April 2005

Implementation Timeline for ISBN-13 at the Library of Congress

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Recommended Citation

Bucknum, David (2005) "Implementation Timeline for ISBN-13 at the Library of Congress," *Against the Grain*: Vol. 17: Iss. 2, Article 7.

DOI: <https://doi.org/10.7771/2380-176X.4788>

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The ISBN Agency and ISBN-13

by **John Krafty** (Product Manager, Books In Print®, R. R. Bowker)
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R. R. Bowker has been the **U.S. ISBN Agency** since 1968 and the **Australian ISBN Agency** (through its **Thorpe-Bowker** division) since 2002. An **ISBN Agency** is responsible for the overall administration of the **ISBN** system within its registration group. These responsibilities are:

- to issue notification of the assignment of an **ISBN**
- to create and maintain registers of **ISBNs** and **ISBN** metadata
- to make **ISBN** and associated metadata available to other registration agencies and to users of the **ISBN** system
- to promote, educate, and train others in the use of the **ISBN**

As a member of the **International ISBN Agency**, **Bowker** has been involved in discussions about **ISBN-13** since the late 1990's. The first official planning session on expanding the **ISBN** took place in mid 2000, and continued until the final draft was approved in the spring of 2004.

Bowker-specific preparations began in early 2004. Obviously, this involved technical changes to the many internal and external systems, but also involved the education of publishers in the U.S. and Australia as part of its **ISBN Agency** responsibilities.

In October 2004, **Bowker** sent an email to over 115,000 U.S. publishers informing them of the expansion of the **ISBN** and its implications. **Bowker** also hosts important information about this topic on their **Agency Website** at www.isbn.org, including an **ISBN-13 Conversion Toolkit** at <http://isbn.org/toolkit.html>. The toolkit includes a free online tool which will convert an **ISBN-10** to an **ISBN-13**. Also at no cost, **Bowker** will convert large files of **ISBNs**, via batch. Interested publishers can find more information about this service at: <http://isbn.org/largeconvert/largeconvert.html>.

Of all the questions the **ISBN Agency** receives about the **ISBN-13**, these two are the most common:

Q: Is converting my ISBN-10 to the ISBN-13 as simple as inserting the "978" prefix before the ISBN-10?

A: No. As described elsewhere in this issue, the **ISBN-13** will not only have the **978** prefix preceding the **ISBN**, but the check digit of the **ISBN-10** will be dropped and a new algorithm will be applied to calculate a new check digit.

Q: Will I be assigned the same publisher prefixes for ISBN-13 as I have for ISBN-10?

A: No. **Regional ISBN Agencies** (like **Bowker**) receive their **ISBN** publisher prefix allocation ranges from the international **ISBN Agency**. There is no way to predict that the agencies will receive the same prefix range allocations as in the past.

In April 2005, subscribers to **Bowker's** online (**BIP**) products will see the **ISBN-13** on search results and full display pages. These products will also support searches using either the **ISBN-10** or **-13**. Also at this time, **Bowker** will offer **ISBN-13** conversion services for bookseller and libraries.

The good news is that the **EAN/UCC** has committed to providing future three digit prefixes for the **ISBN**, so there is no immediate threat of running out, at least not in our lifetime! 🍀

against the grain people profile

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John A. Krafty

BORN & LIVED: Born, raised and still live in Bethlehem, PA.

EARLY LIFE: Catholic grade school — need I say more?

FAMILY: Lives with **Jim**, his partner of 14 years.

EDUCATION: BA — Telecommunications, **Penn State University** — 1986. MBA — Finance, **St Joseph's University** — 1995.

FIRST JOB: Newspaper delivery.

IN MY SPARE TIME I LIKE TO: Listen to music, read non-fiction, garden, run, bicycle or just enjoy the outdoors!

PET PEEVES/WHAT MAKES ME MAD: Self-centered people.

PHILOSOPHY: You only live once, so you might as well enjoy yourself!

