



# INFORMATION STANDARDS QUARTERLY

WINTER 2011 | VOL 23 | ISSUE 1 | ISSN 1041-0031

## SPECIAL EDITION: YEAR IN REVIEW AND STATE OF THE STANDARDS

SUSHI IMPLEMENTATION: THE CLIENT AND SERVER EXPERIENCES

> DEDICATED TO STANDARDS

EXTENDING AND PROMOTING THE USE OF OPENURL

ESTABLISHING SUGGESTED PRACTICES REGARDING SINGLE SIGN-ON



# NISC EDUCATIONAL EDUCATIONAL

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NISO Open Teleconferences

Join us each month for NISO's Open Teleconferences—an ongoing series of calls held on the second Monday of each month as a way to keep the community **informed** of NISO's activities. The calls also provide an opportunity for you to give feedback to NISO on our activities or make suggestions about new activities we should be engaging in.

The call is free and anyone is welcome to participate in the conversation. All calls are held from 3:00 - 4:00 p.m. Eastern time.

### JANUARY

- 7-11 NISO at ALA Midwinter 2011 (San Diego, CA)
- 12 January 12: The Three S's of Electronic Resource Management: Systems, Standards, and Subscriptions (NISO Webinar)

### **FEBRUARY**

9 Back from the Endangered List: Using Authority Data to Enhance the Semantic Web (NISO Webinar)

### MARCH

 9 Patrons, ILL, and Acquisitions (NISO Webinar)

## APRIL

April Two-Part Webinar: RFID Systems in Libraries (NISO Webinαr)

- **13** RFID Systems: An Introduction (Part 1)
- 20 Standards for RFID Systems (Part 2)
- 14 Mobile Technologies in Libraries (NISO One-Day Forum -Philadelphia, PA)

## MAY

May Two-Part Webinar: The Future of Integrated Library Systems (NISO Webinar)

- 11 The Future of ILS: RDA & Cataloging (Part 1)
- 18 The Future of ILS: User Interaction (Part 2)

## JUNE

- 8 ROI in Linking the Semantic Web (NISO Webinar)
- 23–28 NISO at ALA Annual (New Orleans, LA)
- 24 NISO/BISG Forum: The Changing Standards Landscape
- 26 NISO Update

JULY

No events are held this month.

## AUGUST

10 Managing Physical Storage (NISO Webinar)

## SEPTEMBER

14 Preserving Digital Content (NISO Webinar)

## OCTOBER

NISO Two-Part Webinar: Data (NISO Webinar)

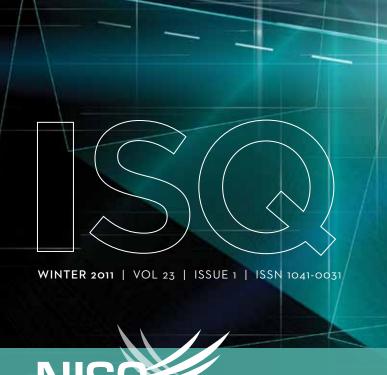
- 12 Data: Supplemental Materials (Part 1)
- 19 Data: Technical Management (Part 2)
- 24-25 The E-books Environment (NISO Two-Day Forum -Washington, DC)

## NOVEMBER

9 New Discovery Tools (NISO Webinar)

## DECEMBER

14 Assessment Metrics (NISO Webinar)



## w the information world CONNECTS

INFORMATION STANDARDS QUARTERLY (ISQ) is a publication by the National Information Standards Organization (NISO). ISQ is NISO's print and electronic magazine for communicating standards-based technology and best practices in library, publishing, and information technology, particularly where these three areas overlap. ISQ reports on the progress of active developments and also on implementations, case studies, and best practices that show potentially replicable efforts.

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# **JOINT 2011 WEBINARS**

The National Information Standards Organization (NISO) and the Dublin Core Metadata Initiative (DCMI) are continuing their educational partnership in 2011 with three joint webinars on topics related to metadata, linked data, and RDA. This partnership builds on the highly successful September 2010 NISO/DCMI webinar that drew over 350 people from more than 100 sites.

## **MARCH 16**

Metadata Harmonization: Making Standards Work Together

## **AUGUST 24**

International Bibliographic Standards, Linked Data, and the Impact on Library Cataloging

## **NOVEMBER 16**

The RDA Vocabularies: Implementation, Extension, and Mapping

Each webinar will take place from 1:00-2:30 p.m. (Eastern time) • Registrants will receive access for one year to the recorded webinar.

STATE OF THE STANDARDS AND YEAR IN REVIEW

I am very pleased to announce that beginning with this issue, *Information Standards* Quarterly will be available in open access. Individual articles and the full issue can be downloaded in PDF format from the NISO website (www.niso.org/publications/isq).

NISO is already unique among standards developing organizations in that it makes all of its standards and recommended practices available free to the public. Adding *ISQ* to that mix will enhance the visibility and reach of the work of our community. We will also be migrating the backfiles of *ISQ* to open access this year as well as converting older issues to electronic format to add to the open access archives.

This free dissemination of NISO's standards and publications is only possible through the generous support of our members. It is their member dues that fund NISO's work. We have been fortunate that even in difficult economic times, most of our members have continued their support and we've even added some. If NISO's work is valuable to your organization, consider becoming a member to ensure that this work continues. For more information, go to www.niso.org/ about/join/.

This issue of ISQ is our annual Year in Review. There is much to report as NISO had a very busy year with 16 active working groups or standing committees in addition to NISO's Architecture and Topic Committees who manage this work and develop new initiatives. KAREN WETZEL summarizes their 2010 work in our main feature article. This is followed by a synopsis of the work of the ISO Technical Committee 46 on Information and Documentation, for which NISO is the U.S. administrator. Last year saw a surge in the implementations of the SUSHI protocol that is now part of the compliance requirements for COUNTER's Code of Practice. Two of those implementers share their experiences: OMAR VILLA from Groupo Integra describes a SUSHI client implementation and BRINDA SHAH from H.W. Wilson represents the server side. ANDREW PACE from OCLC, a long-time participant in NISO's work, explains why he is dedicated to standards and why you should be too. In our Spotlight section, PHIL NORMAN and JEFF YOUNG, also from OCLC, tell how the OpenURL maintenance agency is working to extend and promote the use of the OpenURL standard for new and innovative applications. LINDA BEEBE provides a member spotlight on her organization, the American Psychological Association, and how they use standards throughout their product lines. Three members of the NISO ESPReSSO working group—Heather Ruland Staines (Springer), HARRY KAPLANIAN (Serials Solutions), and KRISTINE FERRY (University of California, Irvine) provide a report on their development of a recommended practice for improving single sign-on authentication to licensed or protected content. We wrap up this issue with our annual State of the Standards portfolio, listing all of NISO's published standards, recommended practices, and technical reports as well as the status of all the in-development work.

If this is your first time in reading *ISQ*, I hope you find it both informative and educational and will recommend it to your colleagues.

Cynchia A. Hodgson

Cynthia A. Hodgson | NISO Managing Editor



This report summarizing the previous year's standards development work appears in the first issue of the year of ISQ to keep you informed of the scope and status of NISO's programs on an annual basis.



If you would like to be involved with NISO standards development, contact the NISO office by phone (301.654.2512) or via e-mail (nisohq@niso.org).

## Physical Delivery of Library Resources Working Group

#### APPROVED: September 1, 2009

#### Discovery to Delivery Topic Committee

Chairs: Valerie Horton (Colorado Library Consortium), Diana Silveira (Novare Library Services)

This working group is tasked with developing a Recommended Practice for the delivery of physical library resources. Although e-resource numbers are substantial, the sharing and delivery of physical library items has also seen steady growth in recent years. Issues such as packaging, labeling, courier services, and more will benefit immensely from the development of best practices.

The NISO Physical Delivery of Library Resources Working Group's interest lies in identifying methods for improving performance and reducing the cost of moving materials between a library that owns an item and another library whose patron wants to use the item. The scope of their document is limited to the external delivery of items between separately administered libraries, though many recommendations could apply to delivery between branches of a single library system, as well. External delivery can include consortial delivery within a shared system, a region, a state, or a country. It can also be described as items moving through a standard interlibrary loan request. The group's recommendations focus on ensuring that the physical delivery of library materials happens in the most cost-effective and time-sensitive manner possible. All aspects of the physical move are covered: labeling, packaging, automation, and receiving the item.

### **RFID** Revision

APPROVED: February 12, 2010

Content & Collection Management Topic Committee

Chairs: Vinod Chachra (VTLS), Paul Sevcik (3M)

A project to revise the NISO Recommended Practice *RFID in U.S. Libraries* (NISO RP-6-2008) was approved in February 2010 to ensure that the RP is up-to-date and to provide United States implementers of RFID tags in libraries with sufficient guidance to conform with the international ISO three-part standard on this topic (ISO 28560) that is expected to be published in early 2011.

The group began by reviewing the original recommended practice to identify areas where revision is necessary, reviewing the ISO work to determine a US position on the adoption of the encoding parts of the ISO standard, and discussing what potential position the group might recommend regarding UHF (ultra high frequency) RFID. Work then began on active revision of the recommended practice document. The draft revision is expected to be released for comment in early spring 2011.

## SUSHI Standing Committee

#### **Business Information Topic Committee**

Chairs: Hana Levay (University of Washington), Oliver Pesch (EBSCO Information Services)

ANSI/NISO Z39.93-2007, The Standardized Usage Statistics Harvesting Initiative (SUSHI) Protocol

This standing committee provides maintenance and support for SUSHI and further acts as a maintenance group for the COUNTER Code of Practice XML schemas. In 2010, the SUSHI Standing Committee updated support resources including FAQs, Getting Started Pages, SUSHI Reports Registry of sample files, and SUSHI Schemas.

In addition, the committee created a SUSHI Server Registry of available SUSHI servers to aid libraries and usage consolidation system suppliers in accessing their reports. Finally, in November 2010 the SUSHI Standing Committee proposed a new working group to focus on improving SUSHI servers through enhanced reporting. This proposal was approved by the Business Information Topic Committee and the working group roster is currently being developed. 

## Z39.7 Data Dictionary Standing Committee

Business Information Topic Committee

Chairs: **Denise Davis** (Sacramento Public Library), **Elizabeth Aversa** (University of Alabama)

ANSI/NISO Z39.7, Information Services and Use: Metrics & statistics for libraries and information providers – Data Dictionary (www.niso.org/dictionary)

The Z39.7 Data Dictionary Standing Committee provides support for the continuously maintained Data Dictionary standard. The committee has reviewed the standard and all the public feedback received, and has finished work to integrate the content from the original appendices *Methods* of *Measurement* and *Measuring the Use of Electronic Library Services* into the main body of the standard. The NISO office is currently working to put those changes in place as per the continuous maintenance procedures for this standard.

# KBart

A Joint NISO/UKSG Initiative

**KBART** Phase II

APPROVED: March 17, 2010

Discovery to Delivery Topic Committee

Chairs: Andreas Biedenbach (Springer Science+Business Media), Sarah Pearson (University of Birmingham)

Following the publication of the Phase 1 KBART (Knowledge Bases and Related Tools) Recommended Practice (NISO RP-9-2010) in January 2010, a new proposal was approved to begin work on KBART Phase 2, to develop a second recommended practice. This phase will focus on the more advanced, complex issues that cause problems related to OpenURL Knowledge Bases, including accessibility of e-books, conference proceedings, hosting services, and open access content.

For the Phase 1 RP, a KBART Registry was established of knowledge base supply chain contacts and organizations that have officially endorsed the KBART RP. By the end of 2010, nine organizations had submitted endorsements and had their sample files validated. Several more endorsements have been requested and are pending file validation.

## IOTA: Improving OpenURLs Through Analytics

#### APPROVED: December 8, 2009

**Business Information Topic Committee** 

#### Chair: Adam Chandler (Cornell University)

The IOTA (Improving OpenURLs Through Analytics) Working Group—formerly called OpenURL Quality Metrics—is a two-year project to investigate the feasibility of creating industry-wide, transparent and scalable metrics for evaluating and comparing the quality of OpenURL implementations across content providers. At the end of two years an evaluation process will be conducted and a decision made on whether or not to continue the initiative, to be provided in a published NISO Technical Report. This qualitative research report is intended to help OpenURL providers compare their OpenURL quality to that of their peers, include recommendations for source vendors and possibly link resolver vendors, and ultimately improve OpenURLs across the industry—and particularly for end users.

The IOTA working group made the IOTA reporting system and resolver log data available at openurlquality.niso.org and

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focused their work on consistent, clear terminology; user interface and documentation; and analysis and outreach.

At this time, nearly 10 million OpenURLs have been analyzed from log files supplied by ten different organizations, including publishers, aggregators, system suppliers, and libraries. Available reports show OpenURL element frequency and patterns contained within OpenURL strings from source databases and source vendors. A variety of report filters are available. The working group is also developing a "Vendor Completeness Index" that tests the assumption that more information makes for a better OpenURL, and looking at element weighting, e.g., if a particular element is considered "more important" than others.

In addition, IOTA is currently in discussions with the NISO/UKSG KBART Phase II Working Group about potential collaboration on "linkto" syntax and behavior standardization.



## I<sup>2</sup> Working Group

#### APPROVED: January 10, 2008

#### **Business Information Topic Committee**

Chairs: Grace Agnew (Rutgers University), Oliver Pesch (EBSCO Information Services)

The I<sup>2</sup> (Institutional Identifier) Working Group was established to develop a standard that includes a globally unique institutional identifier string that is usable in the web environment, together with sufficient metadata to uniquely relate the institution to its identifier. The I<sup>2</sup> standard, has the potential to improve the reliability and efficiency of many business-related transactions including materials acquisition, e-resource management, and interlibrary loan. The working group is also tasked with identifying a strategy for the implementation of the institutional identifier.

