

The International Standard Book Number System

ISBN Users' Manual

International Edition

Fifth Edition

International ISBN Agency
Berlin 2005

The most up-to-date version of the *ISBN Users' Manual* will be found on the website of the International ISBN Agency:
<http://www.isbn-international.org>

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Fifth Edition

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Preface to the Fifth Edition

The International Standard Book Number has been a remarkable success story since its inception in 1968 as the “Standard Book Number” (SBN) in the United Kingdom. Within a year the SBN was transformed into the International SBN, and was extended from a nine-digit to a ten-digit number. Since its ratification by ISO as International Standard 2108 in 1970, the international coordination of the ISBN system has been the responsibility of the International ISBN Agency in Berlin, a unit within the Berlin State Library. At present, 166 countries are members of the ISBN system.

The success of the ISBN together with the development and popularity of electronic publications gave rise to concern regarding the overall capacity of the current ISBN system in ten-digit form. It was decided to revise the standard using the EAN/Bookland version of the number as the new, thirteen-digit identifier to secure capacity for many years to come. A number of alternatives were assessed, but this was regarded as the most convenient solution since the trade was quite familiar with it as the bar coded form of the ISBN. Furthermore, EAN.UCC, the regulators for bar coding internationally, declared their readiness to provide additional three-digit EAN prefixes, effectively guaranteeing the future capacity of the system.

During the revision process the opportunity was taken to examine and redefine the scope of material that is applicable for identification by ISBN. The new standard incorporates chapters of publications, even articles (when made available separately) as eligible within its scope. Included in this manual is an extensive Frequently Asked Questions section to help users with the correct application of the numbering system as well as guidance towards implementing the thirteen-digit ISBN. To assist ONIX users, a dedicated section specifies the kernel metadata for ISBN. Additionally, to create a firm foundation for the future, ISBN is becoming formalised as a membership-based organisation, maintained by contributions from all locally appointed agencies. Further details of the new governance structure are dealt with in separate documents.

The *ISBN Users’ Manual* is the official commentary on the text of the ISO-approved standard; it translates its general provisions into concrete guidelines and provides illustrative examples. The manual is published simultaneously with the release of the new standard by ISO to assist agencies and publishers both in the transition period up to 1 January 2007 and to establish good ISBN practice in terms of the new scope and principles of assignment. In particular, the more detailed information on eligible products, electronic publications, etc., will be welcome to users now — they are not linked to a date or deadline.

The present *Users’ Manual* was prepared by a number of ISBN agencies, and includes much input from the international representatives on the ISO 2108 revision working group, under the able coordination of Stella Griffiths (UK ISBN Agency); the contributors deserve the thanks of the whole ISBN community.

Needless to say, given that the application of ISBN is dynamic, this manual will certainly undergo small changes in the future. Nevertheless, it should be regarded as a reliable guide for the next ten years.

January 2005, Berlin

Hartmut Walravens

1. Background

The question of the need for and feasibility of an international numbering system for books was first discussed at the Third International Conference on Book Market Research and Rationalisation in the Book Trade, held in November 1966 in Berlin.

At that time, a number of European publishers and book distributors were considering the use of computers for order processing and inventory control, and it was evident that a prerequisite for an efficient automated system was a unique and simple identification number for a published item.

The system that fulfilled this requirement and became known as the International Standard Book Number (ISBN) system was developed out of the book numbering system introduced in the United Kingdom in 1967 by J. Whitaker & Sons, Ltd., and in the United States in 1968 by R. R. Bowker.

At the same time, the International Organization for Standardization (ISO) Technical Committee 46 on Information and Documentation set up a working party to investigate the possibility of adapting the British system for international use.

During 1968 and 1969 several meetings took place between representatives from various European countries and the United States, and a report was circulated to all countries belonging to ISO.

As a result of these meetings the International Standard Book Number (ISBN) was approved as ISO standard 2108¹ in 1970. In 1992 the third edition of this standard replaced the second edition of 1978.

The purpose of the international standard is to coordinate and standardise the international use of ISBNs to identify uniquely one publication or edition of a publication published by one specific publisher.

The original standard has been revised as book and book-like items begin to appear in new forms of media, and the system is in use today in over 160 countries.

Since 2001 a working group comprising nominated delegates from national standards organisations, representing ISBN agencies, publishers, booksellers, libraries, and systems vendors, has been developing the fourth edition of the standard. This fourth edition is probably the most extensive revision of the ISBN to date. It has increased the numbering capacity of the system, specified the metadata that should be supplied at the time of ISBN assignment, developed rules for the administration and governance of the system as well as specifying the registration authority for the standard. In achieving these objectives, the structure and length of the ISBN has been changed for the first time since its inception.

This manual explains the functioning of the system and the steps necessary to ensure that ISBNs are correctly assigned, and provides guidance for the transition period from the ten-digit structure to the newly expanded ISBN and beyond.

¹ Obtainable from national standards organisations.

2. Advantages of the ISBN

- The ISBN is a unique international identifier for monographic publications; assigning a number replaces the handling of long bibliographic descriptive records. Time and staff are saved, and copying mistakes are avoided.
- The ISBN allows compilation and updating of book-trade directories and bibliographic databases, such as catalogues of books-in-print. Information on available books can be found easily.
- Ordering and distribution of books is mainly executed by ISBN; this is a fast and efficient method.
- The ISBN is machine-readable in the form of a 13-digit EAN.UCC bar code. This is fast and avoids mistakes.
- The ISBN is needed for the running of electronic point-of-sale systems in bookshops.
- Rights management is mainly done on the basis of the ISBN.
- The accumulation of sales data is done by the ISBN. This enables the varying successes of different product forms and editions of publications to be monitored, as well as enabling comparisons between different subject areas and even different publishing houses.
- The national lending right in some countries is based on the ISBN. Such schemes enable authors and illustrators to receive payments proportionate to the number of times that their books are lent out by public libraries.

3. The Function and Scope of the ISBN

Recognised in more than 160 countries throughout the world, the International Standard Book Number is a short and clear identifier that is potentially machine-readable. The ISBN denotes a particular monographic publication uniquely and should, therefore, be associated with it from early production stages. An essential instrument in production, distribution, sales analysis, and bibliographic data storage systems in the book trade, ISBN is also of vital importance to library information management.

However, where a product is appropriate to another specific numbering system (such as continuing resources and ongoing integrating resources, which qualify for the ISSN, and printed music, which qualifies for the ISMN), then that system must be used. If appropriate, such identifiers should be used in conjunction with the ISBN (see also section 13.1). Further information on other types of identifier is provided in section 13.

ISBNs are assigned to monographic publications and certain types of related products that are available to the public, whether those publications and related products are available on a gratis basis or to purchase. In addition, individual sections (such as chapters) of monographic publications or issues or articles of continuing resources that are made available separately may also use the ISBN as an identifier. With regard to the various media available, it is of no importance in what physical form the content is documented and distributed; however, each product form should be identified separately.

Some examples of types of monographic publications to which an ISBN **shall be** assigned are:

- Printed books and pamphlets
- Braille publications
- Publications that are not intended by the publisher to be updated regularly or continued indefinitely
- Individual articles² or issues of a particular continuing resource (but not the continuing resource in its entirety)
- Maps
- Educational/instructional films, videos and transparencies
- Audiobooks on cassette, or CD, or DVD (talking books)
- Electronic publications either on physical carriers (such as machine-readable tapes, diskettes, or CD-ROMs) or on the Internet
- Digitised copies of print monographic publications
- Microform publications
- Educational or instructional software
- Mixed media publications (where the principal constituent is text-based)

Some examples of the types of material to which an ISBN **shall NOT be** assigned are:

- Continuing resources³ treated in their entirety as bibliographic entities (individual issues may qualify for ISBNs)
- Abstract entities⁴ such as textual works and other abstract creations of intellectual or artistic content
- Ephemeral printed materials such as advertising matter and the like
- Printed music
- Art prints and art folders without title page and text
- Personal documents (such as an electronic curriculum vitae or personal profile)
- Greetings cards
- Music sound recordings
- Software that is intended for any purpose other than educational or instructional
- Electronic bulletin boards
- E-mails and other electronic correspondence
- Games

For further information including clarification about whether or not a particular type of product may qualify, please contact your local ISBN registration agency.

2 Where individual articles are made available separately by a publisher, they qualify as monographic publications and shall be assigned an ISBN. This does not apply in the case of offprint copies, which are ordered by the author(s) of the article for their own distribution purposes.

3 A publication that is issued over time with no predetermined conclusion. Such a publication is usually issued in successive or integrating issues, which generally have numerical and or chronological designations. Typical examples include serials such as newspapers, periodicals, journals, magazines, etc., and integrating resources such as updating loose-leaf publications and updating websites. Individual articles or issues that are available separately qualify as monographic publications and may be identified by the ISBN.

4 For example, each separate product form of the novel *The Old Man and the Sea* is eligible for an ISBN, but the novel itself, as an abstract textual work, shall not be assigned an ISBN.

4. Structure of the ISBN

From 1 January 2007, national ISBN agencies shall only provide ISBNs that consist of 13 digits, comprising the following elements:

- Prefix element
- Registration group element
- Registrant element
- Publication element
- Check digit

When printed, the ISBN is always preceded by the letters “ISBN”.

Note: In countries where the Latin alphabet is not used, an abbreviation in the characters of the local script may be used **in addition** to the Latin letters “ISBN”.

The ISBN is divided into five elements, three of them of variable length; the first and last elements are of fixed length. The elements must each be separated clearly by hyphens or spaces when displayed in *human readable* form:

ISBN 978-0-571-08989-5

or

ISBN 978 0 571 08989 5

Note: The use of hyphens or spaces has no lexical significance and is purely to enhance readability.

The number of digits in the second, third, and fourth elements of the ISBN (registration group element, registrant element, publication element) varies. The length of the registration group element and of the registrant element is relative to the anticipated publishing output of the registration group or registrant. When these elements are short in length it indicates that the output of the registration group or the registrant (or both) is expected to be a large number of publications.

