said Denise Davis, Chair of the Statistics Committee. “A new section on measuring electronic resources has been added to the standard. In addition, to maximize functionality and access, the standard will be available as a web-accessible data dictionary.”

The Forum reviewed important background on the development of the revised standard and reviewed the timeline for the release of the standard as a Draft Standard for Trial Use. The Standard will be released on July 26, 2002 for a one year trial use period. The revised standard will be presented as a web-accessible database on the NISO website.
NISO Annual Meeting

The 2002 NISO annual meeting was held June 16th in Atlanta, GA. Beverly Lynch, Chair of the NISO Board of Directors chaired the meeting and gave an update on NISO standards current work and a view to what’s ahead. Priscilla Caplan, chair of the Standards Development committee, reported on standards development activities and accomplishments. The program, jointly sponsored with the LITA TESLA Committee, featured four speakers describing high-profile projects using emerging standards.

Randy Menakes of Ex Libris USA reported on NCIP, NISO’s circulation interchange protocol. This standard, currently in development, defines the various transactions needed to support circulation activities among independent library systems such as patron and item inquiry and update transactions, hold or reserve functions, checkout, renew, and check-in. It is also expected to support the circulation of printed and electronic materials and will facilitate direct patron borrowing, remote patron authentication, on-line payment, and controlled access to electronic documents.

David Wasley (University of California) briefed the group on Shibboleth, the authentication scheme developed under the auspices of Internet2/MACE. Shibboleth focuses on the safe delivery of reliable authorization data and is based on agreement between information providers and network infrastructure groups on how to exchange authentication, authorization, and demographic information.

Kim Parker (Yale University) described the OpenURL standard now in development. OpenURL is a syntax to create web-transportable packages of metadata and/or identifiers about an information object. Such packages are at the core of context-sensitive or open link technology. By standardizing this syntax, the OpenURL will enable many other innovative user-specific services.

METS, the Metadata Encoding and Transmission Standard was reported on by Steve Abrams (Harvard University). The METS schema is a standard for encoding descriptive, administrative, and structural metadata regarding objects within a digital library expressed using the XML schema language of the World Wide Web Consortium. This standard is maintained in the Network Development and MARC Standards Office of the Library of Congress and is being developed as an initiative of the Digital Library Federation.

The speakers presentations are featured on the NISO website.

NISO/BISG Program on Identifiers

“Identifiers: What’s new, what’s changing!” was the theme of the program sponsored by NISO and the Book Industry Study Group on June 16. Identifiers are strings that uniquely name objects independent of their location and, in the best of all information worlds, remain valid over long periods of time. Identifiers have proven their importance in the print publishing environment and, are increasingly important in the digital environment.

Priscilla Caplan moderated an expert panel that focused on the ISBN, the DOI, and the ISTC, the three leading information identifiers that support resource management on a broad scale. This event provided a good opportunity to examine the identifiers now in use and consider how best to identify content at levels that are not handled well now.

Andrew Grabois, Senior Director Publisher Relations and Content for R. R. Bowker, discuss the ISBN standard, a unique, international identification system for books and other monographic publications in both physical and electronic (digital) formats. Mr. Grabois described the proposal to increase the numbering capacity of the ISBN system and to deal with assignment and use of ISBN in the digital information environment.

Albert Simmonds, Business Manager for OCLC Resolution Services described the ISTC, a voluntary numbering system for the identification of textual works that will be a unique, internationally recognized and permanent identifier for each textual work to which it is assigned. A textual work is defined as any work composed predominantly of a combination of words such as an article, an essay, a novel, a poem, a screenplay, or a short story.

Amy Brand, Director of Business Development for CrossRef, addressed the current and prospective uses of CrossRef. The CrossRef system creates a mechanism for members to obtain DOIs by looking up metadata for the object, and to obtain metadata by looking up DOIs.

John Kunze (University of California-San Francisco) addressed the issue of persistence in information identification.

Links to the speakers’ presentations are on the NISO website: http://www.niso.org/news/events_workshops/Anl2002-rpt.html
NISO Election: Deborah Loeding Joins the Board

Results of the NISO Board election have been tabulated. NISO is pleased to welcome Deborah Loeding to the Board of Directors. Loeding’s three-year term on the Board began July 1, 2002. Brian Green and Richard Luce were re-elected to second terms on the Board.

Deborah Loeding is Vice President of Sales and Marketing at The H.W. Wilson Company. She has been involved in the Company’s worldwide selling and marketing activities. Most recently she has been involved in the Company’s web product development underscoring the need for interoperability among vendor services. Loeding has been with the H.W. Wilson Company for eighteen years and serves on its Board of Directors. Ms. Loeding has ten years experience as a librarian, having worked in college, public, and special libraries. She is a graduate of the University of Illinois, Urbana and holds B.A., M.A., and M.L.S. degrees.

