



Standards Quiz Show: An Introduction to Using Standards in Serials & Electronic Resources Work

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Abstract

Standards are an important part of serials and electronic resources work, which makes standards important to NASIG. Beth Ashmore, Jen Montavon-Green, and Matthew Ragucci discuss the importance of standards to this work, the role of NASIG's Standards Committee in representing NASIG's interests to the standards community, and opportunities for others to get involved in shaping standards. Their program was a highly-interactive session which culminated in a Jeopardy!-style game show for session attendees.

Keywords: standards, recommended practices, National Information Standards Organization (NISO), NASIG standards committee

The presenters opened by defining standards, based on the International Organization for Standardization (ISO) standard about

vocabulary surrounding standards work. Standards are “document[s], established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context.”¹ These are very clearly set out rules to which various bodies must adhere, and often have implications for interoperability between systems. For example, a resource making a query using OpenURL can find content in another system, since they both use the same standard.

Recommended practices are not as strictly upheld. These are “guidelines or best practices that are being recommended by a group or committee that develops it and possibly an oversight committee.”² Recommended practices typically do not impact multiple systems and are not needed for interoperability. The Content Platform Migrations Recommended Practice, for example, provides guidelines for publishers moving content so that the process goes as smoothly as possible for customers. These guidelines, however, are not necessary for communication between publishers and customers.

NASIG interests intersect significantly with standards work. Whether with metadata standards like MACHine-Readable Cataloging (MARC) or subject headings, electronic resources standards such as Counting Online Usage of NeTworked Electronic Resources (COUNTER) or Knowledge Bases and Related Tools (KBART), accessibility recommended practices like Web Content Accessibility Guidelines (WCAG), and others, NASIG realized that it was important to conscientiously think about standards work and provide feedback to standards organizations. The NASIG Standards Committee grew out of this recognition.

The purpose of the NASIG Standards Committee is “to participate in and monitor the activities of standards-related initiatives and organizations such as the National Information Standards Organization (NISO) and COUNTER, to educate and inform NASIG members about the importance of relevant standards, to explore and develop opportunities for the NASIG membership to participate in standards

development efforts, [and] provide representatives to outside standards initiatives or organizations as needed.”³ Standards Committee members serve five-year terms. These longer-than-normal terms allow members time to get familiar with standards work and the work of the committee without feeling pressured to contribute before they know what they are working with.

Committee members may be specifically designated as NASIG’s official representative to the various groups with which we interact. For NISO, for instance, one committee member will be expected to coordinate NASIG’s relationship with that peer organization, including voting on ballots and other proposals on behalf of NASIG, and contributing NASIG members’ views to NISO discussions.⁴

The presenters then asked: why do standards matter to NASIG members? The National Institute of Standards and Technology (NIST) says that “standards allow technology to work seamlessly and establish trust so that markets can operate smoothly. They provide a common language to measure and evaluate performance, make interoperability of components made by different companies possible, protect consumers by ensuring safety, durability, and market equity.”⁵ In libraries, standards offer compatibility, efficacy, efficiency, mass production, and quality control; standards make librarians’ jobs easier.

Standards and recommended practices also play an important role in the scholarly communication industry. Nettie Lagace made the analogy that if the scholarly publishing ecosystem were a machine of many cogs, standards and recommended practices would serve as the grease that facilitates the creation and dissemination of information.⁶ Standards and recommended practices ensure reliability, integrity, interoperability, and discoverability of scholarly content.⁷ By defining consistent guidelines for formatting, citation styles, and referencing, these standards help authors present their research in a clear and organized manner. This promotes a uniform and standardized approach to publishing, making it easier to understand and assess the content.