4.1 Prefix element

The first element of the ISBN is a three-digit number that is made available by EAN International. Prefixes that have already been made available by EAN International are 978 and 979, but there may be a further prefix allocation made in the future as required to ensure the continued capacity of the ISBN system.

EXAMPLE: 978

4.2 Registration group element

The second element of the ISBN identifies the country, geographical region, or language area participating in the ISBN system. Some members of the ISBN system form language areas (e.g., registration group number 3 = German language group); others form regional units (e.g., registration group number 982 = South Pacific). The length of this element varies but may comprise up to 5 digits.

Registration group elements are allocated by the International ISBN Agency.

EXAMPLE: 978-0

4.3 Registrant element

The third element of the ISBN identifies a particular publisher or imprint within a registration group. The length of this element varies in direct relationship to the anticipated output of the publisher and may comprise up to 7 digits. Publishers with the largest expected title outputs are assigned the shortest registrant elements and vice versa.

Potential registrants apply to the ISBN group agency responsible for the management of the ISBN system within the country, region, or language group where they are based in order to be assigned registrant elements that are unique to them. Once they have exhausted the allocation of ISBNs that is linked to their registrant element, they may be assigned an additional registrant element providing further allocations of ISBNs.

EXAMPLE: 978-0-11

4.4 Publication element

The fourth element of the ISBN identifies a specific edition of a publication by a specific publisher. The length of this element varies in direct relationship to the anticipated output of the publisher concerned and may comprise up to 6 digits. Publishers with the largest expected title outputs are assigned the longest publication elements and vice versa. To ensure that the correct length of the ISBN is maintained, blank digits are represented by leading zeros.

EXAMPLE 978-0-11-000222

4.5 Check digit

The fifth element of the ISBN is the check digit. This is calculated using a modulus 10 algorithm.

Each of the first 12 digits of the ISBN is alternately multiplied by 1 and 3. The check digit is equal to 10 minus the remainder resulting from dividing the sum of the weighted products of the first 12 digits by 10 with one exception. If this calculation results in an apparent check digit of 10, the check digit is 0.

Use the following steps to calculate the check digit for the ISBN 978-0-11-000222-?:

Step 1: Determine the sum of the weighted products for the first 12 digits of the ISBN (see following table).

	Prefix element			Registration group element	Registrant element		Publication element						Check digit	Sum
	9	7	8		0	1	1	0	0	2	2	2		
ISBN	9	7	8	0	1	1	0	0	2	2	2	?		
Weight	1	3	1	3	1	3	1	3	1	3	1	3	-	

Product	9	21	8	0		1	3	0	0	0	6	2	6	-	56
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Step 2: Divide the sum of the weighted products of the first 12 digits of the ISBN calculated in step 1 by 10, determining the remainder.

$$56 / 10 = 5 \quad \text{remainder} = 6$$

Step 3: Subtract the remainder calculated in step 2 from 10. The resulting difference is the value of the check digit with one exception. If the remainder from step 2 is 0, the check digit is 0.

$$10 - 6 = 4$$

Check digit = 4

ISBN = 978-0-11-000222-4

The following mathematical formula is an alternative way of expressing the calculation of the check digit:

$$\text{Check digit} = \text{mod } 10 (10 - [\text{mod } 10 \{\text{sum of weighted products of the first 12 ISBN digits}\}])$$

$$\text{Check digit} = \text{mod } 10 (10 - [\text{mod } 10 \{56\}])$$

Check digit = 4

The sum of the weighted products of the first 12 digits plus the check digit must be divisible by 10 without a remainder for the ISBN to be valid.

Note: The length of the registration group, registrant, and publication elements are variable and may not always be the same as in the example table above. Not all registration group and registrant combinations are valid. See *Distribution of ranges* section for formulaic information required to validate and split an ISBN.

Please contact your local registration agency, which will be able to assist you with calculating your ISBNs either by providing pre-calculated lists of the ISBNs or by providing software to enable you to calculate your own ISBNs.

4.6 Distribution of ranges

Ranges are allocated according to anticipated demand (i.e., the size of the publishing programme) within a particular regional or language grouping. Some registration group elements are held in reserve by the International ISBN Agency to ensure future capacity. The International ISBN Agency will allocate these as necessary when ranges are low in any particular grouping. Additionally, registrant ranges within a registration group that has already been allocated to a specific regional or language grouping may remain undefined to satisfy future needs.

Comprehensive details of registration groups and registrant range metadata is available from the International ISBN Agency and enables the validation of the current allocation of defined ranges. Not all registration group and registrant combinations are valid. The formulaic information (using the comprehensive group and registrant range metadata)

required to split the ISBN into its constituent parts follows below. See *Check digit* section for information regarding check digit calculation and validation.

The number of digits in each of the ISBN elements for registration group, registrant, and publication varies in length, although the number of digits contained in these three elements is nine in total. These nine digits, together with the three-digit prefix element and the check digit, make up the 13-digit ISBN. The number of digits in the registration group and registrant elements will vary according to the publishing output of the registration group or registrant in question. Registration groups for which large output of monographic publications is anticipated will receive group numbers of one or two digits. Publishers with an expected large output of publications will be assigned registrant numbers of two or three digits.

Note: The number of digits specified and assigned for registrant groups and registrants within prefix element 978 cannot be relied upon to predict those which are specified and assigned within future prefix elements (e.g., prefix element 979). Registration groups and registrant allocations for future prefixes will reflect assignment history and assignment projections for the entire prefix element system viewed collectively.

Determining the internal divisions of the 13-digit ISBN is a two-step process: first, determine the registration group using the rules for prefix elements assigned for ISBN; second, determine the registrant and publication element lengths using the registration group rules. Registration group rules are available from the International ISBN Agency.

Table 1 illustrates the distribution of registration group ranges within prefix element 978. Any other EAN.UCC prefix defined for use within the ISBN system will have registration group rules available from the International ISBN Agency prior to any registration group assignment within that EAN.UCC prefix. *It is strongly recommended to check with the International ISBN Agency on a regular basis for possible additions or changes to registration group rules.*

Table 1: Distribution of registration group ranges within prefix element 978

Prefix element	Registration Group element range	Numbers available per Registration Group
978	0 – 5	100,000,000
	6	(undefined range)
	7	100,000,000
	80 – 94	10,000,000
	950 – 989	1,000,000
	9900 – 9989	100,000
	99900 – 99999	10,000

Table 2 illustrates how to derive the registration group structure for prefix element 978 that is assigned for an ISBN. An examination of the five digits following the prefix element will permit the determination of the length of the registration group element. Once the registration group length is known, the registrant group can be derived.

Table 2: Method of deriving the registration group structure for prefix element 978

If the five digits following the prefix	Registration Group length is:	The prefix element and Registration Group divisions would occur after
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element are between:		the following digits and associated elements:
00000 – 59999	1	3rd (prefix element) 4th (registration group)
60000 – 69999	0 (undefined)	(undefined range)
70000 – 79999	1	3rd (prefix element) 4th (registration group)
80000 – 94999	2	3rd (prefix element) 5th (registration group)
95000 – 98999	3	3rd (prefix element) 6th (registration group)
99000 – 99899	4	3rd (prefix element) 7th (registration group)
99900 – 99999	5	3rd (prefix element) 8th (registration group)

The length of the registrant element is established within each registration group by ISBN registration agencies in accordance with the needs of the publishing industry within their designated area. The ranges assigned to each registration group must be established in advance by the International ISBN Agency before determining distribution of ranges of ISBNs to publishers within those groups.

EXAMPLE 1:

Test ISBN: 9786000000004

EAN.UCC prefix: 978

(registration group test segment): 60000

Registration group: (undefined and invalid)

Note: This test ISBN is not valid because the registration group test segment is within the group 60000 to 69999, which has a specified group length of 0 (currently undefined).

EXAMPLE 2:

Test ISBN: 9780777777770

EAN.UCC prefix: 978

(registration group test segment): 07777

Registration group: 0

Note: This test ISBN is valid because the registration group test segment is within the range 00000 to 59999, which has a specified registration group length of 1 (defined and valid).

Table 3 illustrates the distribution of registrant element ranges and publication elements within registration group 978-0. The registrant element ranges for use within each registration group will be defined by the International ISBN Agency based on anticipated publishing programmes for that registration group.

Table 3: Distribution of registrant element ranges and publication elements within group 978-0

Registration group	Registrant element range	Numbers available per registrant for publication identification
978-0	00 – 19	1,000,000
	200 – 699	100,000
	7000 – 8499	10,000
	85000 – 89999	1,000
	900000 – 949999	100
	9500000 – 9999999	10

Table 4 illustrates how to derive the internal structure for the registration group 978-0. An examination of the five digits following the registrant group element will permit the determination of the length of the registrant element. Once the registrant length is known, the publication element length can be derived.

Table 4: Method of deriving the internal structure for registration group 978-0

If the five digits following the Registration Group are between:	Registrant length is:	Publication element length is:	The internal divisions would occur after each of the following digits and associated elements:
00000 – 19999	2	6	3rd (prefix) 4th (registration group) 6th (registrant) 12th (publication)
20000 – 69999	3	5	3rd (prefix) 4th (registration group) 7th (registrant) 12th (publication)
70000 – 84999	4	4	3rd (prefix) 4th (registration group) 8th (registrant) 12th (publication)
85000 – 89999	5	3	3rd (prefix) 4th (registration group) 9th (registrant) 12th (publication)
90000 – 94999	6	2	3rd (prefix) 4th (registration group) 10th (registrant) 12th (publication)
95000 – 99999	7	1	3rd (prefix) 4th (registration group) 11th (registrant) 12th (publication)

EXAMPLE:

Test ISBN: 9780777777770

EAN.UCC prefix: 978

Registration group: 0

(registrant test segment): 77777

Registrant: 7777

Publication: 7777

Check digit: 0

Displayable ISBN: 978-0-7777-7777-0

Note: The registrant test segment is within the range from 70000 to 84999, which has a specified registrant length of 4 (defined and valid).