During the first phase of their work in 2008-2009, the group surveyed the environment and developed scenarios to represent the most compelling use cases for institutional identifiers that engage all relevant stakeholders and identify their institutional identifier needs, focused on: e-resources, institutional repositories, and library resource management. A report from the first phase of this work, including a metadata schema of 16 elements that can robustly identify the institution associated with the l<sup>2</sup> identifier, was released for comments in July 2010.

In 2010, phase two of the work began with a focus on development of the standard, finalizing metadata that would be required by the I<sup>2</sup> standard, and looking at how this standard would work with other related standards. Comments on the mid-term report were supportive of the I<sup>2</sup> work, and some changes—primarily in the development of more use cases to show how the I<sup>2</sup> might be integrated and used—were made as a result of feedback. Following the report, the working group began to focus on potential collaboration opportunities between I<sup>2</sup> and ISNI—the ISO International Standard Name Identifier standard. The group is currently initiating discussions with the new ISNI Registration Authority to explore how ISNI can be extended to support the mission and scenarios of use for the I<sup>2</sup>.

PIE-J

identification e-journals

### **Educational Programs**

In 2010, with the support of the Education Committee, NISO held three in-person forums, including the third annual NISO/ BISG forum at ALA Annual, as well as thirteen webinars—one each month (except July), with May and September having special two-part webinar events. Over 300 people attended NISO's forums, and an additional 1,100 sites registered for NISO webinars. With an average of four people viewing the live webinars at each site, that's a grand total of over 4,500 people benefiting from NISO's education events!

The Dublin Core Metadata Initiative partnered with NISO to present a webinar on *Dublin* Core and *Linked Data* that drew over 350 people from more than 100 sites. This partnership will continue into 2011 with even more joint webinars.

Slide presentations from all of the events and the webinars are available on the NISO website in the 2010 events area.

NISO also held free open teleconferences every month except July to keep the community apprised of activities and provide an opportunity for feedback. Audio recordings of the calls are posted on the NISO website in the 2010 events area.

## PIE-J: Presentation and Identification of E-Journals

APPROVED: February 8, 2010

**Business Information Topic Committee** 

Chairs: **Bob Boissy** (Springer), **Cindy Hepfer** (University of Buffalo)

The PIE-J working group, approved in February 2010, is charged with development of a NISO Recommended Practice for the presentation and identification of e-journals. Unless journal websites accurately and uniformly list all the titles under which content was published, user access to desired content is considerably diminished.

This effort will provide much-needed guidance to publishers and platform providers on the presentation of e-journals—particularly in the areas of title presentation, accurate use of the ISSN, citation practices, title changes, and the supporting metadata that it would be helpful to provide on journal. The group hopes to have a draft for comment available in late spring 2011.

## Information Standards Quarterly (ISQ)



#### Four themed issues of ISQ were published in 2010:

Winter: 2009 Year in Review Spring: Digital Preservation Summer: Enhanced Journal Articles Fall: Resource Sharing

NISO also announced that beginning in 2011, *ISQ* will be issued electronically in open access. Both the full issue and individual articles will be available for free download from the NISO website. NISO's Board of Directors strongly believes that providing the information in *ISQ* via open access will enhance the visibility and reach of the work of our community. The existing archives that were previously protected will be migrated to open access and the backfile will be converted to electronic format.

Print copies will still be available to subscribers and to NISO members who opt-in to receive a print copy. Additionally, a print copy of individual issues will be available for on-demand purchase.

## ERM Data Standards and Best Practices Review Working Group

APPROVED: June 30, 2009

Business Information Topic Committee

Chairs: Ivy Anderson (California Digital Library), Tim Jewell (University of Washington)

This ERM Data Review Working Group was charged to undertake a gap analysis regarding electronic resource management (ERM)-related data, standards, and best practices. Following the analysis, the working group will make recommendations regarding the future of the ERMI data dictionary within that broader context, describe the typical challenges libraries face in using currently available ERM systems and services, and identify gaps in interoperability and best practices.

In 2010, the working group completed work in mapping extant standards and best practices to ERMI terms to identify where the existing work meets the needs of ERMI, where related work exists, and what gaps there may be. In addition, a subgroup was tasked with reviewing existing surveys of ERM use to identify what additional information—if any—may be needed from vendors, libraries using ERM systems, and other identified stakeholders concerning data requirements and ERM system implementation and management issues.

In July 2010, the working group released a report of their work through June 30, 2010. In fall 2010, the group began drafting their report; it is expected to be published in June 2011.

## JATS: Journal Article Tag Suite

APPROVED: September 2, 2009

Content & Collection Management Topic Committee

Chairs: **Jeff Beck** (National Center for Biotechnology Information, NIH), **Tommie Usdin** (Mulberry Technologies, Inc.)

Originally known as Standardized Markup for Journal Articles, the goal of the JATS Working Group is to take the currently existing National Library of Medicine (NLM) *Journal Archiving and Interchange Tag Suite* version 3.0, the three journal article schemas, and the related documentation and shepherd the tag suite through the NISO standardization process, with each of the schemas to be maintained outside of the standard.

The group began by reviewing a list of changes that had been suggested for the existing journal article tag sets. The working group first revised the version 3.0 document in order to handle outstanding requests, and made further decisions as to how the standard will be formatted and made available, as well as how to make supporting documentation available. As an outreach activity, NLM's National Center for Biotechnology Information (NCBI) hosted the Journal Article Tag Suite Conference (JATS-Con) on November 1-2, 2010 at the NIH campus in Bethesda, Maryland. Plans are now underway for a second JATS-Con September 26 & 27, 2011.

The standard is currently in its final draft stage in the working group and will be made available for trial use in Spring 2011. Once complete, the standard will be continuously maintained, which allows for regularly updating by a standing maintenance committee in order to quickly address ongoing changes and requirements.

## Supplemental Journal Article Materials

A Joint NISO/NFAIS Initiative

APPROVED: April 16, 2010

Content & Collection Management Topic Committee

Business Working Group Chairs: Linda Beebe (APA), Marie McVeigh (Thomson Reuters)

Technical Working Group Chairs: Dave Martinsen (ACS), Sasha Schwartzman (AGU)

This joint project follows the January 22, 2010 roundtable meeting on this topic and acts on the recommendation of that group. The goal is to create a Recommended Practice for publisher inclusion, handling, display, and preservation of supplemental journal article materials.

To do so, three groups were created:

- » Business Working Group to focus on the semantic and policy issues related to delivering materials that are supplemental to scholarly journal articles.
- » Technical Working Group to look at the technical issues related to supplemental materials, e.g., syntax, linking, interoperability, markup, metadata, etc.
- » Stakeholders Interest Group to serve as a way for the working groups to share information about their work with the community and as a forum for questions and feedback about that work.

The working groups first met in September 2010 and drafted charges for their work that help to define their duties and scope. The business working group began by creating definitions for "article" and "supplemental material" to help guide their work and provide context for the technical working group, and further identified three categories to help publishers, editors, and authors classify supplemental materials and to help refine the group's recommendations. In fall 2010 they began drafting recommendations, categorized into sections that deal with selecting, editing, presenting, and preserving supplemental material. The Technical Working Group began with the creation of a hierarchy of suggested metadata, and has been reviewing the metadata terms to provide attributes and definitions. In February 2011, following the review of all the metadata elements, the Technical Working Group plans to split into subgroups to focus on each of its areas of focus (as defined in its charge) in order to move more quickly in its work.

## CORE Standing Committee

**Business Information Topic Committee** 

Chairs: Ted Koppel (Auto-Graphics, Inc.), Kathy Klemperer (Harrassowitz)

NISO RP-10-2010, Cost of Resource Exchange (CORE) Protocol

The CORE specification identifies a compact yet useful structure to facilitate the transfer of cost and related financial information from an Integrated Library System (ILS) Acquisitions module (the source) to an Electronic Resource Management System (ERMS) (the requester). The population of ERMS financial data from the ILS Acquisitions system makes cost-per-click and other cost-related reports in the ERMS all the more possible.

The Cost of Resource Exchange (CORE) Protocol standard (Z39.93-201x) was released in April 2009 as a draft for trial use. The trial period was originally planned to end on March 31, 2010, but the economic environment precluded any implementations during the trial. As a result, the working group and topic committee agreed to make CORE available as a NISO Recommended Practice to allow ILS and ERM vendors, subscription agents, open-source providers, and other system developers to implement the XML framework for exchanging cost information between systems. In August 2010, CORE: Cost of Resource Exchange Protocol (NISO RP-10-2010) was formally published. At that time, the CORE Standing Committee was established to monitor the use of CORE, to continue to promote the specification and its adoption, and to conduct an annual review of its uptake in the first three years.



## SERU Standing Committee

#### **Business Information Topic Committee**

Chairs: Judy Luther (Informed Strategies), Selden Lamoureux (University of North Carolina, Chapel Hill)

NISO RP-7-2008, SERU: A Shared Electronic Resource Understanding

This standing committee provides maintenance and support for NISO RP-7-2008, *SERU: A Shared Electronic Resource Understanding.* During the first half of 2010, the standing committee was inactive, but it reconvened in June 2010 in order to address some items that have arisen in the last year, including:

- » Updating the SERU website to ensure that support is available to those interested in implementing SERU
- » Continued promotion and outreach about SERU, particularly to smaller publishers
- » Addressing questions that have arisen about the use of SERU internationally
- » Discussing and considering issues and questions that have arisen around how SERU might be applied to e-book licensing

In September 2010, the SERU FAQs were updated and made available on the SERU site in HTML and as a PDF download. These FAQs include questions ranging from when to use SERU to how to implement it, provide guidelines on perpetual access and use of materials, describe next steps, and more. In addition, at the end of 2010 a SERU logo was developed to help SERU implementers identify themselves on their websites and to help identify those products that are available for use with SERU.

The committee has drafted a proposal to minimally revise the SERU document in order to allow for its easier use with e-books. This primarily entails adjusting current language that specifically references subscriptions to allow for broader application of SERU, and includes a new paragraph around ILL. This new work was approved in early 2011.

Login

## ESPReSSO: Establishing Suggested Practices Regarding Single Sign-On

#### APPROVED: April 22, 2009

#### Discovery to Delivery Topic Committee

Chairs: Harry Kaplanian (Serials Solutions), Steven Carmody (Brown University)

This effort, a Chair's Initiative project, was formed to develop recommendations that will improve the user experience by providing consistency, improved usability, and a single sign-on (SSO) authentication experience across a set of distributed e-resource service providers. The end result of this work will be small, smart conventions for moving the user seamlessly from licensed site to licensed site within a single session.

In 2010, the working group originally focused on clarifying and structuring its charge and scope, defining four specific deliverables of the charge:

- » Standardized terminology
- » Recommendations for standardized user interface presentation for user authentication
- » Identification of approaches that allow federated search

technologies and portals to leverage existing web SSO authentication sessions of a user when contacting back-end service provider sites

» Plans for the promotion and adoption of the recommended practice to make the access improvements a reality

ESPReSSO is primarily concerned with the situation where an organization (a company, a campus, a public library, etc.) acquires a license to access specific content and where the browser user is a member of the group authorized to access that content. This working group is not addressing the situation where an individual would obtain a license for his or her own personal use. Drafting of the recommended practice document is in its final stages, with a draft for public for comment expected in early 2011.



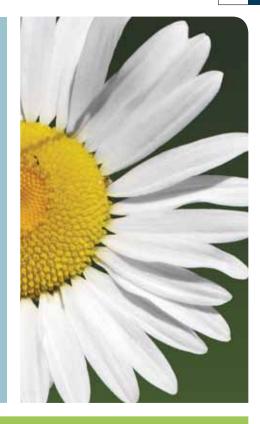
## DAISY Standard Revision Working Group

#### APPROVED: August 29, 2008

Content & Collection Management Topic Committee

Chairs: Markus Gylling (DAISY Consortium), George Kersher (DAISY Consortium)

The DAISY standard, officially ANSI/NISO Z39.86-2005, Specifications for the Digital Talking Book, is being revised in order to modularize it for easier and more flexible use, as well as to take advantage of current technologies to enable a significantly better user experience. The proposed revision divides the specification into two parts: Part A, Authoring and Interchange, and Part B, Distribution. Part A (the ZedAI Framework) was released in May 2010 for public review. Currently it is expected that Part A will be released as a draft standard for trial use in early April 2011. For Part B, the working group is evaluating the IDPF's publication of EPUB 3, which was released as a draft on February 14, 2011. If the features and function requirements needed for the proposed Part B of the DAISY standard are met by the EPUB 3 specification, the DAISY working group may recommend dropping Part B of Z39.86.



## NCIP Standing Committee

Discovery to Delivery Topic Committee

Chair: Mike Dicus (Ex Libris)

Maintenance Agency: EnvisionWare (Point of Contact: Rob Walsh)

ANSI/NISO Z39.83-1 2008, NISO Circulation Interchange Part 1: Protocol (NCIP)

ANSI/NISO Z39.83-2 2008, NISO Circulation Interchange Protocol (NCIP) Part 2: Implementation Profile 1

This standing committee provides guidance for the published standard, ANSI/NISO Z39.83-2008, *NISO Circulation Interchange Protocol* (NCIP). In early 2010, this standard was shifted from a periodically maintained standard that undergoes a review every five years to a continuously maintained standard that allows for regular updating and changes through established procedures. The committee met in person in April 2010 to discuss proposed changes and make determinations on them, as well as to discuss outreach efforts, implementation status updates, and to identify needed support documentation.

