

Short review

Questions and issues about the conversion to 13-digit ISBN and ISSN revision in library systems

1. Introduction

The ISBN is a key identifier for publisher and library systems, and is a data element that is commonly exchanged during transactions or is used for linking in a variety of data processing functions. The ISBN is used for acquisition purposes, item identification, copyright management and borrowing fees to authors.

Coordination between systems that exchange data, both in terms of the coding of the ISBN and the precise timing of system changes, is essential for the uninterrupted functioning of systems. More than 160 countries use ISBNs. Currently, the library community does not have a clear standard for the treatment of 13-digit ISBNs during the transition period 2005–6, a shift some people say poses technical challenges similar to those experienced during the Y2K, as not all players will have their systems ready on time. The change will lead to a number of interoperability issues for ILS vendors and the book trade. Although no changes will have to be made to bibliographic databases, workflows will be affected.

2. Key date: 1 January 2007

The 13-digit ISBN will replace the 10-digit ISBN on 1 January 2007. The 13 digits consist of

- a 3-digit prefix of 978;¹
- the (original) 9 digits of the existing ISBN;
- a 1-digit certifier/controller (different from that of the 9-digit certifier).

3. Three key data providers: their plans for 2005

Library of Congress: 13-digit ISBNs will be stored in a 020 field of their own.

¹'979' will be used by the book trade for the new 13-digit ISBN, which will be used in parallel with the – also 13-digit – EAN (European Article Number).

OCLC (Online Computer Library Center): 13-digit ISBNs will be stored in a 024 field. Any 13-digit ISBNs input in the 020 field will be moved to the 020 \$z (invalid number) field. The ISBNs in the 024 field will be searchable as 'standard numbers' but not with an ISBN search. This is considered to be a temporary solution while OCLC transitions to a new platform.

RLG: RLIN21 allows the input and retrieval of 13-digit ISBNs in the 020 field and the input of 13-digit ISBNs in other MARC21 fields that have ISBN subfields. Some RLG users of older systems, however, will only be able to input 13-digit ISBNs in the \$z subfield of the 020 (invalid number) field.

4. ILS systems

In addition to accepting these records as input, Integrated Library System vendors are also working with interim solutions of their own for input and indexing. To date, no vendor has announced whether they will eventually convert all 10-digit ISBNs to 13-digit ISBNs by 2007 for data exchange and searching purposes. Some questions to be answered are:

1. Is the 020 \$a the target data element for the 13-digit ISBN? If so, when must all systems be prepared to make full use of this data element for input, indexing and communication functions?
2. Will a 'clean up' phase be needed for records that were created before systems were able to create 13-digit ISBNs in the standard location?
3. How will library systems handle 13-digit ISBNs in bibliographic fields that have ISBN subfields?
4. The ISBN Implementation Guidelines state that libraries should support both 10-digit and 13-digit ISBNs for patron and library use 'indefinitely', but that in 2007 those systems must send only 13-digit ISBNs in purchase transactions. How are library systems planning to implement these functions, and how will this affect the librarian and patron functions of input and searching in library catalogues?
5. If both 10-digit and 13-digit ISBNs are retained in records, should the standard identify those 10- and 13-digit ISBNs that are equivalent?

Libraries have to prepare for changes to their:

- acquisition module(s) and exchange programmes with book trade partners;
- catalogues and other bibliographical tools/databases (OPAC, portals, meta-searching, etc.);
- circulation and ILL systems;
- copy-cataloguing interfaces;
- RFID and barcode tools;
- interfaces with other bibliographical systems and national/regional library networks.

Also, URNs and DOIs will be affected when ISBNs are integrated.

5. Other information sources

- NISO; one of NISO's circulars² has been used in preparing this document;

²Pat Harris, Executive Director, NISO, 4733 Bethesda Avenue, Suite 300, Bethesda, MD 20814, USA. Tel.: 001 301 654 2512; Fax: 001 301 654 1721; E-mail: pharris@niso.org; www.niso.org.

- International ISBN Agency: Guidelines for the Implementation of 13-digit ISBNs. Berlin, 2004 (First edition/ revised September 2004). ISBN-10: 3-88053-108-0/ISBN-13: 978-3-88053-108-6. www.isbn-international.org;
- www.nlc-bnc.ca/iso/tc46sc9/;
- www.ean-int.org;
- www.editeur.org.

6. The ISSN: major revisions

At the same time major revisions to the ISSN are underway. In the digital information world, unique resource identifiers are critical for effectively meta-searching, linking to full-text search results, and migrating systems data. The International Standard Serial Number (ISSN) is one of the most used identifiers but the standard defining its structure and usage (ISO 3297:1998) is showing its age. An ISO working group, with strong participation from NISO, is re-examining the ISSN standard. The goal of this revision is to better address the assignment of ISSNs to all continuing resources regardless of format, to specify requirements for the display of the ISSN in information systems, and to identify metadata requirements when assigning ISSNs.

In 2004, the Working Group received feedback from ISSN users on various potential scenarios. Four subgroups are now addressing these core issues:

- *Scope*: What can an ISSN be assigned to? This is not a trivial question in today's web-enabled world of ephemeral information and personal blogs.
- *New services*: What new services (look-up? resolution?) can be offered based on the unique capabilities of the ISSN?
- *Title identification*: How can the ISSN be used with other naming systems such as Digital Object Identifiers (DOI), Serial Information Contribution Identifiers (SICI), or the 'info' URI scheme used in OpenURL?
- *Product identification*: Is there potential for a product level identifier that would interface with the ISSN?

The activities of the ISSN Working Group can be followed at their website.

In the meantime, the NISO-EDItEUR Joint Working Party has achieved an important milestone, with the release of a draft Serial Release Notification transaction format.

7. Serial Release Notification (SRN) released for comment

The NISO-EDItEUR Joint Working Party on the Exchange of Serial Subscription Information has completed a draft Serial Release Notification (SRN) transaction format. The draft SRN, background information on this work, and examples are available at www.fcla.edu/~pcaplan/jwp.

The goal of a SRN message is for a publisher or intermediary to announce the release of a serial issue or contribution unambiguously and as concisely as possible. Recipients of SRN messages can use this standard message in a variety of ways that add efficiency and value to their services; for example:

- An integrated library system can use a SRN message to automatically update a serial 'expected date' in its serials control module. With a real expected date, the numbers of premature claims for items assumed to be late should decrease.

- Abstracting and indexing services can prepare themselves for incoming issues in a more efficient way, thus improving workflow.
- The SRN will enable periodical aggregators and vendors to have a far better idea of the expected receipt date for a serial and anticipate their workload. Aggregators and vendors can also enhance the SRN message with locally produced information and add value to the services they already provide.
- SRN messages can be used to update (or maintain) library holdings in a serials union catalogue.
- SRN messages can be used to update an OpenURL link resolver with the most recent information about what a library has received.

Edited by Johan van Halm