Table 5 illustrates the distribution of registrant number ranges and maximum publications per registrant within registration group 978-952:

Table 5: Distribution of registrant number ranges and publications within registration group 978-952

Registration group	Registrant element range	Numbers available per registrant for publication identification
978-952	00 – 19	10,000
	200 – 499	1,000
	5000 – 8899	100
	89 – 94	10,000
	9500 – 9899	100
	99000 – 99999	10

Table 6 illustrates how to derive the internal structure for the registration group 978-952. An examination of the five digits following the registrant group element will permit the determination of the length of that registrant element. Once the registrant length is known, the publication element length can be derived.

Table 6: Method of deriving the internal structure for registration group 978-952

If the five digits following the Registration Group are between:	Registrant length is:	Publication element length is:	The internal divisions would occur after each of the following digits and associated elements:
00000 – 19999	2	4	3rd (prefix) 6th (registration group) 8th (registrant) 12th (publication)
20000 – 49999	3	3	3rd (prefix) 6th (registration group) 9th (registrant) 12th (publication)
50000 – 88999	4	2	3rd (prefix) 6th (registration group) 10th (registrant) 12th (publication)
89000 – 94999	2	4	3rd (prefix) 6th (registration group) 8th (registrant) 12th (publication)
95000 – 98999	4	2	3rd (prefix) 6th (registration group) 10th (registrant) 12th (publication)
99000 – 99999	5	1	3rd (prefix) 6th (registration group) 11th (registrant) 12th (publication)

EXAMPLE:

Test ISBN: 9789528988885

EAN.UCC prefix: 978

Registration group: 952

(registrant test segment): 89888

Registrant: 89

Publication: 8888

Check digit: 5

Displayable ISBN: 978-952-89-8888-5

Note: The registrant test segment is within the range from 89000 to 94999, which has a specified registrant length of 2 (defined and valid).

5. Application of ISBN

5.1 General

A separate ISBN shall be assigned to each separate monographic publication or separate edition of a monographic publication issued by a publisher. A separate ISBN shall be assigned to each different language edition of a monographic publication. Where a publication is made available to the public both individually and as part of a series, it shall be regarded as two separate publications, each of which shall be assigned a separate ISBN.

5.2 Changes to publications

A separate ISBN shall be assigned if there have been significant changes to any part or parts of a publication. A separate ISBN shall be assigned if there has been a change to the title of a publication. A change to the cover design or colour or to the price of a monographic publication does not require a separate ISBN. Minor changes in an edition (e.g., corrections to misprints) do not require a separate ISBN.

5.3 Facsimile reprints

A separate ISBN shall be assigned to a facsimile reprint when it is produced by another publisher or republished under the imprint of a different publisher. A separate ISBN shall also be assigned if the same publication is published under a different imprint name by the same publisher.

For example, *Illustrierte Karl-May-Bibliographie* by Hainer Plaul was published by Edition Leipzig in 1988 (ISBN 3-361-00145-5). A facsimile reprint published by Saur in 1989 was assigned a separate ISBN from that publisher's ISBN allocation (ISBN 3-598-07258-9).

5.4 Publications in different product forms

Different product forms of a publication (e.g., hardback, paperback, Braille, audiobook, online electronic publication) require separate ISBNs. Where electronic publications are made available in different formats (e.g. .lit, .pdf, .html, .pdb) each *separately available* format shall be assigned a unique ISBN.

5.5 Loose-leaf publications

An ISBN should be assigned to a finite loose-leaf publication — that is, a loose-leaf publication not intended to continue indefinitely.

Neither a loose-leaf publication that is continually updated (integrating resource) nor the individual updated sections should be assigned an ISBN (see section 13.7).

5.6 Multi-volume publications

Publications may comprise more than one volume, and in these cases an ISBN must be assigned to cover the entire set. Where individual volumes of the set are available separately, each volume must be assigned a unique ISBN to identify it. The verso of the title page (or an equivalent position in a non-print version) in each case should clearly display the ISBN for the set as a whole as well as the ISBN for that particular volume.

Even if the multiple volume publication will only be available as a complete set, the assignment of a separate ISBN to each individual volume is still recommended. Doing so will facilitate various stages of transaction processing, including the handling of shipments when not all volumes are simultaneously published or distributed and the supply of replacements in the case of damaged copies.

5.7 Backlist

A publisher is required to number all backlist publications and publish the ISBNs in any catalogues that the publisher produces whether these catalogues are in print or electronic format. The ISBN must also appear in the first available reprint or reissue of a backlist title.

5.8 Collaborative publications

A publication issued as a joint imprint with other publishers is usually assigned an ISBN by the publisher(s) in charge of distribution. However, it is permissible for each of the co-publishers to assign its own ISBN and display each of them on the copyright page. In such cases, only one of these ISBNs shall be displayed as a bar code on the publication.

5.9 Publications sold or distributed by agents

(Except for a. and c., this applies only to countries that are not yet participating in the system)

- a. As the ISBN standard states, a particular edition published by a particular publisher receives only one ISBN. This ISBN must be retained no matter where, or by whom, the publication is distributed or sold.
- b. A publication imported by an exclusive distributor or sole agent from an area that is not in the ISBN system and has no ISBNs assigned to it may be assigned an ISBN by the exclusive distributor.
- c. Publications imported by an exclusive distributor or sole agent to which a new title page, bearing the imprint of the exclusive distributor, has been added in place of the title page of the original publisher are to be given a new ISBN by the exclusive distributor or sole agent. The ISBN of the original publisher should also be given.
- d. A publication imported by several distributors from an area not in the ISBN system and that has no ISBNs assigned to it may be assigned an ISBN by the group agency responsible for those distributors.

5.10 Acquisition of one publisher by another

A publisher acquiring another publishing house can continue to use the originally assigned ISBN.

5.11 Acquisition of complete stock of and rights in publication

A publisher acquiring the complete stock of and rights to a publication(s) can continue to use the originally assigned ISBN until the new company reprints or reissues the publication under that company's own ISBN registrant element.

5.12 Publishers with more than one place of publication

- a. A publisher operating in several places that are listed together in the imprint of a publication must assign only one ISBN to that publication.
- b. A publisher operating separate and distinct offices or branches in different places may have a registrant element for each office or branch. However, each publication is to be assigned only one ISBN by the office or branch responsible for the publication.

5.13 Register of ISBNs and accompanying metadata

It is the responsibility of the publishers to inform their group agency, or the organisation responsible for the maintenance of publication registration, of the ISBNs that will be assigned to forthcoming publications. The information shall include some minimum metadata (descriptive) elements and shall be compatible with the ONIX International product information standards maintained by EDItEUR and its associated organisations:

Data element	Comments	ONIX element(s)
ISBN	In the 13-digit ISBN format	<ProductIdentifier>
Product form	Coding that indicates the medium and/or format of the product	<ProductForm> <EpubFormat>

Title	The title of the publication, together with subtitle where applicable	<Title> composite
Series	Series title and enumeration when applicable	<Series> composite
Contributor	Contributor role code(s) and contributor name(s)	<Contributor> composite
Edition	Edition number (for editions after the first), type, and statement	<EditionTypeCode> <EditionNumber> <EditionStatement>
Language(s) of text	Using ISO 639-2/B language codes	<Language> composite
Imprint	The brand name under which the publication is published	<ImprintName>
Publisher	The person or organisation that owns the imprint at the date of publication	<Publisher> composite
Country of publication	Using ISO 3166-1 country codes	<CountryOfPublication>
Publication date	The date of first publication under this ISBN. In the ISO 8601 format (YYYY-MM-DD)	<PublicationDate>
ISBN of parent publication	ISBN of the parent publication of which this publication is a part, when applicable	<RelatedProduct> composite

The International ISBN Agency will supply an XML schema on request and software to assist with data entry requirements. Further supporting information including the metadata schema will be available at www.editeur.org/onix_isbn.html.

Databases that link ISBNs with their metadata (such as books-in-print listings, national bibliography, etc.) should be made available and kept up to date. In instances where ISBN registration agencies do not provide such bibliographic listing services, they are nevertheless responsible for liaising with appropriate service providers to ensure that such services are accessible. Customers may be charged a fee by ISBN registration agencies and publishers of bibliographic databases to access this information.

5.14 ISBNs can never be reused

Once assigned to a monographic publication, an ISBN can never be reused to identify another monographic publication, even if the original ISBN is found to have been assigned in error. A registrant who discovers that an ISBN has been erroneously assigned must delete this number from the list of usable numbers. The registrant shall also report the erroneous ISBN to their ISBN agency.

6. ISBN for Electronic Publications and Educational/Instructional Software

6.1 ISBN for eligible electronic publications

Where a publication is available electronically (e.g., an e-book, CD-ROM, or publication available on the Internet), it will qualify for an ISBN provided that it contains text and is made available to the public, and that there is no intention for the publication to be a continuing resource.

Such publications may also include pictures and sounds, but linked material (e.g., hypertext) would only be considered covered by the same ISBN if the related material was actually part of the publication.

The following types of electronic publications shall *not* be assigned an ISBN:

- Publications that are subject to frequent update and where access is possible to these changes almost immediately, such as online databases
- Websites
- Promotional or advertising materials
- Bulletin boards
- E-mails and other electronic correspondence
- Search engines
- Games
- Personal documents (such as an electronic curriculum vitae or personal profile)
- Schedulers/diaries

6.2 ISBN for eligible software products

An ISBN may be used to identify a specific software product that is intended for educational and/or instructional purposes, such as a computer-based training product, provided that it is not customisable nor requires data in order to function.

All other software products (e.g., computer games) shall not be assigned an ISBN.