Brian Green is Director of Book Industry Communication (BIC), set up by The UK Publishers Association, The Library Association, The Booksellers Association and The British Library to develop and promote standards for electronic commerce in the book and serials sectors. He also manages EDItEUR, the international equivalent to BIC that is playing a leading role in developing the standards infrastructure for e-commerce and digital publishing. As the manager of both national and international book and serials standards bodies, Mr. Green brings a global perspective to the NISO Board.

Richard Luce is the Research Library Director at Los Alamos National Laboratory and the project leader of the Library Without Walls. In 1996 Luce received the LANL Distinguished Performance Award for contributions supporting science and technology through the transformation of the Research Library. Today, the Library Without Walls project is known internationally as one of the most pioneering and successful digital library efforts to date. Mr. Luce has over twenty years of library management and information systems experience.

Other members of the NISO Board include: Chair Beverly P. Lynch, Professor, Graduate School of Education and Information Studies, UCLA; Vice Chair/Chair Elect Jan Peterson, Vice President of Content Development, Infotrieve; Immediate Past Chair Donald J. Muccino, Executive Vice President, COO, OCLC; Treasurer Carl Grant, President, Ex Libris USA; Chair of the NISO Standards Development Committee Priscilla Caplan, Florida Center for Library Automation; and Executive Director/Secretary Patricia Harris, Executive Director, NISO. Other directors include: Pieter S. H. Bolman, Director STM Relations, Elsevier Science; Jose Marie Griffiths, Doreen E. Boyce, Chair and Professor and Director, Sara Fine Institute, University of Pittsburgh; Sally McCallum, Chief, Network Development and MARC Standards Office, Library of Congress; Steven Puglia, Preservation and Imaging Specialist, U.S. National Archives & Records Administration; and Albert Simmonds, Business Manager, Resolution Services, OCLC, Inc.

Z39.50 Guide Published

Z39.50: A Primer on the Protocol was published by NISO Press in June 2002. This 12-page booklet provides an introduction to the standard, explains its development, and reports on plans for its future. A bibliography includes print and electronic resources for further information. ANSI/NISO Z30.50 is NISO’s information retrieval standard. Widely implemented, Z39.50 is the basis for global resource sharing in the library and bibliographic community. Z39.50: A Primer on the Protocol is available for $20 from NISO Press Fulfillment (T: 301-362-6904) and as a free pdf download from the NISO website (www.niso.org).

INTERNATIONAL UPDATE

ISTC at Final Ballot

The members of TC46 Subcommittee 9 have approved CD 21047, the International Standard Text Code, for advancement to the Enquiry stage. The ballot on DIS 21047 will commence in late-2002.

The ISTC is intended to identify a “textual work.” It is not a legal concept but a practical one; a textual work includes any work composed predominantly of a combination of words. Examples of textual works are: an article; an essay; a novel; a poem; a screenplay; a short story. It does not apply to physical products and other manifestations of a work (such as: an edition of a book; an article printed in a journal; a talking book; or the electronic versions of such products).

Thirteen ISO member organizations (92% of the ISO members voting) approved the standard at the CD-level. The ballot results were:
13 Approve
1 Disapprove (Russian Federation)
1 Abstain
9 No reply

Comments were submitted by Canada, Czech Republic, Finland, Germany, Russian Federation, Sweden, UK, USA, and the International Federation of Library Associations (IFLA). ISO/TC 46/SC 9 Working Group 3 discussed the comments on CD 21047 at its April 2002 meeting in Toronto, Canada. CD 21047 is being processed for registration and distribution as ISO Draft International Standard 21047.

Albert Simmonds (OCLC Names Resolution and a member of the NISO Board of Directors) is the chair of SC9/WG 3 developing the ISTC standard. Further information about the draft ISTC standard is available on the ISO TC46/SC9 Web site at: <http://www.nlc-bnc.ca/iso/tc46sc9/21047.htm>

ISAN (ISO 15706) at Final Ballot

The final two-month ballot to approve the ISAN standard is being conducted July 11, 2002 - September 11, 2002.

The ISAN (ISO 15706) uniquely distinguishes one audiovisual work from another. Current methods of identifying audiovisual works, such as by title, can result in confusion about the specific work being referenced. For example, one title can be very similar to another. Titles also change when a work is distributed outside the country of origin and the title is translated into other languages. The ISAN is a unique number that is permanently assigned to an audiovisual work; it will identify that work across national boundaries and languages. It will be useful in a wide range of applications, particularly those which involve databases or the exchange of information about audiovisual works. Some of its possible applications are: by collecting societies to assist in the allocation of royalties; to track the use of audiovisual works; and, for anti-piracy purposes such as verifying title registrations.

Plans for an industry consortium that will establish and manage the Registration Authority for ISO 15706 are being finalized.