The changes that were approved in spring were completed in late 2010, and a maintenance Version 2.01 was made available in early 2011. This version is aimed primarily at correcting defects identified in the standard and ensuring that the standard and the NCIP schema agree with one another. Further, some structural changes have been made in the standard to improve the presentation of the information and make it more usable for implementers. Finally, Bibliographic Record Id has been made repeatable within Bibliographic Description, and Request Item has been changed so that it now accepts both Bibliographic Record Id and Item Id, and both elements are now repeatable.

In November 2010, an NCIP Implementer Registry for both initiators and responders was completed; the registry will help libraries to learn about NCIP implementers and the messages they have implemented.

Finally, the group has drafted a support document on Core Messages Explained, which provides additional information about the core message set that this committee recommends for an implementation of NCIP; this is expected to be made available in spring 2011. Implementation of NCIP continues to grow, with several implementations of Version 2 underway. NCIP has been shown to both reduce staff time and speed up the delivery of materials –thus the continued call for the use of NCIP for resource sharing and self-service applications. I FE I doi: 10.3789/isgv23n1.2011.02

#### CYNTHIA HODGSON

# SPECIAL EDITION:

# YEAR IN REVIEW

TC46	SC4	SC8	SC9	SC11
-	-		-	

NISO has been the U.S. liaison group for the International Organization for Standardization (ISO) Technical Committee 46 (TC46) on Information and Documentation for decades. Officially designated by

ANSI as the U.S. Technical Advisory Group (TAG) for TC46, NISO submits the U.S. votes and comments on all TC46 standards, based on the ballot results from the U.S. NISO voting members. In 2010, NISO submitted U.S. votes and comments on 15 draft standards, 5 systematic reviews, and 3 new work items. In addition the NISO TC46 TAG provided comments on 10 drafts and new work items from liaison committees. This article summarizes the work of TC46 and its four subcommittees during 2010.



#### TC46 INFORMATION AND DOCUMENTATION

#### Secretariat: Association Française de Normalisation (AFNOR)

The TC46 plenary meeting was held May 14, 2010 in Jeju Island, Republic of Korea.

#### Systematic review confirmations:

- » ISO 214:1976, Documentation Abstracts for publications and documentation
- » ISO 233-3:1999, Information and documentation Transliteration of Arabic characters into Latin characters – Part 3: Persian language – Simplified transliteration
- » ISO 843:1997, Information and documentation -Conversion of Greek characters into Latin characters
- » ISO 2145:1978, Documentation Numbering of divisions and subdivisions in written documents
- » ISO 3166-1:2006, Codes for the representation of names of countries and their subdivisions - Part 1: Country codes
- » ISO 3166-3:1999, Codes for the representation of names of countries and their subdivisions - Part 3: Code for formerly used names of countries
- » ISO 7154-1:1983, Documentation Bibliographic filing principles

- » ISO 9706:1994, Information and documentation -Paper for documents - Requirements for permanence
- » ISO 9984:1996, Information and documentation Transliteration of Georgian characters into Latin characters
- » ISO 11108:1996, Information and documentation Archival paper Requirements for permanence and durability
- » ISO 11798:1999, Information and documentation Permanence and durability of writing, printing and copying on paper - Requirements and test methods

#### New projects:

Revision of ISO 8, Documentation - Presentation of periodicals

#### Liaison activities:

A new liaison was formed with ISO TC68/SC7, Financial Services/Core banking. TC46 experts were appointed to a TC68/SC7 study group to sort out issues related to currency codes and their relationship with country codes.



#### SC4 TECHNICAL INTEROPERABILITY

#### Secretariat: Standards of New Zealand

The SC4 plenary meeting was held May 12, 2010 in Jeju Island, Republic of Korea.

#### Standards published:

» ISO 2146:2010, Information and documentation - Registry services for libraries and related organizations (3rd edition)

#### Systematic review confirmations:

- » ISO 8777:1993, Information and documentation -Commands for interactive text searching
- » ISO 10754:1996, Information and documentation Extension of the Cyrillic alphabet coded character set for non-Slavic languages for bibliographic information interchange
- » ISO 12083:1994, Information and documentation -Electronic manuscript preparation and markup
- » ISO 17933:2000, Information and documentation GEDI – Generic Electronic Document Interchange

#### In development:

- » ISO/FDIS 28560-1, Information and documentation RFID in libraries - Part 1: Data elements and general guidelines for implementation
- » ISO/FDIS 28560-2, Information and documentation RFID in libraries – Part 2: Encoding of RFID data elements based on rules from ISO/IEC 15962
- » ISO/FDIS 28560-3, Information and documentation -RFID in libraries - Part 3: Fixed length encoding

#### New projects:

» Revision of ISO 21127:2006 Information and documentation – A reference ontology for the interchange of cultural heritage information

#### Liaison activities:

- » New liaisons were formed with JTC1 (Information technology) and two of its subcommittees: SC2 (Coded character sets) and SC32 (Data management and interchange).
- » The Dublin Core Metadata Initiative was approved as a new liaison (pending ISO confirmation).
- » ISO 639 series on Codes for the representation of names of languages - The first edition of Part 4: General principles of coding of the representation of names of languages and related entities, and application guidelines was published in 2010. Updates made to 639-1 and 639-2 are available at: www.loc.gov/standards/iso639-2/php/code\_changes. php. Updates made to 639-3 are available at: www.sil.org/ iso639-3/changes.asp. An agreement has been reached in principle to migrate the series to the "Standards as databases" format using the ISO Concept database.

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#### SC8 QUALITY - STATISTICS AND PERFORMANCE EVALUATION

#### Secretariat: Detusches Institute für Normung (DIN)

SC8 held plenary meetings on March 31, 2010 in Berlin and on December 7, 2010 in Munich.

The re-nomination of Dr. Roswitha Poll (Universitäts-und Landesbibliothek Münster) as chair for a 3-year period, starting from January 1, 2011, was approved.

#### Systematic review confirmations:

» ISO 9230:2007, Information and documentation -Determination of price indexes for print and electronic media purchased by libraries

#### In development:

- » ISO/NP TR 11219, Information and documentation Qualitative conditions and basic statistics for library buildings
- » ISO/NP TR 14873, Information and documentation Statistics and quality issues for web archiving
- » ISO/AWI TR 19934, Information and documentation Statistics for the use of electronic library services

#### New projects:

- » Revision of ISO 2789, Information and documentation International library statistics
- » Revision of ISO 11620, Information and documentation Library performance indicators
- » New standard: ISO 16439, Methods and procedures for assessing the impact of libraries

## SC9 IDENTIFICATION AND DESCRIPTION

#### Secretariat: ANSI/NISO

The SC9 plenary meeting was held May 13, 2010 in Jeju Island, Republic of Korea.

#### Standards published or approved for publication:

- » ISO 690:2010, Information and documentation Guidelines for bibliographic references and citations to information resources (3rd edition, revises and merges former parts 1 and 2)
- » ISO 26324, Information and documentation Digital object identifier system (publication pending)
- » ISO 27729, Information and documentation *International* standard name identifier (ISNI) (publication pending)

#### Systematic review confirmations:

- » ISO 3901:2001, Information and documentation International Standard Recording Code (ISRC)
- » ISO 15706-2:2007, Information and documentation International Standard Audiovisual Number (ISAN) – Part 2: Version identifier

#### In development:

- » ISO/FDIS 25964-1, Information and documentation -Thesauri and interoperability with other vocabularies - Part 1: Thesauri for information retrieval
- » ISO/FDIS 27730, Information and documentation International standard collection identifier (ISCI)

#### New projects:

» New standard: ISO/NP 25964-2, Information and documentation - Thesauri and interoperability with other vocabularies - Part 2: Interoperability with other vocabularies

#### **Registration Authority News:**

- » The International DOI Foundation was approved as the ISO 26324 Registration Authority (pending ISO confirmation).
- The new ISNI Registration Authority was approved as the ISO 27729 Registration Authority (pending ISO confirmation).

#### SC11 ARCHIVES AND RECORDS MANAGEMENT

#### Secretariat: Standards Australia

SC11 plenary meetings were held May 13, 2010 in Jeju Island, Republic of Korea, and October 28, 2010 in Delft, Netherlands.

The re-nomination of David Moldrich (Foster's Group, Australia) as Chairperson for 2010-2013 was approved.

A new scope statement for SC11 was approved: Standardization of best practices in managing archives and records by providing a managerial framework, as well as standards and guidance, for the design and application of records practices and processes to ensure authoritative and reliable information and evidence of business activity in organizations. Exclusions: Technologies and technical processes within the scope of TC171.

#### Standards published:

- » ISO 16175-1:2010, Information and documentation Principles and functional requirements for records in electronic office environments – Part 1: Overview and statement of principles
- » ISO 16175-3:2010, Information and documentation Principles and functional requirements for records in electronic office environments – Part 3: Guidelines and functional requirements for records in business systems
- » ISO/TR 13028:2010, Information and documentation -Implementation guidelines for digitization of records

#### Systematic review confirmations:

- » ISO 23081-1:2006, Information and documentation -Records management processes - Metadata for records -Part 1: Principles
- » ISO 22310:2006, Information and documentation Guidelines for standards drafters for stating records management requirements in standards

#### In development:

- » ISO/DIS 13008, Information and documentation Digital records conversion and migration process
- » ISO/FDIS 16175-2, Information and documentation Principles and functional requirements for records in electronic office environments – Part 2: Guidelines and functional requirements for digital records management systems
- » ISO/DTR 17068, Information and documentation Records Management -The Trusted Third Party Repository for Electronic Records
- » ISO/DTR 23081-3, Information and documentation Managing metadata for records – Part 3: Self-assessment method
- » ISO/DIS 30300, Information and documentation Management system for records – Fundamentals and vocabulary
- » ISO/DIS 30301, Information and documentation -Management system for records - Requirements

#### A free informative document *Digital Records Preservation – Where to start guide* was published.

#### Formation of new liaisons:

- » ISO TC176/SC3, Quality management and quality assurance/ Supporting technologies
- » ISO TC207, Environmental management
- » ISO/CASCO, Committee on conformity assessment

#### | FE | doi: 10.3789/isqv23n1.2011.03

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## relevant LINKS

International Organization for Standardization www.iso.org/

#### ISO TC46 webpage

www.iso.org/iso/standards\_development/technical\_ committees/list\_of\_iso\_technical\_committees/iso\_technical\_ committee.htm?commid=48750

#### NISO International Standardization

www.niso.org/international/

TC46 will hold its 2011 plenary meeting week in Sydney, Australia from May 2-6. Standards Australia will host the meeting.

# ANSI/NISO Z39.93-2007 THE STANDARDIZED USAGE STATISTICS HARVESTING INITIATIVE (SUSHI) PROTOCO ANSI/NISO Z39.93-2007 READY

**INITIATIVE (SUSHI) PROTOCOL** 

#### SUPPORT FOR IMPLEMENTATION

Schemas and Greatly Improved Supporting Materials NOW AVAILABLE to Assist Adoption

The NISO SUSHI Standing Advisory Committee announced in November 2008 the approval and final release of SUSHI schemas (and related files) providing full support of Release 3 of the COUNTER Code of Practice for Journals and Databases. Notable in this latest release of the COUNTER Code of Practice is the requirement that content providers implement SUSHI as a means of delivering their reports (deadline: August 2009).

With the schemas now finalized, content providers can be confident about setting their development agendas for implementing SUSHI. In addition, you can now find on the SUSHI website:

- Clear graphical representations of the schemas.
- FAQs that are being updated and include sections specifically for librarians and for developers.
- And even more support documents, presentation materials, and other resources.

#### **Easy Access to COUNTER Reports**

SUSHI is a protocol that can be used by electronic resource management (ERM) and other systems to automate the transport of COUNTER formatted usage statistics. It can also be used to retrieve non-COUNTER reports that meet the specified requirements for retrieval by SUSHI.

#### Standard, Schema, WSDL...

The SUSHI standard is the high-level framework in which the SUSHI Schema, SUSHI WSDL, and COUNTER reports operate. The SUSHI WSDL describes how the client and server sides of the web services transaction will interoperate. The schema describes the XML that is used to perform the SUSHI operation. A COUNTER XML report is the actual payload of the transaction.

#### **Available Schemas**

Three supporting XML schemas are posted on the NISO website: two SUSHI schemas which are basically retrieval envelopes for the XML-formatted COUNTER report, and a COUNTER reports schema, which in turn creates an XML-formatted version of the requested report.

NISO

WWW.NISO.ORG/WORKROOMS/SUSHI





n 2007, NISO published the *Standardized Usage Statistics Harvesting Initiative (SUSHI)* Protocol (ANSI/NISO Z39.93), which defines an automated request and response model for the harvesting of electronic resource usage data utilizing a web services framework. It was developed to replace the time-consuming, user-mediated collection of usage data reports. COUNTER reports are the main type of usage data that is being harvested with SUSHI. Use of COUNTER with SUSHI requires that the reports be in XML format, which further enables the automation of importing this data into an electronic resource management (ERM) system.

In 2008, COUNTER issued Release 3 of the *Code of Practice for Journals and Databases*. New to the release was the requirement to support SUSHI in order to be considered compliant. This further added to the impetus of implementing SUSHI. Currently 34 publishers or aggregators are listed on the SUSHI Server Registry. The registry is one of many implementation aids that have been developed by the SUSHI Standing Committee and the SUSHI Developer community and posted to the SUSHI website. Two implementers of SUSHI, one for the client side and one for the server side, have shared their experiences in implementing SUSHI in their organizations in the following articles. Neither developer had any previous experience in working with web services, but with the help of the SUSHI Developer community they both created successful implementations with only a few headaches along the way.

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# SUSHI Implementation: THE CLIENT SIDE EXPERIENCE

### OMAR VILLA

work in a Mexican company named Grupo Integra, which among other activities develops web systems for libraries. One of these systems called Kenvo Stats generates statistics on the usage of electronic resources and we added a module to this system to retrieve the COUNTER report statistics with a SUSHI client. I was in charge of developing that client. I had to learn about some new technology areas and experienced some trial and error, but ultimately developed the SUSHI client we needed.