6.3 Principles for assignment of ISBN to electronic publications and eligible software products

- Where a specific, qualifying publication or product is available using different operating systems and/or command languages, each separate format shall be assigned a unique ISBN. Neither operating systems nor reading devices themselves shall, however, be assigned an ISBN.
- When a publication or product is updated, revised, or amended and the changes are sufficiently substantial for the publication to be called a new edition, a separate ISBN shall be assigned.
- A re-launch of an existing publication or product, even in new packaging, where there is no significant difference in the performance of the new from the old product, does not merit a separate ISBN. The existing ISBN shall continue to be used.
- A single ISBN may cover two or more items in a package consisting of the software product and its accompanying user and technical manuals if the manuals are necessary in order to operate the software and are useful only as an adjunct to the software.

- If the package consists of two or more items that will be made available separately and can be used independently, then the entire package should have a distinct ISBN, as must each separate component.
- An ISBN should be assigned to a software product independently of its physical form (e.g., software that must be downloaded to the customer from a remote database).
- As well as identifying the product itself, an ISBN identifies the publisher; it should not be used to identify a distributor or wholesaler of the product.

7. ISBN for Print-on-Demand Publications

A “print-on-demand” publication is printed and bound in response to a specific order from a customer. Such orders are often for single copies of publications that would otherwise be declared “out-of-print” since large print runs would not be economical.

Print-on-demand should not be confused with short-run printing, in which small quantities of books may be manufactured and then stored for fulfilling customer orders as and when they are received. With short-run printing, stock is warehoused, even if in small quantities; with on-demand printing, however, there is no stock.

If the on-demand version of a publication is in a different product form from the previously published non-on-demand version (e.g., if a hardback becomes a paperback when it shifts to being on-demand), a new ISBN is required, just as for any other changes of product form. Minor changes to trim sizes in order to comply with the specifications of on-demand printing machines shall not require a new ISBN.

A publication shall receive a separate ISBN when reproduced on demand by a publisher that has bought print-on-demand rights for the publication from another publisher.

A copy that is produced by an organisation other than the publisher on behalf of that publisher (i.e., no rights have changed hands), and where the on-demand edition is in a different product form, shall receive a separate ISBN.

A “customised” or “personalised” version of a print-on-demand book, where the customer, not the publisher, dictates the content of the book, and which has a limited availability, shall not be assigned an ISBN.

8. Location and Display of the ISBN on Publications⁵

8.1 General

The ISBN must appear on the item itself.

In the case of printed publications, the ISBN must appear on the:

- Verso of the title page (copyright page)
- Foot of the title page, if there is no space on the title verso

⁵ Since publishers will inevitably be holding stock carrying 10-digit ISBNs for many years to come, it may be sensible to move towards printing the 13-digit ISBN on their books as soon as possible, in conjunction with the 10-digit ISBN until 2007. For more information about recommended dual display of 10- and 13-digit ISBNs on publications, see “Timing for the use of 13-digit ISBNs” section in Extracts from *Guidelines for the Implementation of 13-Digit ISBNs*.

- Lower section of the outside back cover
- Foot of the back of the jacket, or any other protective case, or wrapper

In the case of electronic publications, the ISBN must appear on the:

- Title display; the first display (compact discs, online publications); or on the screen that displays the title or its equivalent (e.g., the initial screen displayed when the content is first accessed and/or on the screen that carries the copyright notice)

In the case of educational/instructional films, videos, and transparencies, the ISBN must appear on the:

- Credit titles

If the publication is issued in a container that is an integral part of the publication (e.g., a compact disc, cassette, or diskette), the ISBN shall be displayed on any labels included with that container. If it is not possible to display the ISBN on the container or its label, then the ISBN shall be displayed at the bottom of the back of any permanent packaging for that container (e.g., the box, sleeve, or frame).

The different formats of an electronic publication shall be given an individual ISBN if they are made available separately. If the publication is made available in two formats that are always bundled together for sale, then only one ISBN is required. Where formats are made available separately, all the ISBNs should be listed one below the other on all versions and the abbreviated format should be mentioned in parentheses at the end of its ISBN.

Examples: ISBN 978-951-45-9693-3 (hardback)
 ISBN 978-951-45-9694-0 (paperback)
 ISBN 978-951-45-9695-7 (PDF)
 ISBN 978-951-45-9696-4 (HTML)
 ISBN 978-951-45-9999-6 (OEB)

The ISBN shall also appear on any accompanying material issued in conjunction with the publication.

The ISBN should always be printed in type large enough to be easily legible (i.e., 9-point or larger).

8.2 ISBN in bar coded form

The rapid, worldwide expansion of bar code scanning has brought into prominence the agreement reached between the EAN International (EAN), the Uniform Code Council (UCC), and the International ISBN and International ISMN Agency, which allows the ISBN to be encoded into an EAN-13 bar code. This makes the ISBN an international identifier compatible with the worldwide bar coding scheme.

Representing the ISBN in an EAN-13 bar code symbology must be done in accordance with ISO/IEC 15420 (bar code symbology specification EAN/UPC) that requires the usage of EAN-13 symbols to be in line with the recommendations of EAN and UCC. An EAN bar code consists of thirteen digits.

An example of an ISBN encoded in an EAN-13 bar code symbol is shown below:

ISBN 978-1-873671-00-9

When used in a bar code, the ISBN must be displayed in human readable form immediately above the EAN-13 bar code symbol, preceded by “ISBN”.

Example of printing the ISBN in EAN -13 bar code symbol symbology:



Further information on the introduction and use of the EAN-13 bar code symbol is provided by the ISBN group agencies and the International ISBN Agency. Group agencies are encouraged to cooperate directly with the EAN organisations on a national or regional level.

The recommended location of the EAN-13 bar code symbol for publications is the lower right quadrant of the back, near the spine.

8.3 Five-digit add-on code

In the United States and Canada, a five-digit add-on to the bar code is used in the book trade to indicate the price. For further information on bar codes in the United States and Canada visit the Book Industry Study Group website www.bisg.org.

The five-digit add-on code should not be used for price information in other countries, although it may be used with a “9” prefix for a publisher’s own in-house use (e.g., for handling returns). These supplementary codes always start with “9” within the range “90000-98999”.

8.4 Providing the EAN.UCC bar code for ISBN — instructions for film master suppliers

Film master suppliers providing ISBN EAN bar codes to publishers to print on products should observe the following procedures:

- Validate the ISBN provided by the publisher, using the ISBN check digit validation algorithm, to avoid any transcription or transposition errors (see *ISBN Check digit* section {4.5}).
- Hyphenate the ISBN according to the rules (see *Distribution of ranges* section {4.6})
- Print the following:
 - Mandatory**
 - ISBN in 9-point type or larger
 - ISBN EAN in bar code
 - ISBN EAN in human-readable form
 - Optional (at the publisher's discretion)**
 - Five-digit add-on in bar code and in human-readable format

All these procedures should be done through computer programming.

EAN technical requirements for bar code printing should be observed.

ISBNs printed in machine-readable form are still subject to the rules laid down by the ISBN standard. The considerable number of additional rules and recommendations makes it necessary that those wishing to print the ISBN in a scannable font should contact their local ISBN agencies for advice.

8.5 Algorithm for generating the ISBN and EAN.UCC bar code

See *Check digit* (section 4.5) for information on calculating the check digit of the ISBN.
See *Distribution of ranges* (section 4.6) for formulaic information required to split the ISBN.

9. Administration of the ISBN System

9.1 General

The administration of the ISBN system is carried out on three levels: international, ISBN registration agency, and publisher.

9.2 International administration

The principal functions and responsibilities of the International ISBN Agency are:

- To promote, coordinate, and supervise the worldwide use of the ISBN system
- To represent the interests of the ISBN community to other relevant organisations
- To appoint appropriate organisations as ISBN registration agencies and revoke such appointments as necessary
- To define registration groups and their areas of responsibility and allocate them to appropriate ISBN registration agencies
- To determine the definition of registration group rules that govern the length of available registrant elements within each group and ensure that an accurate and comprehensive register of these rules is available publicly at all times
- To allocate ranges of unique registrant elements within the appropriate registration group to ISBN registration agencies and to maintain a complete and accurate register of the registrant elements that have been assigned
- To secure the maintenance of ISBNs and their associated ISBN metadata through ISBN registration agency registers
- To develop, monitor, and enforce policies and procedures governing the operations of ISBN agencies and the process of ISBN registration by those agencies, including any fees associated with that process
- To facilitate the review and resolution of duplicate assignments of an ISBN
- To review and decide on any appeals relating to decisions made by registration agencies

- To develop, maintain, and make publicly available documentation for users of the ISBN system
- To implement and maintain funding arrangements as necessary to support the operations of the International ISBN Agency, including, but not limited to, financial contributions from ISBN registration agencies.

9.3 ISBN registration agencies

The administration of the ISBN system within a registration group is the responsibility of the ISBN registration agency. The ISBN registration agency may operate on a national, regional, linguistic, or other reasonable division of responsibility according to the basis of the group allocation.

Within a group there may be several national agencies (e.g., group identifier 978-0 and 978-1 have separate agencies in Australia, English-speaking Canada, the United Kingdom, the United States and so on).

The functions and responsibilities of an ISBN registration agency are:

- To ensure that continuous service is provided
- To issue notification of the assignment of an ISBN or an ISBN registrant element to the registrant of that monographic publication or publisher name
- To create, manage, and maintain registers of ISBN, ISBN metadata, and administrative data in accordance with the policies set out by the International ISBN Agency. (Tasks involving ISBN metadata may be delegated to a designated bibliographic agency provided that compliance is made with these specifications)
- To correct inaccurate ISBNs and ISBN metadata if proof of such inaccuracy is provided
- To make ISBN and associated metadata available to other registration agencies and to users of the ISBN system in compliance with policies set out by the International ISBN Agency
- To collate and maintain statistical data on its ISBN-related operations and report these at the stipulated intervals to the International ISBN Agency
- To promote, educate, and train others in the use of the ISBN system in compliance with the specifications of the applicable edition of the ISBN standard in force at the time
- To adhere to the ISBN policies and procedures established by the International ISBN Agency in compliance with the specifications of the applicable edition of the ISBN standard in force at the time

9.4 Publisher administration

Publishers are responsible for assigning publication elements to the individual items they publish and for ensuring the application of pertinent regulations.