MOST MEANINGFUL CAREER ACHIEVEMENT: The development and launch of *PatronBooksInPrint.com*.

HOW/WHERE DO I SEE THE INDUSTRY IN FIVE YEARS: Access to on-demand, pay-as-you-go book content (similar to music and iTunes).

Implementation Timeline for ISBN-13 at the Library of Congress

by **David Bucknum** (Automated Operations Coordinator, CIP Division, Library of Congress) <dabu@loc.gov>

December 2003

The **Cataloging in Publication Division** at the **Library of Congress** received a query from a major publishing house requesting permission to

add **ISBNs** in the new **13-digit** format to the **Library of Congress Cataloging-In-Publication (CIP)** data. While informal discussions concern-

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ing our readiness to implement **ISBN-13** were under way, specifically with regard to the impact on our bibliographic systems and applications, we believed there would be sufficient time to make any necessary changes well in advance of the proposed date for full implementation (1/1/2007). Moreover, the **International Organization of Standardization (ISO)** working group charged with drafting the revised standard (**ISO 2108**) was not due to publish the final specifications until January 2005. However, in response to the publishers who wanted to implement **ISBN-13** as early as 2003, and to preserve the integrity of our bibliographic data, we were compelled to respond quickly by drafting a comprehensive policy statement and developing a strategy to integrate the new format into our existing bibliographic systems and data.

January 2004

At **ALA Midwinter**, in San Diego, stakeholders from various divisions of the **Library of Congress** elected to pursue fact-finding activities, both informally and formally through their respective committees, prior to meeting as a group to formulate a strategic plan for implementation of **ISBN-13**. In addition, there was a **NISO**-sponsored conference meeting ("Size matters: Preparing for the Expanded ISBN") scheduled to take place on Monday, January 12, 2004. From these sources, we expected to glean information on issues of importance for publishers, libraries, and bibliographic data systems.

Meanwhile, we gathered additional information on two fronts regarding:

1. Revisions that would need to be made to our bibliographic systems and software in order to provide publishers the capability to submit **13-digit ISBNs** to the **Library of Congress** via the **Cataloging In Publication** program and the **Pre-assigned Control Number (PCN)** program (which assigns **LCCNs**) and how long these changes would take to implement.

After bibliographic systems and software experts studied the issue, it was determined that several applications would indeed need to be revised, including software to produce **MARC21** records from application data in the **Electronic CIP** and **Electronic PCN** online systems, **CIP** data generator applications (i.e., to provide publishers with **CIP** data), and **MARC21** record validation programs. However, the experts stated that the updates could be completed in a relatively short time.

2. The readiness of publishers to supply pairs of **13-** and **10-digit ISBNs** for forthcoming publications during the "interim" period from January 1, 2005 to January 1, 2007 (i.e., in advance of the full implementation date).

The **Library of Congress** representative to the **BISAC Metadata Com-**

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BORN & LIVED: New Orleans, LA; Mountain Brook, AL; Cambridge and Watertown, MA; Concord, NH; now in Woodstock, GA.

FAMILY: Three brothers, one niece, six nephews.

EDUCATION: AB from **Harvard**, MSLS from **Simmons**.

FIRST JOB: Assistant Head of Technical Services, Lamont & Hilles Libraries, **Harvard University**.

IN MY SPARE TIME I LIKE TO: Follow **NASCAR**, listen to music (mainly **Elvis**, jazz vocals, country), sing, go to concerts, work jigsaw and crossword puzzles.

FAVORITE BOOKS: *The Phantom Tollbooth* by **Norton Juster**, *Last Train to Memphis* by **Peter Guralnick**.

