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Todd Carpenter
NISO, tcarpenter@niso.org

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

by **Todd Carpenter** (Managing Director, NISO, 1 North Charles Street, Suite 1905, Baltimore, MD 21201; Phone: 301-654-2512; Fax: 301-654-1721) <tcarpenter@niso.org> www.niso.org

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)**,¹ 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) 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.

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.

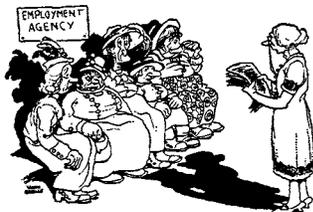
International Standard Name Identifier (ISNI) (ISO/CD 27729) — While libraries have tremendous background skills in the development and maintenance of name authority files, there are broader issues related to name identification that will be addressed in this developing standard. Among these are the 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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I Hear the Train A Comin'
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formative device. Let's revisit this at the **2009 Charleston Conference**.

"The ghost of beauty, the ghost of stateliness, the ghost of elegance, the ghost of pride, the ghost of frivolity, the ghost of wit, the ghost of youth, the ghost of age, all waiting their dismissal from the desolate shore..."

To the aforementioned university press. For many years, the university press imprimatur has connoted quality and intellectual vibrancy. The effects of the scholarly communication crisis have been keenly felt by this group over the past two decades. Monographs continue to struggle finding a place within library budgets, as do, increasingly, print books in general. Marketing dollars are scarce, and fixed costs are nontrivial. However, we can clearly observe pockets of innovation emerging over the past few years. **Rice University** has revived its press in digital only mode, relying on low-cost print-on-demand for those who want hard copy. **Columbia University Press** has teamed with the library and the IT department to co-found **Electronic Publishing Initiative at Columbia (EPIC)**. EPIC's goal — to create new kinds of scholarly and educational publications through the use of new media technologies — has already resulted in the development of the **Columbia International Affairs Online** and **Earthscape** platforms. **Penn State Press** and the **University Libraries** have partnered on an **Office of Digital Scholarly Publishing** to recognize efficiencies on project management, budgeting, and opportunity evaluation. Will these types of experiments reinvigorate the category? Or is the venerable institution truly in danger of joining **Dickens'** ghosts on the desolate shore?

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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. 🍄

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.

"... tell Wind and Fire where to stop," returned madame; "but don't tell me."

The Wind and the Fire might be told where to stop, but international scientific collaboration is another matter. As I mentioned in a recent *Train* column, China is growing as both a creator and consumer of scholarly content. The supporting data are in some ways staggering. To briefly recap, China's **GDP** investment in research and development will grow from around 1% earlier this decade to 2.5% in 2020. Higher education enrollment has increased more than five-fold since 1996. China had a 20-fold increase in publications in international scientific journals from 1981 to 2003. The other BRIC countries (Brazil, Russia, India, and China) are similarly emerging as important actors within the academic research system. However, legal restrictions, particularly within the United States, have limited the scope of collaboration between domestic and international scientists. Laws limit the extent to which federal funds can be shared with foreign collaborators. Visas regulations restrict face-to-face interaction among international team members. Espionage concerns cabin off dual-use equipment that might speed diffuse research efforts. While the protection of taxpayer resources and state secrets are principles that should not be taken lightly, several efforts are underway to loosen these restrictions in the name of scientific advancement. One notable example is the **American Association for the Advancement of Science's** recently launched **Center for Science Diplomacy** (see <http://diplomacy.aaas.org/>). In an era where connectivity and connectedness are increasingly the norm, one suspects that the impediments to international scientific collaboration will be eroded and perhaps overrun in the coming years.

"You anticipate what I would say, though you cannot know how earnestly I say it, how earnestly I feel it, without knowing my secret heart, and the hopes and fears and anxieties with which it has long been laden."

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Amazon could be the collector of university presses? Were this to happen, the effects of the

POD butterfly might not end here. With **Amazon** involved, what will happen to academic book vendors? Maybe **Amazon** could buy one or more of approval vendors and simplify the whole process. We live in interesting times. Watch out for butterflies! 🍄

Endnotes

1. "Bound." (June 5, 2008). *The Economist*. [Electronic Version]. Retrieved July 23, 2008 from http://www.economist.com/business/displaystory.cfm?story_id=11504752.
2. **Jones, Philip**. (May 27, 2008). **Bowker** reports huge US p.o.d. surge. *Bookseller.com*. Retrieved July 23, 2008 from <http://www.thebookseller.com/news/59802-bowker-reports-huge-us-pod-surge.html>.
3. **Tetreault, Melissa**. (March 2008). Short run books: "Digital printers offer runs of one to many." **Digital Publishing Solutions**. Retrieved July 23, 2008 from <http://www.dpsmagazine.com/content/ContentCT.asp?P=383>.
4. **Bacher, Thomas**. (July 31, 2007). **Rice E Press**. *Inside Higher ED*. Retrieved July 23, 2008 from <http://www.insidehighered.com/news/2007/07/31/ricepress>.



To the notion of social networks. I have had at least a dozen clients in the past year for which Web 2.0 strategies were a key concern, so I must be careful not to bite the hand that at least has a hand in feeding me. Having said that, the ever-increasing immediacy and intimacy of communication may be reaching its terminus. From blogs to **MySpace** to **Facebook** to **Twitter**, we are now looped into the most evanescent of moods, thoughts, and ruminations. The borders between personal and professional, profound and piffing, insight and inanity have never been blurrier. How do these networks influence the way scholars interact? What efficiencies are created? What impact does the ability to be so wired into other people's thoughts and actions, and, in turn, to have other people so wired into yours, have on the exchange of ideas? Perhaps the **Charleston Conference** can help us untangle these issues and learn to cut through the cluttering aspects of social networks.

"It is a far, far better thing that I do, than I have ever done; it is a far, far better rest that I go to, than I have ever known."

This one is easy isn't it? What is better than strolling through the lobby of the **Francis Marion Hotel** in early November when the **Charleston Conference** is in session? Catching up with old friends. Exchanging ideas on the next big thing with colleagues. Holding court in an overstuffed armchair as a session ends and familiar faces pour out, enlightened and invigorated. And crashing into the hotel bed after a full day of intellectual stimulation, capped off by a fine southern meal. A far, far better thing indeed. See you in November. 🍄