New Version Identifier to be Standardized

ISO TC46/SC9 intends to standardize a version identifier for audiovisual works. The proposed identifier will be a suffix to the ISAN. The development of this new standard will be tasked to SC 9 WG 1 which developed the ISAN standard (ISO 15706). This activity will be known as Project 20925. Jane Saunders of the Motion Picture Association of America is the U.S. expert assigned to participate in the working group.

ISBN Revision Underway

The International Standard Book Number (ISBN) ISO 2108 is now being revised by SC 9 WG 4. Michael Healy of Whitaker Information Services (home of the U.K. ISBN Agency) is the project leader. The U.S. experts on the working group are: Michael Cairns (R. R. Bowker), Albert Simmonds (OCLC Names Resolution), and Wendell Lotz (Ingram).

The purpose of the ISBN revision project is to:

- Increase the numbering capacity of the ISBN system. Electronic publishing and the resulting proliferation of editions and formats is consuming the existing capacity of the ISBN system at a faster rate than originally anticipated when it was designed for numbering printed books in the late 1960’s.
- Specify the metadata to be associated with ISBN assignments and the method of its association;
- Decide whether and how the ISBN is assigned to certain types of monographic publications (e.g. digital files; print-on-demand materials; discrete parts of monographic publications);
- Specify the authority to assign ISBN and the administration of the ISBN system.

When the ISBN revision project is completed, the International Standard for the revised ISBN system will be published as ISO 2108, 4th edition. The target date for implementation of changes to the ISBN system is January 2005.

Statistics Update


A new technical report developed by ISO TC 46 Subcommittee 8 on Statistics and Performance Evaluation is now out for review and ballot. The Report defines 15 performance measures, explains the objective of each measure, and how to collect it. This 40-page Report is on the NISO website as a pdf file in the Members section in the Resources area. Voting members of NISO are invited to submit comments on DTR 20983 by September 20, 2002.
3 ISO Standards to be Revised: Price indexes, Book production statistics, Performance indicators for libraries

TC46/Subcommittee 8 has proposed that 3 Subcommittee 8 standards be revised:

- ISO 9707 Book Production Statistics
- ISO 9230 Price Indexes
- ISO 11620 Performance Indicators for Libraries

If you have an interest in being a member of the working group undertaking the revision of these standards contact Pat Harris (pharris@niso.org) for details. U.S. participants in international standards development attend the meetings, keep the U.S. community informed of the directions the standard is taking, and get feedback and advice from the industry.

STANDARDS STATUS: JULY 1, 2002

This is a capsule report on each active NISO Standards Committee or standard-in-development. This list does not include current, approved standards not being revised.

To learn more about each activity go to: http://www.niso.org/standard.html

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*Draft Standard For Trial Use

CALENDAR

For additional information on any of the events listed contact nisohq@niso.org

JULY

July 18-19 SC AT, Z39.83 NCIP Committee Chicago, IL

AUGUST

August 9 Standards Development Committee Washington, DC

August 12 SC AW Revision of Z39.18 Alexandria, VA

August 16-18 SC AZ OpenURL Los Angeles, CA

SEPTEMBER

September 19-20 Board of Directors Washington, DC

OCTOBER

October 9-14 Frankfurt Book Fair

October 16 World Standards Day
This standard makes possible a powerful, flexible reading system that easily adapts to different types of documents and different user needs. Using this framework anyone can create DTBs ranging from a very simple novel to a long, complex reference work or textbook. The standard is built on existing standards and specifications, so programming skills and software tools developed for other purposes can be applied.

Z39.85-2001 The Dublin Core Metadata Element Set
Metadata is structured information that describes, explains, locates, or otherwise makes it easier to retrieve, use or manage an information resource. The Dublin Core was originally designed to be simple and concise, and to describe Web-based documents. The current standard defines fifteen metadata elements for resource description in a cross-disciplinary information environment.

Z39.78-2000 Library Binding
Binding is the first line of defense in library preservation and can be a major part of a library’s preservation budget. Developed jointly by NISO and the Library Binding Institute, this ANSI/NISO/LBI standard describes the technical specifications and materials to use for first-time hardcover binding of serials and paperbound books intended for the rigors of library use. It also covers rebinding of hardcover books and serials. Following this standard will give you volumes that are sturdy, durable and flexible.

Metadata Made Simpler by Gail Hodge
This introduction to metadata will help you understand what metadata is all about, why it is needed, and the advantages that metadata offers. Dublin Core, GILS, metadata creation and mapping are covered. A list of Web resources and glossary are included.

Z39.79-2001 Environmental Conditions for Exhibiting Library and Archival Materials
Explains how to exhibit and display library and archival items—books, manuscripts, photos, and pamphlets—to minimize the wear and tear on the item. Temperature, humidity, light, contaminants are discussed. Details on exhibition case design and construction are given and specific materials that are safe to use are noted.

Z39.50: A Primer on the Protocol
Explains what Z39.50 is all about, how it works, and why it is the key to resource sharing and information retrieval.

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