HOW/WHERE DO I SEE THE INDUSTRY IN FIVE YEARS: Continuing expansion of eBooks; continued tension between libraries' monographic and serials budgets.

mittee of the **Book Industry Study Group** was asked about the topic at their monthly meeting and reported to us that several publishers were intent on phasing in **13-digit ISBNs** beginning in Spring 2004. In addition, the committee requested an adjustment to the format of **Cataloging-In-Publication** data to conform to the **International ISBN Agency** guidelines (<http://www.isbn-international.org/en/revision.html>), which mandate that, during the interim period, the **13-digit ISBN** and its **10-digit** counterpart be printed on separate lines by manifestation (e.g., "hardcover," "paperback"), for example:

ISBN-13: 978-1-873671-00-0 (hardcover)

ISBN-10: 1-873671-00-8 (hardcover)

February 2004

Stakeholders from the **Library of Congress' Bibliographic Access Divisions**, including **CIP** and the **Cataloging Policy and Support Office (CPSO)**; **ILS Program Office**; and the **Network Development/MARC Standards Office** met to discuss issues surrounding the proposed implementation of **ISBN-13** in order to formulate a clear and timely response to our constituencies: the publishing and library communities. A consensus emerged: if publishers were ready to begin printing **13-digit ISBNs** in forthcoming publications, the **Library of Congress** must be prepared to record the new number format as part of the descriptive cataloging process and incorporate it into the **CIP** data.

However, several technical questions remained to be addressed prior to implementation, including:

1. Could integrated library systems, including those used by the **Library of Congress** and bibliographic partner institutions (e.g., **OCLC**, **RLG**, the **British Library**, the **Library and Archives of Canada**), accommodate the **13-digit ISBN** format?

The **ILS Program Office** and **CPSO** representatives held that the **Library of Congress** would have no problems accommodating **13-digit ISBNs**, since the **MARC21 020** field is of variable length and would be indexed as such.

Since we did not know whether or not the same would hold true for the diverse systems used by our partner institutions, we decided to survey each of them individually concerning the potential impact of 13-digit ISBNs on their software applications.

2. Would content designation in the **MARC21 020** field need to be revised to accommodate linked pairs of **ISBNs** by manifestation as mandated by the **HIA**?

There was some discussion with regard to how the pairs of **13-** and **10-digit ISBNs** would be described in the **MARC21** bibliographic record. Some believed that the pairs should be entered into the same **020** field delimited by two "a" subfields. Unfortunately, this would have required a lengthy process to change the **MARC21 020** content designation, since the "a" subfield is currently not repeatable. In addition, this would have entailed additional revisions to our software applications.

Consequently, we decided to record them in repeated 020 fields grouped by manifestation.

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3. Should **Library of Congress CIP** data be adapted to conform to the new **ISBN** format (i.e., pairs of **ISBNs** by manifestation) as mandated by the **IIA** guidelines?

There was strong disagreement on this issue. Some held the opinion that since **CIP** data had been based on the machine-readable card format for decades and, secondly, since it is indeed "virtual" metadata (i.e., printed in the book, but not part of the content), we should not alter the structure of **ISBNs** in **CIP** data to accommodate the **IIA** prescribed format for **ISBN-13** and **ISBN-10**.

*However, after considering the dilemma facing publishers having to print twice as many **ISBNs** in the book for each manifestation, we reached a compromise.*

Interim Compromise

During the interim period from January 1, 2005 through January 1, 2007, pairs of **13-** and **10-digit ISBNs** would appear in the prescribed format within the **CIP** data, but if a record contained more than two such pairs of **ISBNs**, only the first two pairs would appear in the data followed by "[etc.]" This limitation was intended to address space considerations. But, beginning January 1, 2007, **CIP** data would revert to the traditional format, comprised of only **13-digit ISBNs**.

4. When would the necessary revisions to the **Library of Congress'** online systems and software applications be completed?

*Bibliographic systems and software experts at **LC** reported that all necessary revisions to online systems and software applications could be completed by July 1, 2004. However, after a series of consultations, our bibliographic partner institutions and the **BISAC Metadata Committee** agreed to an official implementation date of October 1, 2004. This would allow our partner institutions to adequately prepare their bibliographic information systems for **ISBN-13** implementation, and, at the same time, grant publishers sufficient time (i.e., prior to the start of the interim period) to submit **CIP** and **PCN** applications containing **13-digit ISBNs** for forthcoming books to be published during the interim period. In addition, the **ALA Annual Conference** in Orlando (mid-June 2004) would provide further opportunity for the various stakeholders to con-*

sult with one another regarding any remaining implementation issues. For example, the **CIP Division** intended to discuss the proposed changes to the **CIP** data format at the meeting of the **CIP Advisory Group**.

