Developments and Initiatives

ISBN - renewed for 21st century

by Michael Healy, Convenor, ISO/TC 46, Information and documentation, SC 9, Identification and description, WG 4, International Standard Book Numbering (ISBN)



ince its inception in 1970, the International Standard Book Number (ISBN) has been an essential part of the global book trade, linking publishers with retailers and libraries and enabling electronic transactions in their ordering, inventory and catalogue systems. For over three decades the ISBN identifier has accompa-

About the author



Michael Healy is the Editorial Director of Nielsen Book-Data and heads its operation that provides the bibliographic data for all the company's

products and services. In addition to his editorial responsibilities, Michael has been extensively involved in a wide range of standards initiatives in the book industry and is currently Vice-Chair of The International ISBN Agency.

nied each book or similar monographic publication from the time of its production and onwards throughout the entire information supply chain. The global success of this system has been the envy of other industries.

However, this very success has put pressure on the numbering capacity of this 10-digit identifier. In countries where the ISBN has been well established for decades, an increase in conventional publishing coupled with the explosive growth of electronic publications, the Internet, and e-commerce have fuelled the demand for ISBNs, the worldwide use of which has also risen each year to a current total of over 160 countries. The result of these increased demands means that the supply of available 10digit ISBNs in some countries will be depleted within this decade.

Addressing the ISBN boom

In 2002, the ISO committee that is responsible for standard identifiers in the field of information and documentation - ISO/TC 46/SC 9, Identification and description - decided to address the capacity issue well before the ISBN system actually ran out of numbers and while publishers, booksellers and libraries still had time to prepare for the necessary changes to their inventory, ordering and catalogue systems.

Jane Thacker, who manages the ISO/TC 46/SC 9 Secretariat at what was then the National Library of Canada, (now Library and Archives Canada), prepared a project proposal and established an international working group to negotiate changes to the ISBN system and draft the new edition of ISO 2108. This broad task was aimed at ensuring that the ISBN continues to serve the existing and emerging needs of publishers, librarians and booksellers over the next ten to twenty years.

Against this background, the ISBN working group met for the first time at a meeting hosted by the National Library of Canada in February 2002. It was given a clear timetable for its work, in line with ISO's project management rules, and was asked to complete the revision and publish the new ISBN standard by early 2005. In spite of the magnitude of their task, the group made exceptionally good progress. They very quickly reached agreement on how the capacity of the ISBN system would be increased and then focussed on the details of implementing that solution and clarifying other issues, such as the assignment of ISBN to electronic publications. The ISO review and voting stages provided valuable feedback from users about the proposed changes to the ISBN, which the working group then addressed in the form of implementation guidelines for the different communities that will be affected by these changes.

Implications of the new ISO 2108 standard

So what are the implications of the new ISO 2108 standard for publishers, booksellers, libraries, distributors, systems suppliers and other sectors of the book supply chain that have come to rely on the ISBN over the past thirty years? The most significant change, which will affect everyone using ISBNs, is the new digit format to take effect 1 January 2007.

The new 13-digit ISBN consists of three parts. The first part will be a three-digit EAN product code for the ISBN system, known as the "Bookland" prefix. Initially this code will be the prefix 978, but when that capacity is exhausted the EAN product code 979 will be added to the ISBN system. The second part of a 13-digit ISBN is nine digits long and comprised of the following three elements: ISBN registration group, publisher, and publication identifier. The final component is a check digit used to verify the accurate transcription of each ISBN.

"...an increase in conventional publishing coupled with the explosive growth of electronic publications, the Internet, and e-commerce have fuelled the demand for ISBNs."

One obvious effect of the change is that the new 13-digit ISBN will be identical to the 13-digit EAN barcode number. But the main effect and the greatest benefit of the change will be to secure sufficient ISBN capacity to serve the book industry's needs for many years ahead, by negotiating for additional EAN codes in the event of future capacity problems.

Key elements of the new edition of ISO 2108:

- → ISBN will become a 13-digit number as of 1 January 2007;
- → The new ISBN will be completely compatible with the EAN 13digit product code system;
- → Publishers will have to recalculate existing 10-digit ISBNs for items that are still in print and subject to further trade;
- → Libraries will have to accommodate both 10-digit and 13-digit ISBNs in their catalogue systems;
- → Publishers will be encouraged to provide metadata to ISBN agencies about the items to which ISBN have been assigned;
- → The ISBN system will have a new registration authority and shared arrangements for funding international administration of the ISBN system.

The upgrading process

What will happen to all the 10digit ISBNs currently in circulation and already allocated to books? Publishers will have to adjust their systems to accommodate the new format and convert - for all their available titles - from 10 to 13-digit ISBNs, and consider converting the ISBNs for most of their out of print titles if they expect to continue receiving orders or enquiries about those titles. They will also have to determine whether they have any 10-digit ISBNs that have not yet been assigned and convert those numbers to the new 13-digit format. Inventory systems, catalogues and contracts, as well as editorial, bibliographic, rights management and other publisher systems will all be affected and should be reviewed to ensure that they are ready for the change to a 13-digit ISBN.