I began to follow the SUSHI project two years earlier because we were very interested in the automation that SUSHI could provide. Then it suddenly became an urgent priority to implement a SUSHI client because some of our customers that already had our system wanted to have a SUSHI client to facilitate their work. We knew that it would also be important to attract new customers.

The first challenge I faced in my path to develop the client was that I had to learn about web services since I had never used them. So I started to read about them until I understood the basics. I then met another obstacle: the system in which the SUSHI client should be implemented is developed in PHP and in the SUSHI documentation, I only found examples of clients developed in ASP.Net and Java. I started doing tests with these clients to better understand how they work, and then I searched for PHP tools to help me make the client work in PHP. This required PHP SOAP requests and process responses, so I tried the PHP SOAP extension, a SOAP toolkit for PHP called NuSOAP, and the PEAR SOAP-Package.

With a couple of tools I found, I succeeded in making requests to the test server of Project Euclid and got a correct response! I needed my SUSHI client to work with several suppliers, so I got information to connect to more SUSHI servers and I conducted the same testing using the same PHP tools. Unfortunately, I didn't get all positive results; there were some servers that I could not successfully communicate with using the PHP tools.

After my failure with PHP tools, I opted for developing the client in Java. I planned to then make this tool communicate to our statistical system created in PHP. Since my knowledge of Java was fairly basic, I knew this would be a challenge and probably take me a long time. Even so, I began to develop the client in Java, based on a toolkit made available by the University of Pennsylvania and posted on the SUSHI website. In working with this toolkit, I got more familiar with web services and that gave me a new idea about how to make the client work with PHP, but this time without using third party tools to make SOAP requests. I decided to create my own class in PHP and make the requests using Sockets. It didn't took me long time to figure out which headers I needed to correctly make a SUSHI request and thanks to the PHP functions, it was much easier for me to process the XML response.

Creating the client with PHP Sockets gave me greater flexibility to deal properly with the differences between SUSHI servers, as there are some that require authentication to send special headers. With the changes I implemented, my SUSHI client became fully interoperable.

When it came time to process the server responses, I realized that the XML responses had some variations, especially in the ReportItems node. Some servers send a ReportItems node for each ItemPerformance node; others put together multiple ItemPerformance nodes on a single ReportItems node. In some cases when the Count node value was zero, the ReportItems node was ignored, but in the same case with other servers, the node was included. Some servers shipped multiple Customer nodes in the same response; that is useful as it serves to collect statistics independently of each area of the institution to which statistics are retrieved. The variations I encountered complicated the processing of the responses and is something other implementers should note if getting data from different SUSHI servers.

Since I started tackling the SUSHI project I had many questions and sometimes I asked for help through the SUSHI Develepers list, and this enabled me to better understand several things. For example, during the development process I was uncertain how to make a request to the ProQuest server and I returned to seek help through the list, where I was



Currently our SUSHI client is successfully retrieving the COUNTER reports JR1, DB1, and DB3 from EBSCOhost, ProQuest, ACS Publications, and ISI Web of Knowledge servers. Having a module of a SUSHI Client has helped us to make our system more attractive for new customers

told the key to making the request. The problem was that I needed to send some additional headers for authentication.

Currently our SUSHI client is successfully retrieving the COUNTER reports JR1, DB1, and DB3 from EBSCOhost, ProQuest, ACS Publications, and ISI Web of Knowledge servers. Having a module of a SUSHI Client has helped us to make our system more attractive for new customers and has saved much time and effort for them to obtain their statistics. Soon we will extend our support to add more providers and additional COUNTER reports.

I want to thank all those who have made the SUSHI project possible and especially to Oliver Pesch who helped me so much. | IP | doi:10.3789/isqv23n1.2011.04

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SERVER SIDE EXPERIENCE »



# SUSHI Implementation: THE SERVER SIDE EXPERIENCE

BRINDA SHAH

n February of 2010, I was tasked with developing a SUSHI (Standardized Usage Statistics Harvesting Initiative) server implementation for the H.W. Wilson Company. We had previously been compliant with Release 2 of the COUNTER Code of *Practice* for supplying resource usage statistics and wanted to continue our compliance with Release 3, which required support of the SUSHI protocol. My experience with SUSHI, which I describe in this article, went from total confusion with endless terms and technologies that I had little or no knowledge of to a pretty neat and straightforward service that turned out to be one of the most interesting projects I have worked on.

When COUNTER 3 was published and I was assigned the SUSHI project, I have to admit that I skipped through all the SUSHI headings not knowing what it was all about. Instead, I concentrated more on reviewing the code change requirements to update the COUNTER 2 reports that we serviced at the time. Seeing that there were not a lot of needed changes to the reports, I thought all that was needed was to lay out the processes and put them together. Soon I came to learn about SUSHI and that it was an added requirement to the COUNTER Release 3 standard, aimed at making it easier to share and consolidate usage statistics through an automated process. The NISO website had a section dedicated to SUSHI that contained everything that I needed. It was well organized, detailed, and provided information on how to get started, FAQs, links to tools, and sample data to use. It was the just the guidance I needed to understand all the pieces involved.

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Once all the necessary components were identified and a clear picture was shaping up in my head, I realized that unlike the basic client/server setup we had in place for delivering existing COUNTER reports, SUSHI involved implementing a web service framework utilizing a SOAP messaging protocol to retrieve XML-formatted COUNTER reports. After researching and reviewing the technologies available to develop web services and based on my own personal experience as a programmer, I decided to adopt the J2EE framework because of its power of cross-platform development and its easy implementation with open source components like Apache Tomcat (web application server), Axis (SOAP engine), and Eclipse (development tool).

Developing a SUSHI web service required **eight tasks** for the different workflow components I needed to put in place.

#### They were:

- Capture usage statistics from our system for the individual customers in compliance with the COUNTER requirements.
- 2 Generate COUNTER reports in XML format using the COUNTER schema.
- 3 Identify and implement a security model.
- 4 Develop a SUSHI web service where requests can be submitted.
- 5 **Develop** a process to analyze the request and authorize it (when allowed) to access the relevant data.
- 6 **Develop** a reporting service to fetch the requested COUNTER report(s).
- Assemble a SUSHI response with the fetched COUNTER report(s) inserted.
- 8 Send the SUSHI response back to the requesting client

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"I want to mention the excitement and self-satisfaction I felt when I made my first successful request and response for a COUNTER DB1 report. I had days of struggle prior to that with tearing things apart and putting the pieces back together. There were times when the request seemed to reach my service and get swallowed up somewhere in the transition even though everything was what and where I thought it should be."

Since the H.W. Wilson Company was already serving COUNTER 2 reports, and very little work was needed to make the minor changes in the usage statistics we were pulling for those reports, no additional work was needed to capture the usage data. The basic tutorial available on the Eclipse site was handy in setting up the environment needed to develop the web service using Apache Tomcat and Axis. Setting up a SUSHI server required an understanding of how these components work and connect with each other, which was a challenging experience for me and probably for anyone else who was not very familiar with web services. After some trial and error and help from the dedicated SUSHI development group, all the components finally seemed to be in place (see Figure 1).

I want to mention the excitement and self-satisfaction I felt when I made my first successful request and response for a COUNTER DB1 report. I had days of struggle prior to that with tearing things apart and putting the pieces back together. There were times when the request seemed to reach my service and get swallowed up somewhere in the transition even though everything was what and where I thought it should be. After an extensive debugging process, establishing a stable environment, and testing using some of the different available SUSHI testing clients like SOAPUI and the web client from University of Pennsylvania, the SUSHI service was ready to deploy.

I would like to conclude this article with stating my support for what SUSHI offers and the many avenues it opens for data sharing and the consolidation of data to serve the customer base in the library, publishing, and information technology communities. Implementing a SUSHI server has satisfied our customers with their requirements of getting consortia-level database and journal reports. It is the perfect bridge or gateway for customers to consolidate their usage data from the different vendors and services they use. The experience I gained in learning about web services and SOAP will definitely be useful for future projects. I would also like to extend special thanks to the help and support provided by the SUSHI Development Group as well as all the support and documentation provided by the NISO website. Further thanks to my manager as well as the VP of Information Systems at the H.W. Wilson Company for their continuous support for the project and for the encouragement to volunteer and share my experience through this article. I IP I doi: 10.3789/isqv23n1.2011.05

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SUSHI website www.niso.org/workrooms/sushi

SUSHI Developers E-mail List www.niso.org/lists/sushidevelopers/

SUSHI Standard (ANSI/NISO Z39.93) www.niso.org/standards/z39-93-2007/



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A judgement formed about something; a personal view, attitude, or appraisal



Andrew K. Pace

#### ANDREW K. PACE

## **Dedicated to Standards**

I have no qualms about expressing my love-hate relationship with standards. For the decade that I have been involved with NISO, I have both articulated the collective sigh heard throughout the community whenever a standards initiative is announced and decried lack of adherence to the most basic of standards that make libraries more efficient and all of our jobs easier. But truth be told, my patience for standards nay-sayers is waning more quickly than it once did.

"Libraries will set standards, and vendors will set reality," a leader in the field once told me. I laughed because it was funny, but also because it is part of the sad reality with which libraries are faced. A lack of standards is required to support any cottage industry and there are a lot of service providers who see standards as a threat to proprietary software. The days for this sort of thinking should be numbered.

Standards require dedication and discipline. Standards require care and attention. Standards require governance and administration. Standards are a way to create cooperation and unification in an industry that demands diversification. In the early part of my career, I remember wishing that there were only one web browser. How much easier it would have been for all of us at the dawn of the web if Netscape or Internet Explorer had been the only game in town. But in our hearts we knew that such a dream would result in less innovation, not more. For the Web, standards reigned.

Standards require dedication and discipline. Standards require care and attention. Standards require governance and administration. Standards are a way to create cooperation and unification in an industry that demands diversification.

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Somewhere in ISO standards, a group of experts decided how big around a shower curtain ring should be. Can you imagine if you had to buy custom shower rings to fit your shower curtain rod? Some of us are making curtain rings, some of us make the rods, some of us make the curtains. What we have in common is the dedication to creating efficiencies for libraries and their suppliers, while supporting diversification of systems.

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I try as much as I can to hold my head high in the realm of standards. Vigilance is also required. My own product group at OCLC was recently faced with a decision regarding the latest version of NCIP. Should we create web services based on version 1.1 or version 2.0 of the standard? No one was really implementing version 2.0 yet. Being a lonely standard implementer can be risky. We boldly chose version 2.0. (Okay, it wasn't that bold, but it was a small gamble.) Several months later, other groups were struggling with the same decision. Rather than simply urge the group working on item availability for discovery systems to join us, we contributed our software code to the group.

So don't tell me that standards are too hard. If you think so, then you think sharing is too hard or cooperation is too hard. One of my first mentors in the standards world was Pat Stevens (most of you NISO groupies will remember her). I always loved the analogy she used to support standards development. Somewhere in ISO standards, she would explain, a group of experts decided how big around a shower curtain ring should be. Can you imagine if you had to buy custom shower rings to fit your shower curtain rod? Some of us are making curtain rings, some of us make the rods, some of us make the curtains. What we have in common is the dedication to creating efficiencies for libraries and their suppliers, while supporting diversification of systems. Why do we do it? Because the ethos of cooperation and sharing that is the cornerstone of our profession demands it. I OP I doi: 10.3789/isqv23n1.2011.06

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# NISO IS WORKING

## to make electronic content more accessible.

Researchers and library patrons are increasingly expecting instant access to the information they need. While the availability of electronic content grows daily and standards such as OpenURL have drastically improved discovery, impediments still remain. At NISO, a number of current projects are underway to improve discovery, access, and delivery of content:

### **KBART: Phase II**



**PHASE I** of the joint NISO/UKSG KBART (Knowledge Bases and Related Tools) project resulted in practical recommendations for exchanging metadata between content providers and knowledge base developers. These recommendations are intuitive, easy for content providers to implement, and easy for knowledge base developers to process.

**PHASE II** builds on that work to focus on the more advanced, complex issues that cause problems in this area. Learn how to implement the recommendations from Phase I and about the next stage of this work at www.niso.org/workrooms/kbart.

## IOTA: Improving OpenURLs Through Analytics



IOTA is a two-year project to investigate the feasibility of creating industry-wide, transparent, and scalable metrics for evaluating and comparing the quality of OpenURL implementations across content providers. At this time, nearly 9 million OpenURLs have been analyzed from log files. The reports created from this analysis allow publishers to see where they can make improvements to their OpenURL strings so that the maximum number of OpenURL requests can be resolved—bringing more readers to their products. Visit openurlquality.niso.org to view the metrics and learn how to add your data to the project. Find out more at www.niso.org/workrooms/openurlquality.

### PIE-J

ne presentation & identification

fe-iournals

Presentation and Identification of E-Journals (PIE-J)

Unless journal websites accurately and uniformly list all the titles under which content was published, user access to desired journal articles is considerably diminished. When journals change titles or publishers, their content must remain easily accessible. This new working group will be developing recommendations that will provide much-needed guidance on the presentation of e-journals to publishers and platform providers—particularly in the areas of title presentation, accurate use of the ISSN, and citation practices—that will solve some long-standing concerns of serials librarians. See www.niso.org/workrooms/ ejournalpresentation/ for more information.

## ESPReSSO: Establishing Suggested Practices Regarding Single Sign-On

This NISO Chair's Initiative was launched to develop recommendations that will improve the user experience when using diverse electronic services by providing transparent single sign-on authentication across distributed service providers. The end result of this work will be small, smart conventions for moving the user within a session from one licensed site to another, so that publisher content can be accessed easily and seamlessly. Find out more at www.niso.org/workrooms/sso.

