

Standards Column — The Problems of Institutional Identification: Toward a Universal Institutional ID

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One of the common jokes relating to standards is that they are such wonderful things because there are so many to choose from. Particularly as they relate to institutions and information exchange, this is true. Unfortunately, for our community no one type of institutional identifier satisfies every need or use; an entity can have many different types of identifiers, each with a different purpose. Institutions, as multifaceted entities that conduct a myriad of interactions, have, as a result, ever-expanding lists of identifiers that relate to each particular institution. So one might ask, “Do we really need another?” That question — and its answer — is not so simple as it may seem, however, and this complexity forms the core rationale for the organization of a new working group within NISO.

Institutional identification is a complicated issue with many overlapping concerns, problems, and use cases. For every identifier, the core questions that need answering are: What are you trying to identify? What makes the entity being identified unique? And how will the identifier be used? By asking these questions, we can begin to evaluate the existing institutional identification standards. We can also discover gaps that tell us where a new identifier would be useful — indeed, necessary.

Organizations have a variety of business functions and needs, and there are a number of unique identifiers related to these. Most organizations in the U.S. have an **Employer Identification Number (EIN)**, also known as a **Federal Tax Identification Number**, which is assigned by the **IRS** and used to identify a business entity. Another type of business identifier is the **D-U-N-S (Data Universal Numbering System) Number**, developed and regulated by **Dun & Bradstreet** — a for-profit financial reporting firm. A **D-U-N-S Number** is a “unique nine-digit sequence recognized as the universal standard for identifying and keeping track of over 100 million businesses worldwide.”⁷¹ Both the **EIN** and **D-U-N-S** identifiers are essential at an organizational level for many business practices and needs. Obviously, paying or reporting taxes are critical business functions, as is organizational identification for auditing and contractual purposes. However, these identifiers all focus on the top-level needs of an organization. They lack the specificity and granularity that publishers and information providers need, particularly when information is provided to smaller divisions within an entity, rather than to the organization as a whole. There are also layers and relationships between entities that are needed in the business of providing information, but that are not captured by either the **EIN** or **D-U-N-S** identifiers.



What about those identifiers that have been created for use by the information community? For example, the **Standard Address Number (SAN)** is an identifier for publishers, standardized by the NISO community to identify the specific delivery addresses of an organization.² Managed by **R.R. Bowker**, the **SAN**, **American National Standard ANSI/NISO Z39.43-1993**, is a seven-digit numeric identifier used to signify a specific address of an organization in (or served by) the publishing industry (including book and serial manufacturers, libraries, publishers, etc.). Originally created to expedite paper-based transactions, such as purchase orders and returns, the **SAN** has been designated as the organizational identifier for use in **EDI** transactions in the publishing industry.³ It is the method used by **PUBNET**, **X*NET**, and **PubEasy.com** systems and is required in all electronic data interchange communications using the **Book Industry Systems Advisory Committee (BISAC) EDI** formats.⁴ However, the **SAN** only represents delivery addresses, and thus lacks the relational information critical to effectively manage digital delivery of content, such as site license subscriptions or consortia relationships.

Further, there are identifiers that either exist or are in development for identification of libraries and related organizations. The **International Standard Identifier for Libraries and Related Organizations (ISIL)** is a standard (ISO 15511-2002)⁵ within the portfolio of **ISO's Technical Committee 46 on Information and Documentation**. In the original development of the standard, the primary focus was to create an identifier to enable access to the holdings of library collections. The **ISIL** also supports granularity, in that library units within an organization may obtain their own identifiers. While the **ISIL** captures the identification of libraries, it is limited in that it does not extend to the diverse world that receives information from the publishing community, which includes not only libraries, but also other entities, such as book stores, jobbers, etc. Similarly, the **MARC** system, maintained

by the **Library of Congress** and the **OCLC** communities, includes unique identifiers that are assigned to libraries within their own structures and systems. However, these proprietary identifiers are unique to these communities. Like **ISIL**, they focus specifically on the library community and do not include the variety and scope of other organizations served by the publishing community.

Because of these gaps and limitations, then, **NISO's Business Information Topic Committee** has charged a new working group — approved by the **NISO Voting Membership**

in early January — to look at the institutional identifier environment and develop a standard that can be implemented in all library and publishing environments, and will meet the needs of the majority of participants. There are a number of potential areas that this proposed new institutional identifier could improve both for libraries and publishers, as well as agents and aggregators. The following potential use cases are drawn from the final draft report of the **Journal Supply Chain Efficiency Improvement Pilot (JSCEIP)**.⁶

Benefits of a potential unique institutional identifier for libraries:

- Precision in order processing and renewal continuity
- Faster access activation to electronic content
- Coherent reporting
- Central IP registration and servicing
- Institutional relationships cataloged
- Documentation of holdings

Benefits of a potential unique institutional identifier for publishers:

- Market penetration knowledge
- Usage analysis
- Customer identification
- End-user identification
- Automatic institutional holdings reports

NISO's goal in creating this identifier is to help remove some of the challenges associated with the information supply chain and to reduce the transaction costs of managing a diverse information flow. The need for such an identifier has become especially acute among the customer service and sales functions within publishers and for digital subscription distribution. Building on the work of the **JSCEIP**, which was limited to journals, the **NISO** working group will conduct an initial analysis of existing identifiers and will explore the possibilities of incorporating these identifiers into a unique institutional identifier that will broadly address the entire library and publishing supply chain for all types of media. The group will then explore the structure and associated metadata for such a new identifier, if their initial review determines that one is indeed needed. In addition, finding ways to incorporate and interact with other existing identifiers is another goal of the group. While a variety of potential business models and services might be developed using such an identifier, the **NISO** working group will focus only on the development of the identifier and its associated data, along with a management structure for correcting and maintaining the metadata.

A slate of nominated participants to join the new working group is being compiled, for

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review and approval by the **Business Information Topic Committee**. Along with this core working group, a larger monitoring group will be formed that will allow interested individuals and organizations to be kept abreast of the working group's activities and to have the opportunity to provide input and feedback to the working group. If you or your organization is interested in participating in the monitoring group, please contact the **NISO** office.

The initial interest in this project has been significant and speaks to the complexity of the problems our community face managing the relationships among and between institutions that purchase content. While many important issues remain to be addressed, we have confidence that the developing working group will satisfactorily resolve them. In the end, we hope

there will be some added clarity surrounding much of the key identification data needed to provide information to institutions. 🌱

Endnotes

1. **Dun & Bradstreet Website** — http://www.dnb.com/US/duns_update/
2. **The SAN** — http://www.niso.org/standards/standard_detail.cfm?std_id=528
3. **SAN History** — <http://www.isbn.org/standards/home/isbn/us/san/san-history.asp>
4. **BISAC** — <http://www.bisg.org/bisac/>
5. **ISO 15511 - ISIL** — http://www.iso.org/iso/catalogue_detail?csnumber=27979
6. *Journal Supply Chain Efficiency Improvement Pilot Report* — **Chvatal, D.**, Editor. http://www.journalsupplychain.com/white_papers/JSCEI_Report_Final_Draft_20080111r.pdf