

# Standards Column — Culture Shock: International Standardization Projects Effecting Publishers and Libraries — A Report of ISO TC 46 Activities

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Many people observing standards development perceive it to be labyrinthine and confusing. This is doubly true of standards work that takes place at the international level in **ISO (International Organization for Standardization)**,<sup>1</sup> a network of the national standards institutes of 157 countries. The committees and their naming structures, standards' numeric designation systems, and the bureaucracy necessary to obtain international consensus can be overwhelming. These issues are compounded by the problem that so few in our community can invest the time, travel, and other resources to actively participate on an international level. However, one cannot minimize the impact that the international standards developed within **ISO** have on the worldwide information community of publishing, libraries, and information systems providers. **ISBN** and **ISSN**, among the most recognized publishing and library standards, are managed at the international level, as are a range of less well-known but equally critical standards. Engaging in such international standards development, review, and maintenance is both necessary and ultimately rewarding for individuals and their organizations.

While a great deal of advancement in standards development takes place in the United States, other regions and countries are also pushing technological and information boundaries and facing challenges of similar size and scope. The information world is increasingly international and geographical boundaries are diminishing in their importance. Regularly, the work undertaken in one region impacts work in other countries or on different continents. Often, because of national organizational structures or governmental policies, countries other than the U.S. are better positioned to advance technological, infrastructure, or procedural standards more quickly than the U.S. community is. Long gone are the days when a national standard would suffice for information exchange, particularly given the global distribution of digital publications.

**ISO's** standards development work is conducted through Technical Committees (TC), who manage a portfolio of standards in a defined topic area. Technical Committees are further divided into Subcommittees (SC) with a narrower topic scope, which in turn assign the actual development of a particular standard to a Working Group (WG). While TCs and SCs continue more or less indefinitely as long as their topic area is relevant, WGs exist only until their work on a particular standard is completed. Each of these levels is numbered sequentially, however when a group disbands, the numbers are not reassigned, which is why there are gaps in the numbering structure.

Within the U.S., **ANSI** assigns a Technical Advisory Group (TAG) Administrator to each of the **ISO** Technical Groups. **NISO** has long served

as the TAG Administrator for **ISO TC46**, Information and Documentation. This makes **NISO** responsible for identifying and managing the group that makes up the TAG, currently defined as **NISO** voting members. The TAG members vote and comment on draft standards issued by TC46 and its subcommittees and **NISO** submits the official U.S. vote. **NISO** also nominates U.S. representatives to each of TC46's Subcommittees and working groups. This is a critical and not well-known aspect of **NISO's** role in standards development.

Two of **NISO's** staff along with nearly a dozen other U.S. technical experts traveled to Stockholm in May for the annual meetings of TC46, and its four sub committees: SC4, Technical Interoperability; SC8, Quality — Statistics and Performance Evaluation; SC9, Identification and Description; and SC11, Archives and Records Management. In addition to the plenary meetings for these Subcommittees, there were also numerous working group meetings for most of the projects underway. The meeting was hosted by the **Swedish Standards Institute (SIS)** and was attended by representatives from some 30 countries.

The breadth and depth of the work underway at **ISO** is indicative of the impact and importance these standards have or will have in the community. Below is a short list and description of some of the projects currently underway within **ISO TC46**; this list is not comprehensive. Please visit the International section of the **NISO** Website ([www.niso.org/international](http://www.niso.org/international)) to learn more about TC46 standards and work in progress.

**International Standard Book Number (ISBN) (ISO 2108)** — The revision of the **ISBN** to expand the numbering system to 13 digits was published in 2005 and took effect in January 2007. As this is the third year after passage of the revision, the standard is up for systematic review, providing adopters an opportunity to identify any implementation issues they encountered.

Structured vocabularies, monolingual (ISO 2788) and multi-lingual (ISO 5964) thesauri — This revision to combine and update both thesaurus standards will have broad application in the development of ontologies and in semantic Web technology.

**International Country and Subdivision Codes (ISO 3166)** — Among the most controversial standards that **NISO** is engaged in, country codes often go to the heart of national and regional identity issues. To address the need for continual revision, the standard is updated

at least twice a year through official newsletters, which are periodically compiled into a new publication of the whole standard. Among the pressing issues faced presently is the use of standard country codes in **ICANN** Internet domain hierarchy names. There are also

concerns relating to non-roman representations of country codes for such uses as passports. Learn more about how this standard is maintained and the role the United Nations plays at [www.iso.org/iso/country\\_codes.htm](http://www.iso.org/iso/country_codes.htm).

**RFID in Libraries (ISO/CD 28500)** — The complexity of the technical specifications for **RFID** tags used in libraries is one factor limiting broader adoption of these systems to track library inventory. Earlier this year, **NISO** released a Recommended Practice for **RFID** use in libraries (*RFID in U.S. Libraries — NISO RP-6-2008*) that is meant to complement the **ISO** work. The **ISO** standard will address issues such as frequency, data models, and other functional requirements.

**International Standard Name Identifier (ISNI) (ISO/CD 27729)** — While libraries have tremendous background skills in the development and maintenance of name authority files, there are broader issues related to name identification that will be addressed in this developing standard. Among these are the identification of various parties in the content creation process (beyond author), the identification of fictional characters or pseudonyms, and the relationships of multi-party entities.

**Library Performance Indicators (ISO 11620)** — This long-established standard puts forward the distinct measures by which libraries compare their performance with other institutions. Currently in revision, the new standard will incorporate metrics related to online resources and changes in library services since the standard was last published.

**Digital Object Identifier (DOI) System (ISO/CD 26324)** — While the **ANSI/NISO DOI** standard (Z39.84) addresses the syntax of the **DOI**, this **ISO** standard covers the whole **DOI** system including syntax, resolution, registration, and administration. Key among the concerns at the international level is the interaction or incorporation of other international identifiers in the **DOI** and the use of **DOIs** to identify digital versions of existing identified objects, such as books or journals.

**Open Office XML** — Although this work is being undertaken by JTC1, SC34, which addresses electronic file formats and is not a part of TC46's work, this initiative aims to create a standard around **Microsoft's Open Office XML** document file formats. It has tremendous potential to impact a number of things that are done within our community, from creation to distribution, and discovery to archiving. Earlier this year, the format was considered for a "fast track" to standardization. However in the drafting stage, the standard received some 3,000 technical comments, which were addressed over five days earlier this spring. The revised document passed despite the strong opposition of a number of countries. However, it was recently announced that a few countries are appealing the results and in particular the process which led to the standard's

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adoption. There certainly will be more to watch in the coming months related to **OOXML**.

There are numerous ways that community members may participate in the international standards development process. Although there is an added level of logistical challenges when participating at this level, it can be a truly rewarding experience. Not only is this a great opportunity to interact with colleagues internationally and experience their culture, it is also an opportunity to help shape the future directions of information exchange. If you are interested in engaging more directly in international standardization, please contact the **NISO** offices at [nisohq@niso.org](mailto:nisohq@niso.org). 🐼

### Endnotes

1. Contrary to popular belief, **ISO** is not an acronym for the name in a different language. Because the organization name would have different acronyms for each language, the short name of **ISO** was chosen — derived from the Greek *isos*, meaning “equal” — to be the all-purpose name in any language.