DO YOU HAVE A SUGGESTION FOR NEW WORK? WE'D LIKE TO HEAR FROM YOU!

www.niso.org/standards/suggest OR visit www.niso.org/workrooms for more information.



#### STANDARD SPOTLIGHT

Many standards are hidden "under the covers" of products or built into infrastructure or services, so that the end user is unaware the standard even exists. Some standards have been around so long they are taken for granted and don't get much press. Through this series, we hope to bring to your attention some of those lesser known or forgotten standards and spotlight their value to our community.

#### PHIL NORMAN AND JEFF YOUNG

## The OpenURL Maintenance Agency: Extending and Promoting the Use of OpenURL

In 2005, NISO published The OpenURL Framework for Context-Sensitive Services (ANSI/NISO Z39.88), which defines "an architecture for creating a networked service environment, in which packages of information are transported. These packages have a description of a referenced resource at their core, and they are transported with the intent of obtaining context-sensitive services pertaining to the referenced resource."

An earlier ad hoc specification of OpenURL (referred to as version 0.1) was focused on the "appropriate copy" problem for scholarly journal literature. The goal of the ANSI/NISO standard (referred to as version 1.0) was to develop a framework that would allow OpenURL to be extended to a wider base of applications, including ones that no one had yet envisioned. To ensure this extensibility, an OpenURL Registry was established where new Community Profiles, Metadata Formats, Namespaces, Character Encodings, Transports, ContextObject formats, Serializations, and Constraint Languages could be registered and given unique identifiers so they may be referenced unambiguously. Today, the OpenURL standard is one of the most heavily used NISO standards and OpenURL linking has become commonplace in electronic information delivery. New applications, such as OpenURL ContextObject in SPAN (COinS) and others described in this article, continue to be developed using the OpenURL framework.

#### The OpenURL Maintenance Agency

The standard also specified the responsibilities of a Maintenance Agency to provide ongoing maintenance of the OpenURL Registry to guarantee stability and to promote and manage the extension of the OpenURL standard. In 2006, NISO appointed OCLC to be the OpenURL Maintenance Agency. Working with the OpenURL Advisory Committee, the Maintenance Agency created a submittal process for the evaluation and approval of new OpenURL framework registry entries.

#### The submittal process has three gates:

- The submittal is reviewed by the Maintenance Agency for technical correctness.
- 2 The submittal is reviewed by the standing Z39.88 review panel of OpenURL experts and community members selected by the creator of the submittal.
- Finally, the submittal goes to a public review and trial period. The trial period allows software developers to try out the new registry entries and submit feedback before the entries are approved.

#### The Request Transfer Message (RTM) -OpenURL Extended

The first implementation of the Request Transfer Message (RTM) OpenURL Community Profile was introduced in OCLC's WorldCat Navigator service in 2009. Navigator is a consortial borrowing system that allows patrons who are members of a library in a consortium to discover and borrow items from other libraries in the consortium. The RTM is used in Navigator to transmit information about the wanted resource and the details of the request, such as "dated needed by" from the discovery system to the Navigator Request Engine. The addition of the RTM Community Profile to the OpenURL registry is a prime example of how the Z39.88 (OpenURL) standard can be extended to support new communities. The Maintenance Agency approved the RTM Community Profile and associated metadata formats in 2009. The RTM submittal was authored by Janifer Gatenby of OCLC. The work evolved from an initiative of the ISO ILL Implementers' Group (IPIG) who developed an XML message called the Request Submission Message designed for passing a request to an ISO 10161 ILL-compliant system from a discovery site. The RTM extends this concept to allow for the transmittal of highly descriptive request messages from discovery systems and item descriptions to any networked delivery system that supplies physical or digital resources.

The RTM OpenURL Community Profile specifies serializing its payload in XML through HTTP POST messages. This allows for transporting multiple context objects in a single OpenURL message and multiple metadata formats for entities such as the wanted resource (referent) in a single context object. The Maintenance Agency worked with the authors to recommend the use of the existing San Antonio Profile 2 (SAP2)—one of two profiles specified in the standard—referent metadata formats (book, journal, dissertation, etc.). During the public review, changes were made to the RTM as Navigator was developed.

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#### info URI Registry Closed To New Entries

Identifiers like LCCNs, ISBN, and OCLC numbers are important clues for identifying various types of entities in OpenURL.

Converting these legacy identifiers to URIs is a way to ensure their uniqueness and improve their interoperability on the Web. When OpenURL 1.0 was created, however, the general assumption at the time was that HTTP URIs could only be used to identify web documents and services. To work around this, the "info" URI scheme [RFC 4452] and registry was developed for identifying resources that aren't "located" on the Web.

Since then, web standards such as the W3C's semantic web have been improved to justify the use of HTTP URIs for "real-world objects like people and cars, and even abstract ideas and nonexisting things like a mythical unicorn." As a result, the info URI committee closed their registry to further registrations in 2010. This change does not affect existing uses of info URIs, but it may have consequences for new OpenURL registration submittals. Submitters who are tempted to coin a new info namespace can apply for a PURL domain instead. For example, http://purl.org/ example/12345 could be used in place of info:example/12345. Ideally, the PURL would resolve to a metadata document that contained the information cached in the OpenURL descriptors.

#### **The Canonical Citation**

In 2008, Eric Rebillard, Professor of Classics and History at Cornell and General Editor of *L'Année philologique* (an abstracting and indexing service specializing in scholarship about classical literature), was awarded a planning grant from The Andrew W. Mellon Foundation to explore with Cornell University Library the possibilities and challenges of using OpenURL to provide linking between citations of classical literature and available online resources in the classics.

An initial submittal included a proposal for adding an info URI work identifier, the recommended top level URI scheme for identifiers in the OpenURL framework. In 2010, the info URI registry was closed to new registrations in favor of HTTP URIs (see sidebar). After working with the Maintenance Agency, the submittal author—David Ruddy, Director, Scholarly Communications Services, at the Cornell University Library—resubmitted the Canonical Citation KEV metadata format using an HTTP URI as the work identifier within the metadata format. The Canonical Citation submittal is currently being reviewed by the Z39.88 Review Panel.

#### Promoting the OpenURL

In 2010, the Z39.88 Review Panel began using NISO's collaborative workspace on the NISO website with folders for submittals and documents, the ability to post comments, and a listserv for members of the review panel. Previously the listservs of the Advisory Committee and Review Panel were managed by OCLC. The NISO Discovery to Delivery Topic Committee, which includes the OpenURL standard in its oversight portfolio, and the Z39.88 Advisory Committee have access to the Review Panel's documents.

The Maintenance Agency encourages community involvement to promote the use of the OpenURL. The OpenURL listserv continues to be the public discussion forum for the community at large.

Additional activities underway by the Maintenance Agency are implementation guidelines, experimental registry entries, and best practices. For example, there is a need for RTM implementation guidelines. These documents will be published as they are agreed upon, informally, by members of the community. Your input is always welcome and can be sent to: openurlagency@oclc.org. | SP | doi: 10.3789/isqv23nl.20nl.07

PHIL NORMAN <norman@oclc.org> is Director of End User and Delivery Services Development, OCLC, and a member of the NISO Z39.88 Standard Committee. JEFF YOUNG < jyoung@oclc.org> is Software Architect, Office of Research, OCLC.



The Maintenance Agency encourages community involvement to promote the use of the OpenURL. The OpenURL listserv continues to be the public discussion forum for the community at large.

Canonical Citation Linking and OpenURL cwkb.org/

info URI registry info-uri.info/

info URI Scheme (RFC 4452) www.ietf.org/rfc/rfc4452.txt

NISO Discovery to Delivery Topic Committee www.niso.org/topics/d2d/

OCLC WorldCat Navigator www.oclc.org/us/en/

navigator/ OpenURL Context in

Spans (COinS) ocoins.info/

**OpenURL Listserv (public)** listserv.oclc.org/scripts/ wa.exe?Ao=OPENURL

**OpenURL Registry** openurl.info/registry

OpenURL Registry Submittal Process openurl.info/registry/docs/ pdf/SubmittalProcess.pdf OpenURL standard (ANSI/NISO Z39.88) www.niso.org/standards/z39-88-2004/

#### Request Transfer Message (RTM)

www.openurl.info/registry/ docs/doc/Request\_Transfer\_ Message\_v5\_3.doc

URIs for Real-World Objects. In: Cool URIs for the Semantic Web. W3C Interest Group Note, December 3, 2008. www.w3.org/TR/ cooluris/#semweb

Z39.88 Review Panel public documents www.niso.org/apps/group\_ public/workgroup.php?wg\_ abbrev=z3988review

RELEVANT

## [SPOTLIGHT]

#### MEMBER SPOTLIGHT



Linda Beebe Senior Director, PsycINFO, at the American Psychological Association (APA)

"In the publications and database arena, standards are essential to our making our content accessible to all who need it and to providing the best possible service to members and other individuals as well as to our institutional customers."

# American Psychological Association: Using Standards to Improve the Dissemination of Knowledge

Linda Beebe, Senior Director, PsycINFO, at the American Psychological Association (APA) and the organization's primary voting representative to NISO responded to the ISQ editor's questions about her organization and their use of standards for this issue's member spotlight.

## Q For our readers who aren't familiar with the American Psychological Association, can you briefly explain who you are and what you do?

The American Psychological Association (APA) is a scientific and professional organization that represents psychology in the United States. With 150,000 members, APA is the largest association of psychologists worldwide. Our mission is to advance the creation, communication, and application of psychological knowledge to benefit society and improve people's lives.

One of APA's largest programs is the Office of Publications and Databases. The office includes three content producers: APA Books, APA Journals, and the PsycINFO department; the latter currently produces five large databases in additional to other smaller subsets. The premier database PsycINFO® provides comprehensive abstracting and indexing of the psychological literature from the 1800s to the present. In January, we announced the indexing of the 3 millionth record in PsycINFO. We also have full-text databases of APA published journals (PsycARTICLES®) and books (PsycBOOKS®). PsycEXTRA is a bibliographic database of gray literature that includes full text for about 70% of the records. PsycCRITIQUES combines a weekly release of reviews of books and films with a database of previously published reviews back to 1956.

## Q How has your organization incorporated standards and best practices into its products and services?

Standards are an important aspect of APA programming. For example, the APA Practice Directorate, under the oversight of the APA Board of Professional Affairs, has developed numerous practice guidelines, such as those for keeping patient records, for practice with various population groups, for evaluating disorders, and

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"Perhaps the most easily explained standards are those relating to our own delivery platform, APA PsycNET. As I noted, the products must work—and increasingly they must work with many different connectors." for incorporating multicultural training and research into practice. Although APA has not, to date, developed clinical treatment guidelines, the organization does offer criteria for evaluating guidelines developed by others. As another example, the APA Commission on Accreditation accredits specific doctoral programs, predoctoral internships, and postdoctoral residencies in professional psychology.

In the publications and database arena, standards are essential to our making our content accessible to all who need it and to providing the best possible service to members and other individuals as well as to our institutional customers.

Reporting standards for scientific research studies facilitate understanding across disciplines and make meta-analyses more efficient. The *Publication Manual of the American Psychological Association* is the standard guideline for the structure of scientific articles in psychology, as well as for the citation style used in psychology and associated behavioral science fields. The current 6th edition contains the Journal Article Reporting Standards (JARS), which were formulated based on other standards.

## Q What benefits has your organization gained from utilizing standards and incorporating them into its products?

APA produces large databases and an increasing number of other electronic products. Having produced our first electronic database in 1967, we have known for a long time that electronic products must not only contain high quality content and look good, they must work. The user must find the functionality they expect, and it must perform in the way they anticipate. Interoperability is key. APA has practiced the philosophy that we want our databases to be where our customers want to find them. That means our databases are distributed on the platforms of several third-party vendors, and our field structures and other technical specifications must be adaptable to these different platforms. We make recommendations to our vendor partners, but we cannot control how a given database will work on their platform. Therefore, following standards or generally accepted practices for structuring data is an important part of our design for any database. And we're proud of how well these databases work in different environments.

#### Q What standards are most important to your organization and why?

Perhaps the most easily explained standards are those relating to our own delivery platform, APA PsycNET. As I noted, the products must work—and increasingly they must work with many different connectors. For example, libraries use link resolvers, A-Z Lists, federated search engines, and discovery services. Consequently, our platform must work with the OpenURL standard, and APA was an early adopter.

Libraries need the ability to measure how these large (and sometimes costly) databases are being used in their institutions, and they need to have confidence that they are receiving the same measures from publisher to publisher and product to product. Meeting the COUNTER usage statistics requirements is, therefore, very important to us. When libraries were ready to receive their usage reports automated in XML format, SUSHI (Standardized Usage Statistics Harvesting Initiative) became a key standard for us as well.

"For some journals, nearly 90% of their research articles are accompanied by supplemental materials. Yet no standards or recommended practices exist for how this material should be selected, edited, linked to (and from), cited, or preserved. Journal constituents do not always know how to find supplemental material because there are no standards for indicating that there is more to the journal article than is contained within the journal framework."

To make the best use of link resolvers and resource management tools, libraries need to know precisely what is contained in each of the databases or content packages they license from APA. Following the NISO/UKSG KBART (Knowledge Base And Related Tools) guidelines enables us to provide that information in a standardized format to customers, our vendor-partners, and link-resolver providers.

We began our transition to the NLM Journal Publishing DTD when it was emerging as a common practice, and we still have a little ways to go. It should come to fruition by the end of the year. Now the NLM journal article schemas and documentation are going through the process of becoming a NISO standard.