They may apply for and receive a registrant element from an ISBN registration agency together with a printout or electronic file of the individual ISBNs that are available to them

within the allocated registrant element. Some ISBN registration agencies may charge a fee for these services.

The ISBN registration agency will determine the range of publication elements that will be available to the publisher. The range assigned will be determined based on current and anticipated future publication output and is directly related to the length of the registrant element allocated. The publisher should ensure that the ISBN registration agency has as much information as possible about all available backlist publications and should advise the agency of all present and future publications in order for the assignment of a suitably sized registrant element.

The publisher should supply the ISBN registration agency (or its designated local bibliographic agency) with a specified amount of metadata about the publication to which the ISBN is assigned. The specifications concerning the type and format of the metadata is established by the International ISBN Agency in cooperation with the ISBN registration agencies.

Further information and detailed instructions concerning the ISBN system are available from the appropriate ISBN registration agency.

10. Non-participating Publishers

In the case of the non-participation of a publisher in the ISBN scheme, the relevant group agency should contact the publisher and advise them of the importance and value of assigning ISBNs to all qualifying publications and supply them with full details about how to adopt the standard.

In the case of publishers who only publish an occasional title and who are never likely to be in the position of assuming the responsibility themselves for numbering, the group agency may nominate a registrant element to assign to miscellaneous publishers and number all publications using that block, irrespective of the publisher concerned. This practice should be adopted with strict control because of the confusion it can produce being an exception of the general rule of one registrant element to one publisher/imprint. In these cases neither the registrant element nor any of the individual ISBNs from this allocation can uniquely identify a particular publisher.

In some countries the group agency assigns ISBNs to publications received for legal deposit that do not already have an ISBN allocated. The group agency then informs the publisher about the ISBN that has been assigned and publicises it in the national bibliography.

11. Practical Uses of ISBN

The ISBN is used in all branches of the book supply chain.

The ISBN in **publishing houses** is used for:

- Identifying firm publication projects from receipt of author's manuscript to delivery of final publication
- Publication identification in publishers' catalogues and advertisements

- Listing in printed and electronic directories and on Internet sites
- Stock control
- Management of royalties
- Ordering
- Accounting and billing
- Monitoring sales data
- Producing statistics
- Handling of returns

The ISBN in **bibliographic data services, distribution centres, and wholesalers** is used for:

- Building databases of publications both in- and out-of-print
- Generating bibliographic products and catalogues from these databases of publications for the book trade
- Ordering services based on electronic communication systems such as EDI (electronic data interchange) or via the Internet
- Stock control
- Monitoring internal logistic processes
- Accounting and billing
- Producing sales data
- Returns administration
- Producing subject lists and catalogues

The ISBN in **centralised service organisations for libraries** (producing ready-to-borrow copies) is used for:

- Ordering from the publishers or wholesalers
- Processing orders from libraries
- Stock control
- Monitoring internal logistic processes

- Accounting and billing
- Administration of rebinding processes

The ISBN in **bookshops** is used for:

- Bibliographic searches
- Tracing addresses of publishers or distributors
- Ordering and reordering processes based on electronic communication systems such as EDI (electronic data interchange) or via the Internet
- Stock administration
- Accounting and billing the end consumer
- Electronic point-of-sale system (EPOS)

The ISBN in **libraries** is used for:

- Information retrieval
- Ordering
- Copy-cataloguing
- Lending statistics
- National lending right
- Inter-library loans

12. ISBN and EAN

In 1997 an agreement was concluded between the EAN International (EAN), the Uniform Code Council (UCC), the International ISBN Agency, and the International ISMN Agency to foster mutual cooperation. It provides an observer status to respective representatives at one another's general assemblies, suggests consultations, and regulates the numbering of non-printed book material.

Contact details:

EAN International
Blue Tower
Avenue Louise 326 - Bte 10
B-1050 Brussels
Belgium
Tel: (+32 2) 788 78 00

Fax: (+32 2) 788 78 99
E-mail: info@ean-int.org
URL: <http://www.ean-int.org>

Uniform Code Council, Inc.
Princeton Pike Corporate Centre
1009 Lenox Drive, Suite 202
Lawrenceville, NJ 08648
USA
Tel: (+1 609) 620 0200
Fax: (+1 609) 620 1200
URL: <http://www.uc-council.org>

13. ISBN and Other Identifiers

13.1 DOI

The Digital Object Identifier (DOI) is a system for persistent actionable identification and interoperable exchange of intellectual property on the Internet. The International DOI Foundation (<http://www.doi.org>), a non-profit organisation, manages development, policy, and licensing of the DOI system to Registration Agencies. DOIs may be used to identify (i.e., name) any intellectual property entity, including those already identified by an ISBN, and can be used compatibly with ISBN (as part of the DOI syntax), to offer the added functions of resolution, data model, and policy components - providing persistence and semantic interoperability. The DOI conforms to the functional requirements of the two generic approaches for naming first-class objects on the Internet: the Uniform Resource Name (URN) and the Uniform Resource Identifier (URI).

The DOI syntax (ANSI/NISO Z39.84-2000, "Syntax for the Digital Object Identifier") has two components: *prefix* and *suffix*, which together form the DOI. The prefix is assigned by a DOI Registration Agency to a Registrant (an organisation that wishes to register DOIs); multiple prefixes defining imprints, journals, etc., may be assigned to one Registrant. The Registrant assigns a unique suffix per each of its entities to be identified. The combination of prefix and suffix ensures uniqueness in the DOI system and avoids a requirement for the centralised allocation of DOI numbers. There is no limitation on the length of a DOI.

An existing standard identification system number such as the ISBN may be integrated into a DOI as the DOI suffix. The format of this integration will be agreed by the Registration Agency or agencies offering such a service: ISBN recommends that precisely the same entity be specified by the two systems (common metadata), and that the syntax explicitly denotes the ISBN. In such case, the DOI could assume the following form:

Example:

10.nnnn/[ISBN]9780110002224
or
10.nnnn/9780110002224

where "10" is the number assigned to DOI within the Handle resolution system, "nnnn" is the registrant number, and the string after the slash is the suffix incorporating the ISBN.

The registration authority for DOI is:

International DOI Foundation

Jordan Hill
Oxford OX2 8DP
UK
Tel: (+44) (0)1865 314033
Fax: (+44) (0)1865 314475
E-mail: n.paskin@doi.org
URL: <http://www.doi.org>

13.2 GTIN

The GTIN (Global Trade Item Number) is a generic term for all the EAN.UCC product identifiers including the EAN-13. Any of these identifiers can be represented as a 14-digit number, right justified and padded with leading zeros where necessary, and it is recommended that databases should be able to store the full 14-digit form. However, 14-digit numbers where the first digit is non-zero are reserved for packs that are not sold at the retail point of sale (e.g., pallets or cartons). Some book trade suppliers may, by agreement with their trading partners, use a non-zero leading digit to indicate a particular pack size (e.g., 20 copies of a book).

A 14-digit GTIN identifying a book will therefore always begin with a leading zero, and the remaining 13 digits will show the EAN-13 number. (N.B: The 14-digit GTIN will never be shown in bar code form on a book).

13.3 Internet identifiers: URN

Uniform Resource Names (URNs) are persistent resource identifiers. Their syntax, defined in Internet standard RFC 2141, is simple:

`<URN> ::= "urn:" <NID> ":" <NSS>`

where <NID> is the Namespace Identifier, and <NSS> is the Namespace Specific String. The leading "urn:" and Namespace Identifier are case-insensitive.

URN namespace registration process has been defined in RFC 3406. A namespace can be registered for any existing identifier system as long as it conforms to the URN syntax. NID "isbn" has been reserved for the ISBN system in RFC 3187. According to this RFC, any URN based on ISBN has the following syntax:

`urn:isbn:<NSS>`

where the Namespace Specific String contains the ISBN in machine readable form. For instance:

`urn:isbn:9780110002224`
`urn:isbn:9510184357`

The 10-digit and 13-digit ISBN can share the same URN namespace since any application capable of processing ISBNs in the future will be able to handle both 10-digit and 13-digit ISBNs and tell them apart from the 978 or 979 prefix element.

Extending ISBNs into URNs is technically easy, and there is no cost involved: URNs are free. Resolution services, systems linking URNs to the identified resources, or bibliographic records describing these resources may rely on any existing or future Internet technology, since URNs are not technology dependent. Initially, URN resolution on the

Internet will rely on the Domain Name System as defined in RFCs 3401-3405. Each namespace will have its own resolution mechanism, which is to be defined in the RFC in which a namespace is registered to the identifier system.

URN syntax has been defined in such a way that Web browsers could use them instead of URLs. Unfortunately, at present the browsers support URNs only with the help of plug-ins. This has enabled URN implementation in various small environments (e.g., German dissertations) that may or may not be interoperable with one another.

For further information:

NID assignments: <http://www.iana.org/assignments/urn-namespaces>

URN clearing house: <http://www.uri.net/>

13.4 ISAN and V-ISAN

ISAN - International Standard Audiovisual Number

The ISAN identifies an audiovisual work — i.e., any work consisting of a moving image with or without accompanying sound, and independent of the physical form in which that work is distributed. The ISAN is not intended to be applied to still images, sound recordings, or other forms of content without significant audiovisual components. The assignment of an ISAN is not related to any process of copyright registration, nor does an ISAN provide evidence of the ownership of rights in an audiovisual work. The ISAN makes it possible for all rights holders (authors, producers, and their agents) to identify an audiovisual work, independent of its physical form.

An ISAN consists of 16 hexadecimal digits divided into two segments: a 12-digit root segment followed by a 4-digit segment for episodes. Zeros are used as fill characters when the work is not an episode. The prefix ISAN and a final check character are included whenever an ISAN is presented in human-readable form.