May 2004

LC began distribution of the official **Library of Congress** policy statement for implementation of the **13-digit ISBN** to constituent groups including publishers, librarians, and **LC** staff members. Among the intended audiences were: the **BISAC Metadata Committee**, **Library of Congress MARC Distribution Services (MDS)** subscribers, **Program for Cooperative Cataloging** institutions, and the **National Library of Medicine** (a **CIP** cooperative cataloging institution). The **ISBN-13** policy statement was made available online on the **CPSO** and **CIP/PCN** Websites, and summarized in a **Library of Congress Cataloging Newsline** article. **Library of Congress** staff, including catalogers, technicians, and **CIP** publisher liaisons also received a revised **Library of Congress Rule Interpretation (LCRI 1.8)**, which provides detailed instructions on the new **ISBN-13** format and how to record the numbers in the **MARC21** record.

October 2004

With all systems and software application updates in place well in advance of the implementation date, the **Library of Congress** began accepting **13-digit ISBNs**. The only issue that has arisen since that time is the question of unpaired **13-digit ISBNs** (i.e., without a corresponding **10-digit** number). Although **Library of Congress** catalogers were instructed not to include single **13-digit ISBNs** in the bibliographic record, upon further reflection, we decided that a rare occurrence of an unpaired **ISBN-13** would still provide valid descriptive information and aid the user in searching for a particular title.

February 2005

During the last four months, more than 500 bibliographic records containing pairs of **13-** and **10-digit ISBNs** have been created and distributed; the vast majority of them were products of our **Electronic CIP** program (<http://cip.loc.gov/>). We anticipate that these numbers will increase dramatically during the next year, particularly as more and more publishers begin to supply **13-digit ISBNs** for forthcoming publications via the **CIP** and **PCN** programs.

Full text of the "Library of Congress Plan to Accommodate 13-digit ISBN" is available online at: <http://www.loc.gov/catdir/cpsol/13digit.html>.

ISBN-13: A Publisher's Checklist

by **Greg Giblin** (Director of Market Development, STM Division, John Wiley and Sons, Inc.) <ggiblin@wiley.com>

Implementation of **ISBN-13** represents a unique challenge to publishers. By January 1, 2007 all publishers must be fully compliant with the new **ISBN-13** standard. Systems must be able to work with the new standard and be interoperable internally as well as with trading partners and customers. The purpose of this article is to remind fellow publishers that major changes are afoot and to present some of the key issues involved in making a smooth transition into the new **ISBN-13** environment.

Involve All Stakeholders

To publishers, the conversion to **ISBN-13** has an impact on the organization that is comparable to that of **Y2K** in the late 90s. Or for the less dramatic, the addition of a three digit area code to formerly seven digit phone numbers. In order to address the multifaceted aspects of this new standard, publishers need to develop a coordinated global effort that includes compliance and participation of all its respective publishing centers across North America, Europe, Asia and Australia. Additionally, publishers often have several publishing groups or divi-

sions within their larger organization, such as Trade/Consumer, Professional, Scientific, Technical and Medical, and Higher Education divisions. Cross-divisional collaboration is critical because workflows, reporting systems, distribution channels and trading partners can all vary due to the nature of these respective businesses.

As well, representation is needed from all operational and support areas such as IT, distribution, production, and finance. These groups will be heavily involved in many aspects and phases of the new system's implementation.

Implement in Phases

In order to successfully migrate to the new standard, publishers need to create a timeline for implementation that addresses all relevant internal and external dependencies. Because the **ISBN** drives so many of our systems, pub-

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