## Q What standards development has your organization been actively involved in?

Three APA staff are currently involved with the Joint NISO-NFAIS Supplemental Journal Article Materials Working Group. Over the past several years, making additional material related to a journal article available as a supplemental file has become a common practice. For some journals, nearly 90% of their research articles are accompanied by supplemental materials. Yet no standards or recommended practices exist for how this material should be selected, edited, linked to (and from), cited, or preserved. Journal constituents, including librarians and end users, do not always know how to find supplemental material because there are no standards for indicating that there is more to the journal article than is contained within the journal framework. The abstracting and indexing services that generally would provide pointers to such content find it just as difficult to recognize there are materials supplemental to any given article.

Most scholarly journals have formulated explicit criteria for acceptance of manuscripts; however, no clear standards exist for the value supplemental material might be expected to add to the presentation of articles in any given journal. In a world of information and work overload, the task of peer reviewing voluminous supplemental files seems increasingly onerous. Faced with the increasing burden, the Journal of Neuroscience last year decided to cease reviewing or accepting supplemental materials. Other journals, such as Cell, have set limitations on what will be accepted. The NISO-NFAIS Working Group is crafting a set of Recommended Practices, considering definitions, policies, and best ways of presenting and preserving this content. There are two subgroups: the Business Working Group, which I am co-chairing with Marie McVeigh from Thomson Reuters, and the Technical Working Group, co-chaired by Dave Martinsen from the American Chemical Society and Sasha Schwartzman from the American Geophysical Union. The former is tackling the semantic side of the problem and the latter is working on the syntactical issues. We work in tandem so that we will end up with what we hope will be a cohesive, very useful document. We began last August and hope to finish before the end of 2011.

Our Full-Text Serials Manager, Kathleen Sheedy, is serving on the NISO PIE-J (Presentation and Identification of E-Journals) Working Group. With 77 journals currently in our PsycARTICLES database, we are particularly concerned about recommended practices for title presentations, accurate ISSNs, and citation practices. And we have concerns beyond our own journals because our PsycINFO bibliographic database covers about 2,500 journals.

I participated in the group that developed SERU, the Shared E-Resources Understanding, as a practice that

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"We find that journal publishers are not always consistent in presenting the titles of their journals. The title may be presented one way on the front cover, another on running heads, sometimes yet another on instructions to authors. Journal titles sometimes change when the ownership changes, but sometimes a title changes from issue to issue." can substitute for the use of a license in small contracts between publishers and libraries. I am pleased to see that many publishers and institutions are now using SERU, as I believe doing so will speed up access to content and eliminate burdens on scarce human resources.

APA maintains an active Permissions and Rights program. Here, too, we have been eager to adopt practices that will protect authors, yet increase access to content in a smooth fashion. For example, we are signatories to the *STM Permissions Guidelines* as revised by the International Association of Scientific, Technical, and Medical Publishers in 2009. In accord with these guidelines, we allow authors to use a certain level of content without obtaining written permission, so long as they provide appropriate credit.

Also early in 2009, the NFAIS Board of Directors approved *Best Practices for Publishing Journal Articles*, which was produced by a working group I chaired in 2008. The working group came together to address the problems abstracting and indexing services were seeing with early publication articles, those generally not associated with a volume or an issue and often released immediately after acceptance. As they evolved, the practices addressed a variety of issues related to publishing any journal articles electronically.

## Q What benefits does your organization gain from active involvement in standards development?

Aside from the fact that we have an opportunity to influence the final outcome of a standard or best practice (far beyond simply voting or commenting on them), it is a tremendous learning opportunity. In every group I or one of our staff has participated in, the breadth of publishing knowledge and experience in the group has elevated our own overall knowledge of publishing. And working groups reach out to other parties as well to ensure that they incorporate the recommendations from across the community. The camaraderie that comes from taking on thorny issues and working through recommendations for solving the problems is another benefit.

## Q What problem areas have you encountered that would benefit from further standards or best practices development?

Shifting journal titles are a constant problem. With the journals in PsycINFO, we find that journal publishers are not always consistent in presenting the titles of their journals. The title may be presented one way on the front cover, another on running heads, sometimes yet another on instructions to authors. Journal titles sometimes change when the ownership changes, but sometimes a title changes from issue to issue. Finding accurate journal titles in abstracting and indexing records is very important to our users, so we spend staff time trying to pin down the correct one. We also need historically accurate and complete journal titles for automated parsing of cited references. Many systems, such as CrossRef, PubMed, and our software supplier, use the ISSN database as their reference; unfortunately, that database does not track title changes at the level of precision that we are looking for. For example, modifying, adding, or removing a subtitle is considered a minor title change that does not require the assignment of a new ISSN. To publishers and end users, however, subtitles *are* significant. Having a standard for tracking all journal

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title changes would be of enormous benefit to APA—and, we would think, to other publishers as well. I am confident that the NISO PIE-J working group will resolve at least some of the problems, but there may be more to do.

We currently deliver electronic books primarily in our PsycBOOKS database and annual collections, and we have some titles in Kindle and Mobipocket formats. As we look more and more at mobile delivery and other forms of delivering books, standards will become more important in those areas.

## Q What else would you like NISO *ISQ* readers to know about your organization?

APA is a non-profit, discipline-based publisher. We are somewhat unusual in that we publish both primary and secondary literature. We are a large enough publisher to have a sophisticated blend of products (which means we encounter a wide range of issues in producing them), but we are small enough that we are in touch across departments and aware of what is happening in all of them. Although the revenues from our products support other APA scientific and educational programs, our mission is very much knowledge dissemination. So, our publishing decisions are made on the basis of good science.

Another area where standards are important to APA is psychological tests and measures. The APA Science Directorate's Testing and Assessment department works full time on these issues, and APA is one of three national organizations that developed the *Standards for Educational and Psychological Testing*. In 2011 PsycINFO will release a 6<sup>th</sup> database, PsycTESTS. This new database will include bibliographic records for both unpublished and commercially available tests, as well as full text for the unpublished tests we own rights for or can obtain permission to deliver.

American Psychological Association

"APA is a non-profit, discipline-based publisher. We are somewhat unusual in that we publish both primary and secondary literature. We are a large enough publisher to have a sophisticated blend of products, but we are small enough that we are in touch across departments and aware of what is happening in all of them."

American Psychological Association www.apa.org

Best Practices for Publishing Journal Articles (NFAIS) www.nfais.org/files/file/Best\_Practices\_Final\_Public.pdf

COUNTER Code of Practice www.projectcounter.org/code\_practice.html

KBART website www.niso.org/workrooms/kbart

NFAIS Best Practices for Publishing Journal Articles www.nfais.org/files/file/Best\_Practices\_Final\_Public.pdf

NLM Journal Archiving and Interchange Tag Suite dtd.nlm.nih.gov/

**OpenURL standard (ANSI/NISO Z39.88)** www.niso.org/standards/z39-88-2004/

PIE-J working group www.niso.org/workrooms/piej Publication Manual of the American Psychological Association www.apastyle.org/manual/index.aspx

SERU website www.niso.org/workrooms/seru

Standardized Markup for Journal Articles working group www.niso.org/workrooms/journalmarkup

Standards for Educational and Psychological Testing www.apa.org/science/programs/testing/standards.aspx

STM Permissions Guidelines www.stm-assoc.org/2010\_10\_22\_STM\_Permissions\_ Guidelines.pdf

Supplemental Journal Article Materials working group www.niso.org/workrooms/supplemental

SUSHI website www.niso.org/workrooms/sushi







#### HEATHER RULAND STAINES, HARRY KAPLANIAN, KRISTINE FERRY

# Establishing Suggested Practices Regarding Single Sign-On (ESPReSSO) Working Group

In 2009, NISO launched a new Chair's Initiative—a project of the chair of NISO's Board of Directors, focusing on a specific issue that would benefit from study and the development of a recommended practice or standard. The issue proposed by then Chair Oliver Pesch was perfecting a seamless, item-level linking through single sign-on authentication technologies in a networked information environment.

Accessing information in a networked environment has been a reality for most user communities for over a decade. With the advent of hosted, aggregated fulltext databases and the proliferation of e-iournals and e-books. research often takes a user to a number of different online hosts and platforms as part of a single transaction. When those information resources are commercial products, each platform requires the user to be authenticated and, as a result, that user may have a different identity on each platform. The problems caused by having to manage multiple identities have led to the development of so-called "Single Sign-On" (SSO) authentication technologies, including proprietary technologies such as Athens and formal open standards such as SAML (Security Assertion Markup Language). With these technologies, the user can access all compliant content platforms using the same identity. More importantly, these technologies have been designed so the

user will encounter only one login event while traversing a multitude of in-sourced and out-sourced service providers. Simplifying the user experience has become more important as organizations have outsourced more and more of their supporting business functions.

Making the SSO environment work better (smarter) will certainly help increase the success of users getting to the content to which they are entitled; however, it is probably fair to say that the majority of content hosts are not compliant with one or more of the current SSO authentication technologies. Library users are required to operate in an environment that includes a mix of authentication technologies with IP authentication being the most common. An effective solution needs to address this hybrid environment and, at the very least, take into consideration the needs of IP authentication and proxy servers, and how they interoperate with SSO authentication technologies.

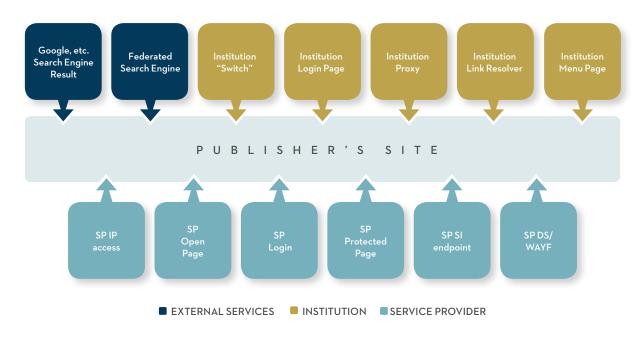
#### The Challenges

This Working Group was primarily concerned with the situation where an organization (a company, a campus, a public library, etc.) acquires a license to access specific content and where the user is a member of the group authorized to access that content. This Working Group did not address the situation where an individual would obtain a license for personal use.

## Authentication has become complex for several reasons:

The Internet world has evolved to provide users with many more options. Users can follow different paths, traversing multiple websites, in order to enter a publisher's site. The result is that users arrive at many different points on the publisher site. It has been difficult to create a consistent, coherent user experience amidst all this variety.

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#### Figure 1: Multiple mechanisms a user may encounter to access a publisher's site

- Users may experience multiple authentication mechanisms, depending on how they enter the publisher's site. Sometimes, the user's physical location could affect the browser flows and authentication mechanisms they see. Within the publisher site, the user might-innocentlynavigate from a public page to a protected page, and thus unwittingly trigger authentication.
- Publishers generally have to present and support multiple authentication mechanisms. They have to construct and present a usable authentication GUI interface that somehow combines multiple methods into an interface that can be used successfully by people with a low familiarity with technical concepts.
- Campuses have deployed various approaches to authentication over the years; some of them require users to be able to use, handle, and manipulate proxy-prefixed URLs that are incomprehensible to the average person.

Figure 1 illustrates the many ways that a user can potentially enter a publisher's site.

Each of the following communities is affected in negative ways when confronted with today's authentication environment:

#### Library Community

Patron demand for remote access to content via computer or mobile device has become the norm rather than the exception. Libraries must provide patrons with an efficient, seamless way to access content and to search across content from multiple sources without continually being challenged for credentials, or having to change the steps they follow as a function of their physical location.

#### Publisher Community

As licenses increase in their complexity, customers may participate in numerous agreements, allowing varying degrees of access at an institutional, consortial, departmental, or other level. Keeping track of which affiliated users have access to what content becomes more challenging all the time. At the same time, customer demands for privacy concerning their users' personal details and online search behavior have grown at an

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Recommendations to publishers include the preferred location for login links and input boxes, standard approaches for guiding users to a desired authentication method, where local branding information could be inserted on a webpage, as well as approaches for handling automatic logins. even quicker pace. Spurred to action by support for single sign-on amongst European federations, publishers and content providers have labored to meet the varying requirements, including certification, interface adaptation, required attributes, and more. Streamlining the process has become essential.

#### End User Community

Researchers and students have access to content through a variety of channels; however, if access is from outside of the university's IP range, a multitude of usernames and passwords might be required. When seeking access to a secured resource, a researcher is unable to identify easily what authentication will be needed and whether the publisher/aggregator supports SSO. The researcher is often unable to navigate to the institutional logon page, identify the appropriate federation and institution, and, once authenticated, return to the secured resource without multiple disruptions for separate authentications. The various stages of this process are not generally identified and branded sufficiently so that the request for credentials is not misinterpreted as phishing or malware.

Variability in the user experience creates a high level of confusion, and results in users giving up rather than being able to complete their tasks. The high level of variability also creates a maintenance nightmare for publishers and user education challenges for libraries.

#### **ESPReSSO** Recommendations

The ESPReSSO Recommended Practice document will recommend practical solutions for improving the success of SSO authentication technologies in providing a seamless experience for the user. It further aims to promote the adoption of one or more of these solutions to make the access improvements a reality. This initiative does not invent any new technology or protocols for the recommendations. Rather, it has developed a set of best practice recommendations surrounding the use of existing technologies. These recommendations are intended to define a path forward from the current access control mechanisms—which are increasingly problematic—to the next-generation approaches that promise to be more secure, easier to manage, more flexible, and provide more functionality. Consequently, the recommendations describe a "hybrid" environment containing older authentication approaches that are being deprecated and newer approaches that are in the early stages of implementation.