Example: ISAN 1881 66C7 3420 6541 9

The ISAN is an International Standard (ISO 15706:2002).

The Registration Authority for ISAN is:

ISAN International Agency
26, rue de Saint Jean
CH-1203 Geneva
Switzerland
Tel: (+41) 22 545 10 00
Fax: (+41) 22 545 10 40
E-mail: info@isan.org
URL: <http://www.isan.org>

V-ISAN - International Standard Audiovisual Number (ISAN) - Version identifier

A V-ISAN identifies a specific version of an audiovisual work – or other content related to an audiovisual work – throughout its life. A V-ISAN is the combination of an International Standard Audiovisual Number (ISAN), as defined in ISO 15706, with an appended version segment.

The V-ISAN is intended for use wherever precise and unique identification of a specific version of an audiovisual work – or other content related to an audiovisual work – is

desirable, such as in audiovisual production and distribution systems, broadcasting applications, and electronic program guides.

A V-ISAN consists of the 16 hexadecimal digits of the ISAN for an audiovisual work, followed by a version segment of 8 hexadecimal digits. Whenever it is presented in human-readable form, the V-ISAN is prefaced by the label ISAN and the appropriate check characters are included after both the ISAN and version segments.

Example: ISAN 1881-66C7-3420-6541-9-9F3A-0245-U

The assignment of a V-ISAN does not constitute evidence of the ownership of rights to either that version or related content or to the audiovisual work itself.

At the point of publication [Jan. 2005], the V-ISAN is undergoing standardisation through ISO TC46/SC9 Working Group 1. Subject to ISO's approval processes, the standard will be published as ISO 15706-2. It will be accompanied by Technical Report 20925, consisting of informative guidelines for the operations of the V-ISAN system under the provisional title: *Information and documentation - International Standard Audiovisual Number (ISAN) - Version segment (V-ISAN) operational guidelines*.

The ISO working group may be contacted via:

ISO/TC 46/SC 9 Secretariat

E-mail: iso.tc46.sc9@lac-bac.gc.ca

URL: <http://www.lac-bac.gc.ca/iso/tc46sc9/wg1/register.htm>

13.5 ISMN

The ISMN (International Standard Music Number) identifies all printed sheet music publications, whether available for sale, or hire, or gratis.

It is a ten-digit identifier, the first character being "M". The letter "M" distinguishes the ISMN from the ISBN and other standards.

The other elements are: a publisher identifier that identifies a particular music publisher, a title number that identifies a specific sheet music publication, and a check digit that is calculated according to a modulus 10. The letter "M" counts as 3.

The ISMN can be integrated into the international 13-digit bar code, using the EAN prefix 979. "M" is assigned the numeric value of zero (0) for bar code purposes only.

The ISMN is not used for books on music, which receive an ISBN, nor is it used for music tapes, CDs, or videos.

Items specifically assigned ISMNs include scores (both orchestral and vocal), sets of parts, anthologies, microform, Braille and electronic music publications and song books (optional). In some cases, a song book, a hymnal, or an album with extensive text and/or illustrations may be considered a music edition, a "normal" book, or both. In such cases, both an ISMN and an ISBN may be assigned, in which case both identifiers must be printed on the publication and clearly identified.

The ISMN is administered by the International ISMN Agency:

International ISMN Agency
Staatsbibliothek zu Berlin
Preussischer Kulturbesitz
Potsdamer Strasse 33

10785 Berlin, Germany
Tel.: (+49 30) 266-2336, -2496, -2498
Fax: (+49 30) 266-2378
E-mail: ismn@sbb.spk-berlin.de
URL: <http://ismn-international.org>

13.6 ISRC

The International Standard Recording Code (ISRC) is the standard international identifier for a sound recording (ISO 3901). It numbers each recording of a piece (not the physical item), regardless of the context or carrier on which it is issued. An ISRC consists of twelve digits and comprises four elements: country code, first owner code, year, and recording code.

Example: ISRC DE P55 97 00001

The ISRC system is administered by IFPI, the International Federation of the Phonographic Industry:

International ISRC Agency
IFPI Secretariat
54 Regent Street
London W1B 5RE
United Kingdom
Tel: +44 (0) 20 7878 7900
Fax: +44 (0) 20 7878 6832
E-mail: isrc@ifpi.org
URL: <http://www.ifpi.org/isrc>

13.7 ISSN

In addition to the International Standard Book Number system, a numbering system for continuing resources has also been established and is called the International Standard Serial Number (ISSN), ISO 3297:1998.

A continuing resource is a publication that is issued over time with no predetermined conclusion. Such a publication is usually issued in successive or integrating issues that generally have numerical and/or chronological designations. Typical examples include serials such as newspapers, periodicals, journals, magazines, etc., and ongoing integrating resources such as loose-leaf publications that are continually updated and websites that are continually updated.

The ISSN is administered by the International Centre for the Registration of Serials:

ISSN International Centre
20, rue Bachaumont
75002 Paris, FRANCE
Tel: (+33 1) 44 88 22 20
Fax: (+33 1) 40 26 32 43
E-mail: issnic@issn.org
URL: <http://www.issn.org>

Publishers of serials should apply to the International ISSN Centre or to their national ISSN centre, if there is one, for ISSN for their serial publications.

Certain publications, such as yearbooks, annuals, monographic series, etc., should be assigned an ISSN for the serial title (which will remain the same for all the parts or individual volumes of the serial) and an ISBN for each individual volume.

If ISBN and ISSN are assigned to a publication they must be both clearly identified.

13.8 ISTC

The ISTC (International Standard Text Code) is a voluntary numbering system for the efficient identification of textual works. The standard is being developed under the auspices of ISO, the International Organization for Standardization, in Geneva.

The ISTC may be applied to any textual work whenever there is an intention to produce such a work in the form of one or more manifestations. For the purposes of the standard, “textual work” is defined as a distinct, abstract creation of intellectual or artistic content composed of a combination of words. Examples of textual works are an article, an essay, a novel, a screenplay, or a short story.

The ISTC will not be assigned to physical products or other manifestations of a work. Such physical products (i.e., a printed book, a talking book, or the electronic versions of such products) shall be assigned an ISBN.

The ISTC will enable the efficient identification and administration of textual works, not publications, although it may be linked to product identifiers such as an ISBN, in order to collocate the various manifestations of a textual work in applications.

It will be a “dumb” number, meaning that it will not include any codes or other signifying elements and will not indicate the work’s author or owner.

The standard will be 16 hexadecimal digits in length using the numerals 0 – 9 and letters A – F and will consist of four elements in the following order: the registration agency element, the year element, the work element, and a check digit.

A consortium comprised of CISAC, Nielsen BookData and R.R. Bowker has been selected to provide the future Registration Authority for the ISTC once ISO 21047 is approved for publication. For additional information on the ISTC Registration Authority, contact:

CISAC
20-26 Boulevard du Parc
92200 Neuilly sur Seine
France
Tel.: (+ 33 1) 55 62 08 50
Fax: (+ 33 1) 55 62 08 60
E-mail: cisac@cisac.org
URL: <http://www.cisac.org>

13.9 ISWC

The ISWC identifies musical works as intangible creations. It is not used to identify manifestations of, or objects related to, musical works. Such manifestations and objects are the subject of separate identification systems, such as ISRC, ISMN, ISAN and ISTC (see descriptions of each of these identifiers elsewhere in section 13).

Example: Mozart's *Die Zauberflöte* (*The Magic Flute*) would be eligible for an ISWC to identify the work. The many printed scores would each qualify for ISMNs, the libretti and their translations for ISTCs (and ISBNs for the publications thereof), a video of a performance would receive an ISAN, a series of television programmes would qualify for a V-ISAN, and a sound recording of the opera an ISRC.

Further information is available from the registration authority:

CISAC
20-26 Boulevard du Parc
92200 Neuilly sur Seine
France
Tel.: (+ 33 1) 55 62 08 50
Fax: (+ 33 1) 55 62 08 60
E-mail: cisac@cisac.org
URL: <http://www.cisac.org>

14. ONIX

ONIX is the international standard for representing and communicating book industry and serials and electronic product information in electronic form. It consists of a content specification (including data elements, tags, and code lists) and an XML DTD.

ONIX was developed and is being maintained by EDItEUR jointly with Book Industry Communication and the Book Industry Study Group, and with user groups in countries whose book trades and books in print services have adopted ONIX. These countries include the United States, the United Kingdom, France, Germany, Australia, Canada and the Republic of Korea.

ONIX has been mapped to MARC21 by the Library of Congress and to UNIMARC by The British Library. It is being used by some national libraries to receive product information from publishers for Cataloguing-in-Publication (CIP) purposes or to enhance Online Public Access Catalogues (OPACs).

Further information on ONIX is available from:

EDItEUR
39-41 North Road
London N7 9DP
UK
Tel: +44 (0)20 7607 0021
Fax: +44 (0)20 7607 0415
E-mail: brian@bic.org.uk
URL: <http://www.editeur.org/>

15. Publications

Publishers' International ISBN Directory (PIID)

The *Publishers' International ISBN Directory* (PIID) comprises all assigned publisher prefixes. It is currently published both in a printed and a CD-ROM edition.

ISBN Newsletter

The *ISBN Newsletter* usually gives the minutes of the International ISBN Agency Panel Meeting.

Frequently Asked Questions About the ISBN System

Why should I use an ISBN?

If you are a publisher or bookseller, it may be in your own interest to do so since you want to sell books. If your books cannot be ordered and distributed by using an ISBN and if they are not included in bibliographic data products, you may find that your books do not sell. People will assume your books do not exist, and even if they do know they exist they may consider it too much of a bother to handle them in a non-industry way.

Do I have to have an ISBN?

From the point of view of the international ISBN system there is no legal requirement to have an ISBN, and it conveys no legal or copyright protection. In a number of countries, though, the use of ISBN is prescribed by law.

Do books need an ISBN if they are not going to be sold?

It is desirable that **all** books are identified by ISBNs.

Should an auction catalogue be assigned an ISBN? What about exhibition catalogues?

