Designing a roadmap to a new bibliographic information ecosystem: Where ebook metadata fits in

A position paper submitted by: Todd A. Carpenter, Executive Director, National Information Standards Organization (NISO), USA

My primary responsibility is the management of a standards development organization in the space of information management and documentation. I also am responsible as Secretary for the ISO Technical Subcommittee (SC 9) on Identification and Description within ISO TC 46 – Information & Documentation. In this capacity, I am intimately involved with the development of the suite of international identifier standards related to publishing, media, and supply chain management (ISBN, ISSN, ISNI, ISRC, ISMN, ISAN, DOI, etc).

Participant's Interest

About NISO: NISO fosters the development and maintenance of standards that facilitate the creation, persistent management, and effective interchange of information so that it can be trusted for use in research and learning. To fulfill this mission, NISO engages libraries, publishers, information aggregators, and other organizations that support learning, research, and scholarship through the creation, organization, management, and curation of knowledge. NISO is a not-for-profit association accredited by the American National Standards Institute (ANSI). On behalf of ANSI, NISO also represents US interests to ISO for Technical Committee 46 (TC 46) - Information and Documentation and all of its four subcommittees.

As such, NISO's interests in electronic books is wide-ranging and includes:
The identification (identifiers) and description (metadata) of digital content;
The preservation of digital content;
Discovery and distribution of digital content;
XML Production of digital content;
Accessibility (for the visually impaired) of digital content

NISO is engaged in the development, maintenance and promotion a variety of standards related to these interest including (though not limited to):
ANSI/NISO Z39.2 - Information Interchange Format (MARC)
ANSI/NISO Z39.84 - Syntax for the Digital Object Identifier (DOI)
ANSI/NISO Z39.85 - Dublin Core Metadata Element Set
ANSI/NISO Z39.96 - JATS: Journal Article Tag Suite
ANSI/NISO Z39.98 - Authoring & Interchange Framework for Adaptive XML (DAISY)
NISO Z39.97-201x Digital Bookmarking and Annotation (in development)
NISO Z39.99-201x Specification for Web Resource Synchronization (in development)

Position Description

Last fall, the Andrew W. Mellon Foundation generously awarded NISO with a grant to support an initiative to develop a community roadmap outlining a path

toward a new bibliographic exchange environment. This roadmap will help support movement toward a future of bibliographic information exchange ecosystem. The bibliographic roadmap initiative aims to bring together as diverse a set of stakeholders as possible to outline current pilots, gaps in existing efforts, adoption barriers, and identify research necessary to support a development path for a transformed bibliographic information environment. Using a consensus process, NISO hopes to build agreement about the problems that we face, which are the best available solutions, and work toward coordinating community efforts.

Through an open virtual dialogue and an in-person meeting—again open and publicly accessible via online stream—, the initiative will ascertain the necessary elements of a bibliographic standards environment that are implementable, suit our global networked information environment, enhance data sharing, and are economically viable. We plan to explore priorities and coordinate the requirements of key communities including: libraries of all types including national libraries; technologists represented by organizations such as the W3C and the DCMI; publishers and other content providers; bibliographic data management system providers for the publishing and library communities; as well as other international standards development organizations.

Another important focus of the project will be the economics of our environment. Metadata management systems are complex computer systems that require tremendous resource investment either for the companies that develop them or for the companies that are their implementers. If there is going to be adoption of any new metadata future, that future must provide the community with either significantly cheaper development costs, drastically lower management costs, significantly better discovery or improved management services. The combination of those elements must provide greater value than the costs of implementing the new system. If they do not, organizations with already constrained resources will simply retain the "good enough" systems that are based on the current metadata exchange model.

The end result of this work will be a report that will identify exchange points where standards development is needed, and document suggested areas where functionality testing should be performed. The report will also help pinpoint at a high level the development priorities and coordination points needed over the next 24-36 months.

I would like to use the opportunity of this meeting to describe this initiative, explain its relevance to the publishing and technology communities, and encourage greater involvement from the commercial publishing, mass media and metadata exchange communities.

I look forward to this meeting and engaging with colleagues on these issues.