Booksellers also need to be ready to handle the new 13-digit ISBN in their ordering and invoicing applications and should do so well before January 2007. Their task will be made somewhat easier, however, because most retail systems already routinely handle 13-digit product numbers because of the use of bar codes on books at the point-of-sale.

Libraries are also preparing for the change, although their challenge is somewhat different, since their databases will have to continue to accommodate both the 10 and 13-digit ISBNs to ensure access to their collections that include older materials as well as current publications.

Although 1 January 2007 is the official date when the 13-digit ISBN is to come into effect, many publishers and booksellers have already decided to implement the new ISBN format with their trading partners. To do so, they will print the new 13-digit ISBN alongside its 10-digit equivalent on books and advance publicity materials well before the official 2007 date – but regardless of when publishers begin using the new 13-digit ISBN, extensive preparation and consultation with their national ISBN agency and their trading partners will be needed.

Significant changes

While the change in the format of the ISBN is the most significant feature of the current revision project – and the most extensive change to ISBN since its inception –there are many other changes in the new edition of ISO 2108. For example, the revised standard clarifies which categories of publication can and cannot be assigned an ISBN. It also covers how they should be used for electronic publications, stipulating that every separately tradable version of an electronic publication be given a unique ISBN.

In line with other recent identifier standards developed by ISO/TC 46/SC 9, the new edition of ISO 2108 also encourages publishers to submit a specified set of descriptive data (metadata) about each publication to the ISBN agency whenever an ISBN is assigned. This development reflects the importance of linking an assigned ISBN to metadata in accessible systems such as "books in print" databases and library catalogues. The new standard stops short of making the registration of ISBN metadata mandatory, because ISBN agencies in some countries do not yet have the systems in place to handle the collection of metadata as part of their ISBN assignment processes. Nevertheless, publishers in most countries will be encouraged, for the first time, to provide data elements such as title, contributor, publisher, and date of publication when each ISBN is assigned. The data is to be provided in a format compatible with the widely used ONIX (Online Information Exchange) product information standard for recording and communicating data in the book trade.

Another aim of the ISBN revision project was to clarify the arrangements for administering, governing and funding the ISBN system. Until now, the international administration of the ISBN system has been provided through the generous support of the Berlin State Library and Prussian Cultural Foundation, which has provided the staff and premises for the Registration Authority for ISO 2108 – also known as the International ISBN Agency – for almost

"... the greatest benefit of the change to a 13-digit ISBN will be to secure sufficient ISBN capacity to serve the book industry's needs for many years ahead."

35 years. Under the new arrangements, administration of the ISBN system will be funded by contributions from the ISBN agencies. A new, not-for-profit organization has been created to act as the governing body for the ISBN system, with the national and regional ISBN agencies being the members of that organization and contributing to its costs of operations. These changes, negotiated in tandem with revisions to the ISBN standard, will put the Registration Authority for ISO 2108 on a solid financial and contractual basis to address future challenges, including global implementation of the 13-digit ISBN.

The widespread influence of the ISBN system means that communicating these changes is a task of global proportions. Implementation guidelines have been prepared as well as a new version of the ISBN users' manual, for the relevant agencies to promote the changes as widely as possible in their countries or regions. Many presentations have already been given, and many more are planned, for publishing, bookselling and library conferences, in order to spread the message globally, that far-reaching changes will soon be established, to ensure that the ISBN remains a cornerstone of the book trade for decades to come.

ISO's role in the revision process

What was ISO's role in the ISBN revision process? First and foremost, the ISBN system is based on an ISO International Standard which provided a clear framework and process for negotiating the changes to the ISBN system in a fair, efficient and timely manner. At the committee level, ISO/TC 46/SC 9 provided administrative support, technical expertise and an international reputation in the development of identifiers for the content industries. Brian Green, Chair of ISO/TC 46/SC 9 and a key player in the ISBN negotiations, says that "in effect, ISO's role is embodied in the first two letters of the ISBN itself. The overwhelming success of the International Standard Book Number is largely because of these two aspects - it is truly international and genuinely standard across all sectors of the information supply chain. ISO provided the structure and processes to achieve that level of consensus and move the ISBN forward with greater capacity and renewed confirmation of its global relevance."

Additional information and a set of Frequently Asked Questions about changes to the ISBN are available on a Web site provided by the ISO/TC 46/SC 9 Secretariat at: http://www.lac-bac.gc.ca/iso/tc46sc9/2108.htm.

ISO 2108:2005, Information and documentation – International Standard Book Number (ISBN), is available from ISO national member institutes and from the ISO Central Secretariat.