One industry standard that helps with the research and publication process is the Open Researcher and Contributor ID (ORCID). ORCID is

a persistent identifier for researchers that distinguishes them from others with the same name and connects them to their scholarly works. This standard helps resolve author name ambiguities, improves attribution and recognition, and supports efficient workflows for research funding, publishing, and affiliations.⁸

Another example of an industry standard that greases the wheels of research creation is the Journal Article Tag Suite (JATS). JATS is an eXtensible Markup Language (XML)-based standard for encoding journal articles, enabling structured and semantically rich representation of content. This allows publishers to present scholarly articles in a consistent and machine-readable format, facilitating better search, indexing, and content exchange.⁹

Information standards and recommended practices also help enhance the discoverability and accessibility of research, which is a critical part of library work. Standardized metadata and indexing practices facilitate efficient organization and categorization of scholarly articles. These standards make it easier for readers and students to find relevant content, improving the dissemination and impact of research findings.

Once such standard that plays an important role in discovery and access is the Digital Object Identifier (DOI). The DOI is an industry standard used to uniquely identify and provide a persistent link to scholarly content such as articles, datasets, and other research outputs. DOIs ensure that scholarly works can be easily and reliably referenced, cited, and linked to, promoting discoverability and citation tracking.¹⁰

Another example of a recommended practice that facilitates discovery and access is the Presentation & Identification of E-Journals (PIE-J). This NISO-recommended practice offers guidelines for the presentation and identification of online journals. PIE-J helps publishers maintain consistent and user-friendly interfaces for e-journals, and makes electronic resource management work easier for libraries, with the goal of making navigation and access easier for researchers.¹¹

One last example of an industry standard that makes electronic resource management work far easier is Counting Online User Networked Electronic Resources (COUNTER). COUNTER—which uses the term “Code of Practice” instead of standard or recommended practice—provides a set of codes and protocols for measuring and reporting usage statistics of online resources such as journals, databases, and books.¹² This standard allows libraries to assess the value and impact of their electronic resources more easily. COUNTER aids in collection management and making decisions about library resources. If there were no uniformity in the output of these data, libraries and institutions would have a very difficult time comparing and evaluating their subscriptions or knowing whether their collections are serving their users.

These standards and recommended practices foster efficiency, transparency, and innovation in the scholarly communication ecosystem. They ensure that researchers, publishers, libraries, and institutions can work together seamlessly, advancing the dissemination of knowledge and the progress of scientific research. By adopting common data formats and metadata schemas, researchers can easily share and exchange information across different platforms and systems. This interoperability enables data integration and reusability, allowing scholars to build upon existing research and facilitating interdisciplinary collaborations.

NISO plays a significant role in advancing information standards within the scholarly communication and publishing ecosystem. NISO is a non-profit organization that develops and promotes consensus-based standards and best practices for information management, including those relevant to the academic and research community. Their remit includes, but is not limited to creating, publishing, and maintaining standards and best practices, fostering the adoption of existing standards, educating the community on technology related issues, and incubating thought leadership activities to advance technology.¹³

The NISO-recommended practice development process is seemingly complex, but it is designed in a way that ensures stakeholders from around the industry are consulted. Once a proposal has been

approved through NISO member vote, a working group is formed to determine the scope of the recommended practice and deliverables. Following a thorough investigation and gathering of input, the working group produces a draft output and makes it available for public review. After the working group has responded to the public comments and modified the recommended practice, it publishes a finalized version which is disseminated across the industry. The working group maintains and updates the recommended practice as needed. The later phases of the recommended practice development process requiring maintenance and revision are crucial to ensure comprehension and adoption by all relevant stakeholders.¹⁴

The presenters wrapped up the presentation by asking attendees to use their phones to play Standards Jeopardy! using a game platform called Factile (<https://www.playfactile.com/>). The game consisted of five categories: "Where do standards come from?" "A day without standards," "It comes 'standard,'" "Standards current events," and "Acronyms." The questions and answers for each category are presented below.

Where do standards come from?

Q1: This industry-based, nonprofit, non-governmental association is the home of many of your favorite standards like KBART and transfer. A1: What is the National Information Standards Organization (NISO)?

