The 13-Digit ISBN: How Will it Affect Libraries?



The ISBN standard is changing. Following a conference held at the British Library on 15th June entitled 'The 13-Digit ISBN: Introducing the new standard'¹, Terry Willan outlines the key issues for libraries.

The ISBN standard will change from 10 to 13 digits on 1 January 2007. By then at the latest, systems must be fully able to work with the new ISBN format.² Michael Healy's article³ alerted libraries to this a year ago. This is a reminder and a further examination of the issues for libraries.

Standard book numbers have existed in the UK since 1969 and the international standard was established in 1972. The ISBN is a product identifier, to facilitate trading. But libraries use it for far more than that. It has become a vital part of library management systems and other tools used by libraries. Software for handling ISBNs exists throughout the core functionality of these systems. Generally, the change is likely to have an impact on aspects such as online displays, form field lengths, data validation and printing, as well as EDI messages, indexing, searching and a wide range of processes involving record identification and matching.

Why and how is the ISBN changing?

The ISBN is used by publishers worldwide and its use in digital publishing, including an ISBN for each format of an e-book and for separately traded parts of books, has added to the pressure on capacity. The numbers in some areas are running low. ISBN revision is addressing issues of capacity, governance, funding and allocation rules.

An opportunity is also being taken to align standards. The new format will be identical to the EAN⁴, the global article numbering system, which is the standard for the barcode number that is printed on the back of the book. EANs with the prefix 978 are currently used for books. The next nine characters are the same as the first nine of the 10-digit ISBN. The last character, the check digit, is calculated differently for the EAN. This means it is easy to convert between the 10-digit ISBN and the 13-digit version. To make more numbers available, most of the EAN range beginning 979 has been designated for new format ISBNs (these will not have a 10-digit equivalent), to be used when the 978 range is exhausted.

Impact on library user services

Books with 10-digit ISBNs will exist in libraries indefinitely. Users may come with references to these books quoting either the 10- or 13-digit form. Library systems should allow users to be unaware of ISBN revision, allowing them to search using either ISBN form for all 10-digit ISBNs and those 13-digit ISBNs in the 978 range. This could mean changes to indexes and search interface software.

Many OPACs today include links to and from a variety of content and services based on an ISBN in the bibliographic record. These include enrichments such as jacket images, tables of contents, summaries and reviews, as well as web-based book retailers, reading list systems, whichbook.net, services delivered to or links from the institution portal and the Virtual Learning Environment and access to the full text of an e-book.

Library systems increasingly interact with each other and with other information sources through cross-searching or virtual union catalogues. Such searches with ISBNs could be hampered during the transition period as different libraries accommodate the ISBN change at different times. Furthermore, the ISBN is typically used by those systems that merge and deduplicate search results from multiple sources.

The contribution of bibliographic and holdings data to physical union catalogues could also be affected, as the ISBN is typically used for matching and linking holdings, and fixed length formats may be used to transmit holdings data.

Impact on library technical services

The searching and interoperability issues already mentioned may also apply in the back-office functions of library systems such as acquisitions, cataloguing inter-library loans. In addition, there may need to be changes in form field lengths and validation routines. Matching and deduplicating records when they are imported either online or in batches relies more or less on ISBNs.

But, for a moment of relief from all these impacts, the MARC format will not be affected by the ISBN change. The ISBN field in both MARC 21 and UKMARC formats is a variable data field so the length is not an issue. There should be no need to convert the data in bibliographic records.

2007 may seem a long way off, but from October 2004 both the British Library and the Library of Congress, under pressure from publishers, will begin entering 13-digit ISBNs into their MARC records alongside their 10-digit equivalents. These records will quickly find their way into library systems worldwide.

The International ISBN Agency has published Guidelines for the Implementation of 13 Digit ISBNs.⁵ From 1st January 2007 all ISBNs quoted in trading must be in the 13-digit form, even for books published earlier. This affects library acquisitions systems and EDI messaging with book suppliers. Book Industry Communication (BIC) has produced guidelines for the implementation of 13-digit ISBNs in EDI trading⁶ to facilitate an orderly transition. From 1st January 2006, all EDI messages should carry both the 10-digit ISBN and the EAN. Systems can and should start doing this now. By the end of 2006, systems should be able to receive and use the EAN instead of the ISBN and from then on cease sending the ISBN data element.

Conclusions and actions

Libraries are complex operations with complex systems, extended further through increasing interaction with other systems. The ISBN plays a vital role as a standard identifier enabling a wide range of functions and its change will have extensive ramifications.

Libraries need to start planning to cope with ISBN revision. This requires talking to system suppliers, materials suppliers, bibliographic record suppliers, consortial and ILL partners, linked content and service providers and users, institution portal and VLE managers and anyone else where there may be ISBN-based system interaction.

References

1. Conference presentations: www.bic.org.uk/13-digitisbn.html

2. For more information, see the web site of the ISO committee with responsibility for revising the ISBN standard: www.lac-bac.gc.ca/iso/tc46sc9/wg4.htm

- 3. M. Healy. 'Think of a number' CILIP Update, June 2003
- 4. www.ean-int.org/
- 5. Guidelines available from www.isbn-international.org/en/revision.html
- 6. <u>www.bic.org.uk</u>

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