Where a catalogue is produced to provide background information on items available for sale at auction, it should not be assigned an ISBN. Effectively, the catalogue is regarded as marketing material (even if it does not include prices) and is outside the scope of ISBN assignment. By contrast, catalogues that accompany exhibitions and provide textual information on particular artists or themes are applicable for ISBNs.

Who assigns ISBN registrant elements?

Only a registration agency appointed by the International ISBN Agency can assign ISBN registrant elements to individual publishers. Neither these registrant elements, nor any of the corresponding ISBNs, can be sold or given to any other publisher.

If I change the price of my book, should I assign a new ISBN?

No.

Does a change of format require a new ISBN?

Yes, different formats need different ISBNs.

I am publishing a book in a foreign language. Should it have an ISBN of the country in whose language the book is written?

No. It is the country where the publisher is based that determines the group identifier, not the language of the text itself.

I am revising a book. Does it require a new ISBN?

A significant change of text requires a new ISBN. If revisions have been made it should state on the verso of the title page that the book is a revised edition and the new ISBN should be printed there.

Does a reprint without change of text or binding require a new ISBN?

No. The original number must be retained, provided the publisher and imprint remain the same.

I would like to issue a new ISBN for marketing reasons. Is this permissible?

No, not if there is no change of text, format, or binding that would justify a new ISBN.

I am reprinting a book and changing the price at which it is available. Is a new ISBN required?

No. A reprint, whether or not the price has been changed, does not require a new ISBN.

I am publishing a book with another publisher. Whose ISBN should appear on the book?

In the case of a joint publication, both publishers are entitled to have an ISBN on the book. It should be made clear which number identifies which publisher. However, if only one publisher is to hold stock and distribute the publication, then it is recommended that the ISBN of the publisher who is responsible for distribution should appear in bar coded form on the back cover of the book.

Is it possible to reassign ISBNs when the books to which they were allocated are out-of-print?

No. An ISBN identifies a given title, and its edition and binding, for all time. Even if out-of-print, it will still exist in some shops and will certainly still exist in libraries.

How are ISBNs allocated to multi-format/multi-volume works?

An ISBN must be allocated to the whole set of volumes of a multi-volume work; also, if the individual volumes of the set are sold separately, each volume must have its own ISBN. Even when each volume is not sold separately, the allocation of an ISBN to each volume is advisable. It facilitates the handling of returns (damaged volumes), and eliminates the possibility of confusion over specific publications. Each volume should list all ISBNs.

Similar rules apply to kits (e.g., a CD-ROM with an accompanying booklet). If any part is available separately, a separate ISBN must be allocated to each part, and to the kit as a whole.

I am publishing a series of publications. Do I need an ISBN or an ISSN?

The series should receive an ISSN while the individual publications should receive ISBNs.

Do I need a new ISBN when I am reprinting a book with a new title?

Yes, a new title requires a new ISBN.

I am taking over another firm, which already has an ISBN registrant element. All future books will be published under my name. Can I renumber all the other firm's titles?

When the publications are reprinted under your own imprint thus carrying your own name, you may assign new ISBNs from your own registrant element.

What information should be included in the metadata element <Publisher>?

It is the responsibility of publishers to inform their group agency, or the organisation responsible for the maintenance of publication registration, of the ISBNs that will be assigned to forthcoming publications. The data element <Publisher> refers to the name of the entity associated with the publishing of a publication – for example, Reed International Books. It is a mandatory element in each occurrence of the <Publisher> composite and is non-repeating. The length of the field is variable, but there is a suggested maximum length of 100 characters. Although the element stipulates only that the name of the publisher is included within the metadata, it is the responsibility of all agencies to maintain up-to-date publisher addresses and other contact details for their own records.

What information should be included in the metadata element <Publication Date>?

This element holds the date of first publication of the publication in the country of publication (that is, under the current ISBN, as distinct from the date of first publication of the work). Although the date should be given as accurately as possible, for advance notifications the month and year are sufficient, and for backlist publications the year of publication is sufficient. This is a mandatory element and the following formats are allowable:

- 4 digits (YYYY)
- 6 digits (YYYYMM)
- 8 digits (YYYYMMDD)

If the date is being supplied by the publisher in advance of publication, then this will be an expected date, which should be replaced by the actual date of publication once known. It is not anticipated that all local agencies will want to receive advance information, but where they do choose to do so then this element should be updated with the correct data at the time of publication.

I am not a publisher – can I still obtain an ISBN?

Yes. For our purposes, a publisher is the group, organisation, company, or individual who is responsible for originating the production of a publication. It is also the person or body who bears the cost/financial risk in making a product available — it is not normally the printer.

Please remember that in a number of countries there is detailed legislation regarding publishing.

In our country the book trade works mostly without computers. Do I still need ISBNs?

You do not have to have computers to make use of an ISBN. The ISBN saves you and other people the bother of copying bibliographic records. In addition, if you want to export your books, without an ISBN they cannot be included in bibliographic data products.

I sell books but also stationery, toys, and many other items. As the ISBN only identifies books, what can I do about the rest?

This material can be numbered by other numbering systems, such as EANs. Modern scanning equipment reads and processes different kinds of bar coded numbers.

The EAN organisation asked me to become a member. Is this mandatory?

If you only want to use the ISBN in EAN-13 bar coded form, you do not have to become a member. But as the EAN and UCC provide other numbering standards for identifying cartons, shipping units, locations, etc., and provide other trade-related services, such as electronic address numbers (location codes), EDI (electronic data interchange) formats, etc., you may want to become a member. Check with your EAN organisation for information on their services.

What happens if I have used all the numbers under my identifier?

An additional identifier can be assigned, allowing for a larger output if necessary. This is an additional identifier, not a replacement.

Do different formats of an electronic publication (e.g., PDF, HTML) need separate ISBNs?

Different formats of an electronic publication are regarded as different product forms and therefore need to be identified by different ISBNs if each format is made available separately.

Do print-on-demand publications get an ISBN?

Yes. If the print-on-demand publication is taking the place of the original version and is in the same format, then it may use the original ISBN. If there have been changes in content or format sufficient to constitute a new edition, then a separate ISBN is required.

Do customised print-on-demand publications get an ISBN?

No. Publications that are available only on a limited basis, such as customised print-on-demand publications with content tailored to a user's request, shall not be assigned an ISBN.

Does the International ISBN Agency determine the fee of ISBNs? Is the fee for ISBNs the same everywhere?

The International ISBN Agency does not influence or determine the fee to provide ISBNs, since it is not directly responsible for their allocation beyond a group/national agency level.

Hence this task falls to the group/national agencies, and due to varying economic factors the fees charged by each agency are likely to be different.

What if I only want one ISBN?

In some countries ISBNs are available as single numbers (for author publishers). In these cases neither the registrant element nor an individual ISBN from that allocation will uniquely identify a particular publisher. In other countries the ISBNs can only be obtained in blocks, and the minimum assignment is therefore ten ISBNs. Please refer to the national ISBN agency that is responsible for your language area, geographical region or other appropriate grouping.

My country does not have an ISBN agency responsible for it – what should I do?

ISBN is a mature standard that has been implemented in over 160 countries and has revolutionised approaches to the storage, retrieval, and use of bibliographic data and has helped to optimise retailer efficiency and enhance distribution. We recommend that you contact the ministry of culture or any associations that are responsible for, or have influence on, the book trade to let them know of the desire to implement the ISBN system in your country. You should encourage them to contact the International ISBN Agency for advice on the requirements for establishing an agency. If this approach does not prove fruitful, further guidance from the International ISBN Agency may be sought. As a short-term measure in order that your publications may still be assigned ISBNs and handled internationally, you may wish to contact a distributor based in another country that is willing to handle your stock and assign ISBNs on your behalf (see also section 5.9).

Will people in other countries be able to search for my books in search engines in those countries? If not, then how can I make this possible?

No. In order to make this possible you will have to contact the respective ISBN agency and ask them for details of how to be entered into their national catalogue for books in circulation (i.e., books-in-print). Sometimes you will have to obtain a distributor from that country or have an address in that country before this is possible. In some circumstances the book will also have to be in the language of that country.

The next series of questions concern the changes in the structure of the ISBN and the revision of the standard.

What was the main objective in revising the ISBN and its structure?

The main purpose of the ISBN revision project was to increase the numbering capacity of the ISBN system. As a result of electronic publishing and other changes in the publishing industry, the numbering capacity of the ISBN system is being consumed at a much faster rate than was originally anticipated when the ISBN system was designed for printed books in the late 1960s.

What are the changes to the ISBN system?

The length of the ISBN is changing from ten digits to thirteen digits. The ISBN will now include an initial prefix element consisting of a three-digit number made available by EAN

International. The prefixes that have already been made available by EAN International are 978 and 979, but there may be an additional allocation made in the future to continue to guarantee the capacity of the system. ISBNs will still retain a check digit but the calculation method is changing; for a full explanation of the algorithm refer to section 4.5.

Why this solution and not others?

The 13-digit solution was proposed since books can already carry both the ISBN and the EAN-13 bar code (i.e., the 10-digit ISBN prefixed by 978 and with a recalculated final check digit). This solution also enables the ISBN system to make use of the "979" EAN prefix, which was reserved years ago for the future use of the book trade within the EAN system.

Why has the ISBN not been changed to a “dumb” number like ISSN?

Such a system would be unmanageable without the support of a strong central database to administer the assignment of ISBN and prevent duplication. Developing that central database, even in the form of a distributed network, would make that proposal one of the most costly and complex solutions for users of the ISBN system.

What are the impacts of changing to the 13-digit ISBN?

Everyone who records, stores, or exchanges ISBN data in an automated system is going to have to ensure that those systems can accommodate the 13-digit ISBN format. Publishers, distributors, retailers, and libraries are the main user groups affected by these changes. It will affect software applications such as automated ordering systems, inventory control systems, point-of-sale systems, and library databases.