The recommendations draw on several years of experience and a variety of approaches. The majority of the recommendations refer to the newer approaches to access control and are intended to provide a consistent user experience across multiple service provider sites. Many of the recommendations were called out in the JISC-sponsored focus group study for Project FLAME, published in August 2009. The ESPReSSO report builds on that study and presents a set of recommendations to both identity provider (IdP) and service provider (SP) sites. The recommendations specifically address typical browser flows, the sequence of pages presented to users, page layout, what information to include in each of those pages, consistent GUI elements, and additional features and functionality to provide users with added value.

#### The recommendations are intended to:

1 Provide users with a consistent experience across a multitude of sites and situations.

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- 2 Reduce user confusion and aborted sessions during the discovery/login process by using a consistent set of visual elements as the user is transferred between sites in order to reinforce the "this is normal and expected" aspect of the experience.
- Be straightforward and easy to implement for both IDP and SP sites.

Recommendations to publishers include the preferred location for login links and input boxes, standard approaches for guiding users to a desired authentication method, where local branding information could be inserted on a webpage, as well as approaches for handling automatic logins. Recommendations for campuses include strategic use of institutional and publisher branding and an institutional menu page that transfers the user to the "automatic login" endpoint at the SP.

#### Next steps

The Recommended Practice is expected to be issued prior to this article's publication. A likely next step following the publication of the ESPReSSO recommendations is the creation of a standing committee to be tasked with outreach support and updating the guidelines and related resources as needed. Related resources include maintenance of a website containing ESPReSSO FAQs for publishers, libraries, and aggregators. Other possibilities include a step-by-step implementation guide, webinars during which SPs who are new to SSO may troubleshoot with SP technical experts, and assistance with federation contracts and correspondence. The recommendations and the additional resources will all be available from the ESPReSSO website. An e-mail interest group list is available for anyone who would like to follow the group's work, comment on or ask questions about the recommended practice, or share SSO experiences with others on the list. I NR I doi: 10.3789/isqv23n1.2011.09

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ESPReSSO Website www.niso.org/workrooms/sso

ESPReSSO Interest Group list www.niso.org/lists/ssoinfo

ESPReSSO Charge www.niso.org/workrooms/sso/charge

Paschoud, John. Project FLAME [Federated Local Access Management Environment] Final Report. JISC: August 2009.

www.jisc.ac.uk/publications/reports/2009/ flamefinalreport.aspx



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By making this information publicly available, libraries will be able to see which vendors currently support NCIP, which version(s) of the standard are supported, and which messages in the standard are implemented.

# NCIP Implementer Registry Now Available

The NCIP Standing Committee, through the efforts of members Susan Campbell (College Center of Library Automation) and Mary Jackson (Auto-Graphics), has created the NCIP Implementer Registry that collects information about vendors' implementations of the *NISO Circulation Interchange Protocol* (*NCIP*) (ANSI/NISO Z39.83).

The registry allows vendors to enter information about their implementations of both Version 1 of the standard, now deprecated but still widely used, and Version 2 of the standard, the current version of the standard adopted in 2008. (There is no independent verification of the information provided by the vendors.)

In 2010 the NCIP Standing Committee defined two sets of core messages for accomplishing essential tasks: Resource Sharing and Self-Service. All required messages for these tasks must be enabled for a vendor to claim support for a core message set. Depending on the role the vendor is playing in the transaction, the vendor may either support the messages as an initiator or responder.

By making this information publicly available, libraries will be able to see which vendors currently support NCIP, which version(s) of the standard are supported, and which messages in the standard are implemented. Information on the site can be accessed by several different views including: vendor full profile, by version and initiator or responder type, and by specific messages in the core set for each version/type. Each of these views can be further filtered by vendor name and by service type (Resource Sharing or Self-Service). The information can also be downloaded in Excel spreadsheet form.

For more information and a link to the registry, visit the NCIP website at: www.niso.org/workrooms/ncip

# Actionable ISBN Application Introduced in Germany

At the Frankfurt Book Fair 2010, the German ISBN Agency MVB launched an application (in co-operation with the DOI Registration Agency *m*EDRA) of the ISBN-A (actionable ISBN). The ISBN-A is a service powered by the Digital Object Identifier (DOI®), in which an existing ISBN is incorporated in the DOI syntax, thus allowing resolution to an electronic resource.

For every ISBN-A in the MVB application, a "title card" is created: a website that provides at a minimum the key bibliographic data about the book, the cover image, the publisher logo, and links to additional information. The additional information varies depending on what the publisher has available, but some possible inclusions are:

- » Table of contents
- » Excerpts
- » Book reviews
- » Press releases
- » Author biography, photos, interviews, blog, and fansite
- » Website of the publisher
- » Sources for purchase including downloads if the book is available electronically

The guiding principles for referencing other identifier schemes within the DOI System are to maximize utility to potential users, and to maximize efficiency among established registries. The ISBN-A is the first practical example of the DOI System collaborating with an existing well-established identifier system; the value of each system is enhanced through this integration.

Example of MVB application title card: dx.doi. org/10.978.37657/15389

Factsheet: The ISBN System in Relation to the DOI® System: www.doi.org/factsheets/ ISBN-A.html

# Entertainment Identifier Registry Utilizes DOI System

A new international coalition, led by MovieLabs, CableLabs,<sup>®</sup> Comcast and Rovi Corporation, has launched the Entertainment Identifier Registry (EIDR), a non-profit global independent registry that provides a uniform approach to cataloging movies, television shows, and other commercial audio/video assets with unique identifiers. Backed by a broad group of industry players, including Deluxe, Universal Pictures, Neustar, Paramount Pictures, Sonic Solutions, Sony Pictures Entertainment, Walt Disney Pictures, Warner Bros. Entertainment, Motion Picture Association of America, Inc., Civolution, Vobile, INA (L'institut national de l'audiovisuel) and others, the registry is set up as an industry resource to help streamline digital commerce and simplify consumer transactions.

EIDR has been developed to address a critical need for a universal ID system for all types of audio/video assets in the entertainment industry, making it easier for businesses to search, track rights, and report revenue based on an assets' unique ID. An EIDR can be assigned to the entire range of audiovisual resources including titles, edits, DVDs, encodings, clips, and mash-ups.

The registry is being developed as an open, standards-based effort built on the established Digital Object Identifier (DOI®) system, created by the International DOI Foundation and based on the widely used Handle System persistent identifier technology. In addition, it uses the open-source registry software from the Corporation for National Research Initiatives (CNRI). This flexible, open foundation allows it to interoperate seamlessly with other existing identifier systems, such as AD-ID, the industry standard for advertising asset identification, which is expected to help streamline interactions between content owners, distributors, system operators, advertisers, and metrics providers.

The consortium is actively looking to expand with new partners and participants internationally and welcomes the open participation of stakeholders in international movie and TV digital distribution.

(📎 More information about EIDR can be found at: www.eidr.org.

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# MARC Code Lists Available as Linked Data

The Library of Congress (LC) web service Authorities and Vocabularies provides access to LC authority and vocabulary data as Linked Data. The vocabulary data are published in RDF using the SKOS/ RDF Vocabulary and are available for bulk download.

Newly added to the site are: MARC List for Countries, MARC List for Geographic Areas, and MARC List for Languages. The MARC Countries entries include references to their equivalent ISO 3166 codes. The MARC Languages have been cross referenced with ISO standards 639-1, 639-2, and 639-5, where appropriate.

The Authorities and Vocabularies web service was first made available in May 2009 and offered the Library of Congress Subject Headings (LCSH), the Library's initial entry into the Linked

Data movement. In part by assigning each vocabulary and each data value within it a unique resource identifier (URI), the service provides a means for machines to semantically access, use, and harvest authority and vocabulary data that adheres to W3C recommendations. such as Simple Knowledge Organization System (SKOS). In this way, the Authorities and Vocabularies web service also makes government data publicly and freely available in the spirit of the Open Government directive. Although the primary goal of the service is to enable machine access to Library of Congress data, a web interface serves human users who are searching and browsing the vocabularies.

Explore the Authorities and Vocabularies at: id.loc.gov



Newly added to the site are: MARC List for Countries, MARC List for Geographic Areas, and MARC List for Languages.

# Lib-Value Website Launched by ARL

The Association of Research Libraries (ARL) has launched a website for *Value, Outcomes, and Return on Investment of Academic Libraries (Lib-Value)*—a free searchable bibliographic database of library value and ROI literature. This database is the result of a three-year project funded by a grant from the Institute of Museum and Library Services (IMLS).

The database currently contains more than 400 entries, including books, book chapters, journal articles, theses and dissertations, reports, presentations, and free websites, covering the expanding literature on library value and evaluation, return on investment in libraries of all kinds, as well as foundational material on methodologies for determining value. The database was compiled by Rachel Fleming-May, assistant professor in the University of Tennessee College of Communication and Information's (CCI) School of Information Sciences, and Crystal Sherline, a graduate student in the CCI. The Lib-Value project is conducting research on value and ROI in academic libraries and developing a set of tested methodologies and tools to help academic librarians measure which products and services provide the most value to the university community and best support the university's mission and goals. These tools will also aid library leaders in demonstrating the library's value to university administrators and funders. More resources will be made available via the Lib-Value website during the next two years as the grant activities move forward, featuring materials from related workshops, presentations, and publications, as well as current news.

Explore the Lib-Value database at: libvalue.cci.utk.edu/

# BIC Product Metadata Guidelines for ONIX 3.0

Book Industry Communications has issued Product Metadata Guidelines for ONIX 3.0 to provide guidance for publishers planning to implement version 3 of ONIX for Books. The guidelines are "intended primarily to help UK publishers in the preparation of ONIX data feeds, by setting out notes on data element inclusion and usage which have been reviewed and agreed by the BIC Product Metadata Committee and in particular by the principal aggregators of UK book trade product information: BDS, Bowker, and Nielsen Book Services."

The guidelines contain write-ups for each major element group within ONIX 3 that include what elements must be included (if relevant), what should be considered for inclusion, an XML example, and a discussion of other elements in the group and when they might be used. The "other" discussions contain indications of different usages in non-UK regions; thus the guidelines may be of interest to those outside of the UK.

A detailed table containing all of the ONIX 3 data elements indicates whether the guidelines specify that the element is mandatory in all instances, required for either basic or higher level product data accreditation, optional but likely to be useful to receivers, optional and can be ignored by receivers, or are not expected to be used in the UK book supply chain.

 The guidelines can be downloaded from: www.bic.org.uk/files/pdfs/101126%20
 BIC%20UK%20ONIX%203%20
 guidelines%20final.pdf

# Draft of Revision of the Specifications for the Digital Talking Book Issued for Comment

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The working group for the revision of ANSI/NISO Z39.86, *Specifications for the Digital Talking Book*, issued a third working draft of the revision in January 2011 for review and comment. This latest draft of the revision incorporates the move to RDFa 1.1; the adoption of XML 1.0, fifth edition, and XML Namespaces, third edition; the adoption of associating Style Sheets with XML documents, second edition; the addition of the associate attribute; the addition of new terms for use cases; and renaming of the "separator" element to "transition". This is the last working draft expected to be issued for comments; a draft standard for trial use should be available in April.

The draft is currently referred to as *Part A: Authoring and Interchange Framework* because the working group also intended to issue a new *Part B: Distribution*. The working group is now looking at the International Digital Publishing Forum's forthcoming publication of EPUB version 3 as possibly meeting the requirements for the proposed Part B; in that case Part B will be dropped and the reference to Part A will be removed from the revision title.

The DAISY Consortium, the maintenance agency for Z39.86, is leading the revision work. The current version of the Digital Talking Book standard is frequently referred to as DAISY 3.

For more information and a link to the draft visit the working group's website: www.niso.org/workrooms/daisy/

# International ISBN Agency Issues Guidelines for the Assignment of ISBNs to E-books

Although the 2005 revision of the International Standard Book Number standard (ISO 2108) makes it clear that each distinct publication, edition, or product form of a monograph is to be assigned its own ISBN, the practice of assigning ISBNs to e-books has varied greatly among publishers and other parties in the supply chain. In 2010, the Board of the International ISBN Agency commissioned a study from Digital Publishing Partners LLC to provide an evidence base for developing its policy and actions regarding the assignment of ISBNs to e-books. Among the findings of the survey were:

- » The requirements for e-book identification and description are broader and more diverse than those for which the ISBN standard was originally designed.
- » The attributes that define a "unique product" are dynamic, continually evolving, and contextual.
- » Where ISBNs are being used to identify e-books, they sometimes properly identify a product or version of an e-book; sometimes a file format; sometimes, the same ISBN is assigned to both the print and e-book versions of the book.
- » Many stakeholders seem satisfied with the status quo and have implemented various types of workarounds, processes,

and systems to satisfy their own specific requirements and to clean up metadata; data quality continues to be a major concern.

» US e-book stakeholders appear to be unconvinced that there is any business case for assigning ISBNs to separate e-book versions (where there is lack of consensus on whether these versions represent separate products).

The International ISBN Agency issued their *Guidelines for the Assignment of ISBNs to E-books* in November 2010. They state: "ISBN should not be used to identify files that only pass between publishers and typesetters or e-book conversion services, nor should it identify abstract entities such as textual works (content). Publications need separate ISBNs if anyone in the supply chain needs to identify them separately." The guidelines include answers to frequently asked questions that expand on the underlying concepts.

The International ISBN Agency is continuing to work with the Book Industry Study Group (BISG) and the US ISBN Agency to achieve a consensus position in the US market on this issue. I NW I doi: 10.3789/isqv23n1.2011.10

The Digital Publishing Partners study is available at: www.isbn-international.org/pages/media/ISBN e-books study public summary 110105.pdf

The ISBN E-book Guidelines are available at: isbn-international.org/news/view/31

In 2010, the Board of the International ISBN Agency commissioned a study from Digital Publishing Partners LLC to provide an evidence base for developing its policy and actions regarding the assignment of ISBNs to e-books.