Q2: This private, non-profit organization administers and coordinates U.S. voluntary standards and conformity assessment systems. They often collaborate with NISO on the adoption and publication of standards, like Dublin Core and NCIP. A2: What is the American National Standards Institute (ANSI)?

Q3: This family of standard XML messaging protocols for exchanging licensing information was a collaboration between NISO and EDIt-EUR, international group coordinating development of the standards infrastructure for electronic commerce in the book, e-book and serials sectors. A3: What is ONIX for Publications Licenses (ONIX-PL)?

- Q4: This NISO Code of Practice, designed to provide consistent guidelines when a journal moves from one publisher to another, began with NASIG's sister organization, UKSG. A4: What is the Transfer Code of Practice?
- Q5: United States government agency tasked with promoting U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life. A5: What is National Institute of Standards and Technology (NIST)?

A day without standards

- Q1: Without this standard, you wouldn't know where to find the title or table of contents in a bib record. A1: What is MARC (MACHine Readable Catalog)?
- Q2: Without this standard, you wouldn't be able to share bibliographic records from one catalog to another. A2: What is Z39.50?
- Q3: Without this standard, you wouldn't be able to compare the use of an e-journal on one platform to an e-journal on another platform. A3: What is COUNTER (Counting Online User NeTworked Electronic Resources)?
- Q4: Without this NISO initiative, we wouldn't be measuring how many times an article was mentioned on Twitter or downloaded from a publisher website. A4: What is NISO Alternative Assessment Metrics (Altmetrics) Initiative?
- Q5: Without this joint project between NISO and STM Publishers, we wouldn't have the seamless access of single sign on for e-journal platforms. A5: What is the RA21 Initiative?

It comes "standard" (All of these answers include the word standard)

- Q1: This is a measure of the amount of variation or dispersion of a set of values. Like in statistics. A1: What is standard deviation?
- Q2: This pupper [picture clue] is this for all Akitas. (This question included a picture of an Akita) A2: What is the breed standard?

Q3: A monetary system where a country's currency or paper has a value directly linked to gold. Sorry Crypto bros. A3: What is the Gold Standard?

Q4: This American corporation is the source of the Rockefeller fortune. A4: What is Standard Oil?

Q5: If you got a 1600 on the SAT you are super smart and probably very good at taking these. A5: What are standardized tests?

Standards current events

Q1: Published in February 2023, this recommended practice seeks to help us all get a handle on our podcasts and other streaming media. A1: What is the RP-41–2023, NISO's Video and Audio Metadata Guidelines?

Q2: This developing NISO standard established a high-level taxonomy of roles typically played by contributors to research outputs. It makes it easy to give credit where credit is due. A2: What is CRediT, Contributor Roles Taxonomy?

Q3: This working group, which included our own Matthew Ragucci, published a recommended practice in 2021 to make it easier for libraries and publishers to communicate around platform migrations. A3: What is the Content Platform Migrations Working Group?

Q4: Updated in 2022, this standard is a specific tag set used for standards publishing or in other words a standard for standards. A4: What is ANSI/NISO Z39.102–2022, STS: Standards Tag Suite?

Q5: Since 2020, NISO has offered this online conference on standards and they release all of the content open access one year later. A5: What is NISO Plus?

Acronyms

Q1: Shared Electronic Resource Understanding Recommended Practice A1: What is SERU?

- Q2: Knowledge Bases and Related Tools A2: What is KBART?
 Q3: Standardized Usage Statistics Harvesting Initiative A3: What is SUSHI?
 Q4: Presentation and Identification of E-Journals Recommended Practice A4: What is PIE-J?
 Q5: NISO Circulation Interchange Protocol A5: What is NCIP?

The top three winners claimed their prizes of swag from the presenters' institutions: North Carolina State University, University of Kentucky, and Wiley.

Contributor Notes

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Notes

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