# STATE OF THE STANDARDS

This comprehensive report on NISO's standards and initiatives appears in the first issue of the year of ISQ to keep you informed of the scope and status of NISO's program on an annual basis. If you have questions about any of the standards or development programs, contact the NISO office by phone (301-654-2512), via email (nisohq@niso.org), or visit the Standards section of the NISO website (www.niso.org/standards).

#### In Development

Listed below are the NISO working groups that are currently developing new or revised standards, recommended practices, or reports. Refer to the NISO website (www.niso.org/workrooms/) and *Newsline* (www.niso.org/publications/ newsline/) for updates on the working group activities. DSFTU stands for Draft Standard for Trial Use.

#### Note: DSFTU stands for Draft Standard for Trial Use.

WORKING GROUP	STATUS	
<b>DAISY Revision</b> Co-chairs: Markus Gylling, George Kerscher	<b>Z39.86-201x, Specifications for the Digital Talking Book</b> Standard revision in development. <i>Part A, Authoring and Interchange</i> <i>Framework</i> , issued for public comment.	
ERM Data Standards & Best Practices Review Co-chairs: Ivy Anderson, Tim Jewell	Technical Report in development. Expected to be published June 2011.	
Establishing Suggested Practices Regarding Single Sign-On (ESPReSSO) Co-chairs: Steve Carmody, Harry Kaplanian	Recommended Practice in development. Draft is expected to be made available for public comment in spring 2011.	
Institutional Identifiers (I²) Co-chairs: Grace Agnew, Oliver Pesch	<b>Z39.94-201x, Institutional Identifiers</b> Standard in development.	
Improving OpenURLs Through Analytics (IOTA) Chair: Adam Chandler	Technical Report in development.	
Knowledge Base and Related Tools (KBART) Phase II Joint project with UKSG Co-chairs: Andreas Biedenbach, Sarah Pearson	NISO RP-9-2010, KBART: Knowledge Bases and Related Tools Phase I Recommended Practice issued January 2010. Phase II Recommended Practice in development.	

#### IN DEVELOPMENT CONTINUED »

WORKING GROUP	STATUS
<b>Physical Delivery of Library Materials</b> Co-chairs: Valerie Horton, Diana Sachs-Silveira	Recommended Practice in development.
Presentation and Identification of E-Journals (PIE-J) Co-chairs: Bob Boissy, Cindy Hepfer	Recommended Practice in development.
RFID for Library Applications Revision Co-chairs: Vinod Chachra, Paul Sevcik	NISO RP-6-201x, RFID in U.S. Libraries Revision in development. Draft for public comment expected in spring 2011.
Standardized Markup for Journal Articles Co-chairs: Jeff Beck, B. Tommie Usdin	<b>Z39.96-201x, Standardized Markup for Journal Articles</b> Standard in development. DSFTU expected in spring 2011.
Supplemental Journal Article Materials Joint project with NFAIS Co-chairs Business Working Group: Linda Beebe, Marie McVeigh Co-chairs Technical Working Group: Dave Martinsen, Alexander (Sasha) Schwarzman	Recommended Practice in Development.

#### In Revision

The following are published and approved NISO standards or recommended practices that are in the process of being revised.

DESIGNATION	TITLE
ANSI/NISO Z39.86 – 201x	Specifications for the Digital Talking Book
NISO RP-6-201x	RFID in U.S. Libraries

#### **Five Year Review**

The following published and approved NISO standards will begin the five-year review process in 2011. Voting pools for these standards will open shortly; if fifteen percent (15%) or more of the membership joins the Voting Pool and balance requirements are met, reviews will be conducted in order to provide a recommendation for action to accompany the review ballots in November 2011. If less than 15% of the membership joins the Voting Pool, the Board may initiate procedures for an administrative withdrawal. See Section 7.5 of the NISO Procedures for more information (www.niso.org/about/documents).

DESIGNATION	TITLE
ANSI/NISO Z39.93-2007	The Standardized Usage Statistics Harvesting Initiative (SUSHI) Protocol
ANSI/NISO Z39.85-2007	The Dublin Core Metadata Element Set

## Published and Approved NISO Standards

The following NISO standards are approved and published. The notation R, e.g. R2002, indicates that the standard was reaffirmed in the specified year. Free downloadable copies of the standards are available from: www.niso.org/standards/

DESIGNATION	TITLE
ANSI/NISO Z39.2-1994 (R2009)	Information Interchange Format
ANSI/NISO Z39.7 (under continuous maintenance)	Information Services and Use: Metrics and statistics for libraries and information providers – Data Dictionary
ANSI/NISO Z39.9-1992 (R2001)	International Standard Serial Numbering (ISSN)
ANSI/NISO Z39.14-1997 (R2009)	Guidelines for Abstracts
ANSI/NISO Z39.18-2010	Scientific and Technical Reports – Preparation, Presentation and Preservation
ANSI/NISO Z39.19-2010	Guidelines for the Construction, Format, and Management of Monolingual Controlled Vocabularies
ANSI/NISO Z39.20-1999	Criteria for Price Indexes for Print Library Materials
ANSI/NISO Z39.23-1997 (R2009)	Standard Technical Report Number Format and Creation
ANSI/NISO Z39.26-1997 (R2002)	Micropublishing Product Information
ANSI/NISO Z39.29-2005 (R2010)	Bibliographic References
ANSI/NISO Z39.32-1996 (R2002)	Information on Microfiche Headers
ANSI/NISO Z39.41-1997 (R2009)	Printed Information on Spines
ANSI/NISO Z39.43-1993 (R2006)	Standard Address Number (SAN) for the Publishing Industry
ANSI/NISO Z39.47-1993 (R2003)	Extended Latin Alphabet Coded Character Set for Bibliographic Use (ANSEL)
ANSI/NISO Z39.48-1992 (R2009)	Permanence of Paper for Publications and Documents in Libraries and Archives
ANSI/NISO Z39.50-2003 (R2009)	Information Retrieval: Application Service Definition & Protocol Specification
ANSI/NISO Z39.53-2001	Codes for the Representation of Languages for Information Interchange
ANSI/NISO Z39.56-1996 (R2002)	Serial Item and Contribution Identifier (SICI)

CONTINUED »

#### PUBLISHED AND APPROVED NISO STANDARDS CONTINUED »

DESIGNATION	TITLE
ANSI/NISO Z39.62-2000	Eye Legible Information on Microfilm Leaders and Trailers and on Containers of Processed Microfilm on Open Reels
ANSI/NISO Z39.64-1989 (R2002)	East Asian Character Code (EACC) for Bibliographic Use
ANSI/NISO Z39.71-2006	Holdings Statements for Bibliographic Items
ANSI/NISO Z39.73-1994 (R2001)	Single-Tier Steel Bracket Library Shelving
ANSI/NISO Z39.74-1996 (R2002)	Guides to Accompany Microform Sets
ANSI/NISO Z39.76-1996 (R2002)	Data Elements for Binding Library Materials
ANSI/NISO Z39.77-2001	Guidelines for Information About Preservation Products
ANSI/NISO Z39.78-2000 (R2006)	Library Binding
ANSI/NISO Z39.79-2001	Environmental Conditions for Exhibiting Library and Archival Materials
ANSI/NISO Z39.82-2001	Title Pages for Conference Publications
ANSI/NISO Z39.83-1 (under continuous maintenance)	NISO Circulation Interchange, Part 1: Protocol (NCIP)
ANSI/NISO Z39.83-2 (under continuous maintenance)	NISO Circulation Interchange Protocol (NCIP), Part 2: Protocol Implementation Profile 1
ANSI/NISO Z39.84-2005 (R2010)	Syntax for the Digital Object Identifier
ANSI/NISO Z39.85-2007	Dublin Core Metadata Element Set
ANSI/NISO Z39.86-2005	Specifications for the Digital Talking Book
ANSI/NISO Z39.87-2006	Data Dictionary – Technical Metadata for Still Images
ANSI/NISO Z39.88-2004 (R2010)	The OpenURL Framework for Context-Sensitive Services
ANSI/NISO Z39. 89-2003 (R2009)	The U.S. National Z39.50 Profile for Library Applications
ANSI/NISO Z39.93-2007	The Standardized Usage Statistics Harvesting Initiative (SUSHI) Protocol
ANSI/NISO/ISO 12083-1995 (R2002)	Electronic Manuscript Preparation and Markup U.S. adoption of ISO 12083

### **NISO Recommended Practices**

NISO Recommended Practices are "best practices" or "guidelines" for methods, materials, or practices in order to give guidance to the user. These documents usually represent a leading edge, exceptional model, or proven industry practice. All elements of Recommended Practices are discretionary and may be used as stated or modified by the user to meet specific needs. Free downloadable copies of these documents are available from: /www.niso.org/publications/rp/

TITLE	DESIGNATION
Framework of Guidance for Building Good Digital Collections 3rd edition, 2007	
Ranking of Authentication and Access Methods Available to the Metasearch Environment	NISO RP-2005-01
Search and Retrieval Results Set Metadata, version 1.0	NISO-RP-2005-02
Search and Retrieval Citation Level Data Elements, version 1.0	NISO RP-2005-03
Best Practices for Designing Web Services in the Library Context	NISO RP-2006-01
NISO Metasearch XML Gateway Implementers Guide, version 1.0	NISO RP-2006-02
RFID in U.S. Libraries	NISO RP-6-2008
SERU: A Shared Electronic Resource Understanding	NISO RP-7-2008
Journal Article Versions (JAV): Recommendations of the NISO/ALPSP JAV Technical Working Group	NISO RP-8-2008
KBART: Knowledge Bases and Related Tools	NISO RP-9-2010
Cost of Resource Exchange (CORE) Protocol	NISO RP-10-2010

## Withdrawn NISO Standards

In accordance with NISO procedures, standards may be withdrawn because they are superseded by a newer standard, a national version is withdrawn in favor of an international equivalent, or the content is deemed to be obsolete. In accordance with ANSI procedure, all American National Standards that are not revised or reaffirmed within ten years following ANSI approval are automatically administratively withdrawn. A list of withdrawn NISO standards is available on the NISO website (www.niso.org/standards/). Copies of these standards are available online or from the NISO office.

## **NISO Technical Reports**

NISO Technical Reports provide useful information about a particular topic, but do not make specific recommendations about practices to follow. They are thus "descriptive" rather than "prescriptive" in nature. Proposed standards that do not result in consensus are often published as technical reports. Free downloadable copies of these documents are available from: www.niso.org/publications/tr/

TITLE	DESIGNATION
Environmental Guidelines for the Storage of Paper Records by William K. Wilson	NISO TR01-1995
Guidelines for Indexes and Related Information Retrieval Devices by James D. Anderson	NISO TR02-1997
Guidelines for Alphabetical Arrangement of Letters & Sorting of Numerals & Other Symbols by Hans H. Wellisch	NISO TRo3-1997
Networked Reference Services: Question / Answer Transaction Protocol	NISO TR04-2006

# ACCESS ISQ GOES OPEN ACCESS IN 2011

NISO is making *Information Standards Quarterly* (ISQ) freely available on the NISO website beginning this issue. Both individual articles and the entire issue will be available for download in PDF format. Print copies will continue to be available by subscription and to members who opt-in.

For more information on Information Standards Quarterly, visit www.niso.org/publications/isq/



DAISY·JATS

EMBRACING FLEXIBILITY

# SUPPLEMENTAL JOURNAL MATERIALS STRUCTURING CONTENT FOR USE

#### **DAISY REVISION**

#### Simplification, Broader Application Key

ANSI/NISO Z39.86 - Specifications for the Digital Talking Book – more commonly known as DAISY, in recognition of the Maintenance Agency for this standard – is undergoing revision to reduce complexity, improve and extend the user experience, support materials beyond the book (e.g., newspapers, audio tours, museum exhibits, presentations, and more), align with mainstream publishing, and allow for innovation. DAISY allows for content to be transformed into multiple output formats, including accessible formats such as Braille, DAISY DTBs, and large print. At this time, the Authoring and Interchange Framework is available for comment and review.

#### JATS: JOURNAL ARTICLE TAG SUITE

#### Standardized Markup for Journal Articles

JATS provides a common format in which publishers and archives could exchange journal content. Based on the long-standing and well-accepted NLM Journal Archiving and Interchange Tag Suite, this standard will define elements and attributes that describe metadata and full content of scholarly journal articles. A final draft is under review by the Working Group and is expected to be available for public comment in early 2011. Three tag sets are included: Journal Archive & Interchange, Journal Publishing, and Article Authoring.

#### SUPPLEMENTAL JOURNAL MATERIALS

#### A Joint NISO/NFAIS Project

This project will recommend best practices for publisher inclusion, handling, display, and preservation of supplemental journal article materials. A Business Working Group is focusing on semantic and policy issues related to delivering materials that are supplemental to scholarly journal articles, while the Technical Working Group addresses issues such as metadata, persistent identifiers, linking mechanisms, packaging, and more.

#### Where to Get More information:

DAISY: Specifications for the Digital Talking Book Co-chairs: Markus Gylling, DAISY Consortium; George Kerscher, DAISY Consortium

⊗ www.niso.org/workrooms/daisy ⊗ www.daisy.org/zw/Main\_Page

#### JATS: Journal Article Tag Suite

Co-chairs: Jeff Beck, NCBI, National Library of Medicine; B. Tommie Usdin, Mulberry Technologies, Inc.

⊗ www.niso.org/workrooms/journalmarkup

#### NISO/NFAIS Supplemental Journal Article Materials

Business Working Group Co-chairs: Linda Beebe, American Psychological Association; Marie McVeigh, Thomson Reuters

Technical Working Group Co-chairs: Dave Martinsen, American Chemical Society; Sasha Schwarzman, American Geophysical Union **www.niso.org/workrooms/supplemental** 