Extracts from *Guidelines for the Implementation of 13-Digit ISBNs*

Retrospective conversion

Publishers will need to recalculate all their ISBNs and accommodate the new number format in their systems. This will include ISBNs for all titles in print, probably all or most out-of-print titles for which orders or other enquiries might be received, and for all outstanding unallocated ISBNs supplied by local agencies.

Software will be widely available for small-scale conversions, and systems providers may supply conversion programs to their customers. Some publishers, particularly those with a substantial number of unallocated ISBNs, may be tempted to continue the use of 10-digit ISBNs for internal systems or create other fixes that simply make it seem as if the number has changed, whereas in reality the ISBN structure is still based on the 10-digit ISBN. This is discouraged because of the ambiguity that becomes possible once 979 prefixes are in circulation. This would be a particular danger for users who truncate ISBNs just down to publication element and check digit in internal systems, omitting even the registrant element.

N.B. Publishers will not be expected to sticker their stock with 13-digit ISBNs since the bar code will remain the same and the Bookland EAN-13 printed below the bar code will be the same number as the 13-digit ISBN (although without hyphenation).

Booksellers will need to process 13-digit ISBNs for ordering, invoicing, and other functions from 1 January 2007 and may wish to be in a position to do so as soon as possible. Most booksellers' systems will already be capable of handling 13-digit product numbers used by the EAN system; the ability to read and process an identical number structure for books and for other merchandise without the risk of ambiguity should be a considerable benefit. Manual stock control and other systems may require conversions to be made from 10-digit to 13-digit ISBNs.

Libraries and library systems

Libraries and library system vendors will need to support both existing 10-digit ISBNs and new 13-digit ISBNs as much in advance of 1 January 2007 as possible and continue to do so well into the future.

It is not necessary to convert the ISBNs held in bibliographic records retrospectively, but record formats must be able to hold 13-digit as well as 10-digit ISBNs as soon as possible. Libraries may want to record both forms of the same ISBN when publishers print both in publications, which they are likely to start doing well ahead of 1 January 2007. When a purchase order is based on a bibliographic record containing only a 10-digit ISBN, the ISBN must be converted to 13 digits in the purchase transaction records.

Existing references to books citing 10-digit ISBNs will continue to be used by library patrons indefinitely. Patrons must be able to find bibliographic information in library catalogues by searching with either ISBN format for all 10-digit ISBNs and those 13-digit ISBNs in the 978 range, regardless of the form of the ISBN in the bibliographic record. This will require changes to indexes and search interface software, which will need to be done as much in advance of 1 January 2007 as possible.

Libraries that provide for patrons and staff to search other library catalogues and other information sources through a single user interface will need to consider the impact of changes to accommodate 13-digit ISBNs at either end. Systems that merge and de-duplicate search results from multiple sources using ISBNs will need to allow for

different records carrying different forms of the same ISBN. Conversely, libraries whose catalogues are accessible for search via remote client systems will also need to consider the impact of changes to those catalogues.

Libraries will need to consider the effect of changes in both their systems and in remote systems in respect of links to and from a variety of content and services based on ISBNs. These may include catalogue enrichments such as jacket images, tables of contents, summaries, and reviews, as well as web-based book retailers, reading list systems, link servers, the corporate portal, the Virtual Learning Environment, and access to the full text of e-books.

Within the administration modules of library systems there may need to be changes such as form field lengths, validation routines, and screen and print layouts. Interlibrary loan systems may depend on ISBNs for matching. There may be software that uses ISBNs for matching and de-duplicating bibliographic records when they are imported either online or in batches.

Libraries' systems will need to work with 13-digit ISBNs for all aspects of book purchasing, including all transactions with booksellers, by 1 January 2007 at the latest. Librarians and their system suppliers should be coordinating with book suppliers and appropriate trade organisations to establish transitional arrangements as soon as possible. Standard EDI formats such as EDIFACT provide for both ISBN (i.e., 10-digit) and EAN, so both elements could be exchanged for a transitional period. It should be noted that these considerations apply not only to printed books but to e-books and all other materials identified by ISBN as well.

Although proprietary bar coding of accession numbers (i.e., individual copies) of books will not change, bar code scanners that are used for data entry or search input of ISBNs from the EAN bar code, which currently output 10-digit ISBNs, will need to be re-programmed.

ISBN implementation changes

The new standard will include a revision of the guidelines for the scope of ISBN use. These are unlikely to change significantly from the existing guidelines in terms of the applicability of ISBN to eligible products or the rules about format and edition changes. They will, however, be rewritten to accommodate newer forms of publication such as the delivery of electronic publications (e-books). Complete information about the scope of the ISBN may be found by consulting the *ISBN Users' Manual* and ISBN agencies.

Timing for the use of 13-digit ISBNs

There is likely to be a fairly long transition period leading up to the adoption of 13-digit ISBNs on 1 January 2007; the speed with which the industry moves forward will depend on the requirements of individual trading partners. Some organisations implementing new systems are likely to want to force the pace by requiring their trading partners to adopt 13-digit ISBNs sooner rather than later. This in turn may lead to a chain reaction that makes 13-digit ISBNs widely used ahead of 2007.

Since publishers will inevitably be holding stock carrying 10-digit ISBNs for many years to come, they may feel that it would be sensible to move towards printing the 13-digit ISBN on their books as soon as possible, in conjunction with the 10-digit ISBN until 2007. It is highly recommended that, if this decision is taken, the numbers should appear on the title page verso, and the book cover if there is no bar code, in the following style:

ISBN-13: 978-1-873671-00-9
ISBN-10:1-873671-00-8

This will enable the ISBN-10 to be deleted from reprints after 2007 with minimal or no cost. However, publishers should ensure that they can receive and process orders using ISBN-13 before putting it on printed material.

For titles published after 1 January 2007, the style should revert to that which has been adopted:

ISBN 978-1-873671-00-9

The bar code symbol on the back cover of the book will be unchanged, except that the eye-readable number should be changed for titles published after 1 January 2007 to the full 13 digits preceded by the letters ISBN, with hyphenation retained for clarity. Publishers and printers using their own software for creating bar codes should ensure that it is adapted to this new requirement and should check that third-party suppliers of film masters or electronic bar code data have correctly interpreted this requirement.



Example of bar code with eye-readable 13-digit ISBN

N.B. During the period before 2007 publishers and printers should continue to print the ISBN-10 in eye-readable text above the bar code symbol on the back cover of the book even if they have printed both the ISBN-10 and the ISBN-13 on the verso of the title page. Users who wish to determine the ISBN-13 based upon the printed bar code and its associated text should rely upon the eye-readable Bookland EAN printed below the bar code.

The algorithms to enable both 10- and 13-digit ISBNs to be validated and split for display purposes will be found in the *ISBN Users' Manual*. The data files referred to in the algorithms will be available from the International Agency's website shortly.

Particular care will have to be taken with catalogues and stock order forms around the time of the introduction of 13-digit ISBNs. It is recommended that publishers print both 10-digit and 13-digit ISBNs in these in the period preceding the change. Abbreviated ISBNs should be avoided to prevent misunderstanding.

It is certain that some booksellers will want to place orders using 13-digit ISBNs ahead of the change-over date. This must be subject to agreement between the trading parties, and publishers must decide with their systems suppliers whether they should convert all incoming ISBNs to the 13-digit format when that begins to happen. In any event, they must be in a position to process all 13 digits after 1 January 2007 to avoid possible ambiguity with a 979 number.

Responsibility for changes

Organisations are recommended to review all existing systems – manual and electronic – as soon as possible, develop an action plan, and allocate resources as necessary. It is recommended that a senior executive in each organisation be nominated to oversee the necessary transition in all relevant areas. These will primarily affect systems, but they will

also impact on editorial processes, sales and marketing, design and production departments, as well as royalty and accounting functions in publishing houses.

A possible – but not exhaustive – list of systems that might be affected in a publishing organisation is as follows:

- ISBN allocation
- Product information
- Editorial management
- Production systems
- E-book supply systems
- Order fulfilment/warehouse management
- Accounting
- Rights and contracts
- Rights management and royalty systems

Booksellers will need to review, among other possible areas:

- Ordering systems
- Stock control
- Point of sale systems
- Accounting

Libraries will need to review:

- Acquisitions systems including transaction messages with trading partners
- Cataloguing and other bibliographic data entry systems
- Interlibrary loan systems
- Bibliographic record importing routines
- Bar code scanners
- Local catalogues
- Information portal/metasearch systems
- Interoperability with remote information sources and clients
- System links to and from remote content and services
- Other ISBN-related functions and systems

Communication with trading partners

Clear decisions and communication of them, regarding timing and methods of implementation are crucial to the smooth introduction of the new standard. All organisations are encouraged as part of their own internal reviews to share their implementation plans and timetables with all their trading partners and ensure that those partners are also taking similar implementation measures.

Other considerations

With the possibility available to the book trade to adopt further prefixes for 13-digit ISBNs in the future, the system is likely to remain in its newly defined structure for many years to come. However, developers may be wise to bear in mind some additional possible scenarios relating to field lengths:

- Some organisations are taking an interest in a 14-digit GTIN (Global Trade Item Number), where the 13-digit ISBN is prefixed by an additional digit that can be used as a packaging level indicator by agreement between trading partners.

- The use of the Digital Object Identifier (DOI) or of Uniform Resource Names (URN) may become more widely adopted in parts of the industry supply chain; these are variable length identifiers that can accommodate ISBNs.

The ISBN system is set to be robust and stable in its new form for all currently known applications, but it may be advisable to build in the flexibility required to address the supply chain issues of the future.

FAQs

What happens to ISBNs that have already been obtained by a publisher but are not yet assigned?

The publisher should continue to use these until they are exhausted but must convert the number formats to the new 13-digit standard, prefixed by 978.

e.g., ISBN: 1-873671-00-8

is converted to

ISBN: 978-1-873671-00-9

Will new ISBNs have to be assigned to products that have already been published?

No. Existing ISBNs should be converted from the 10-digit format to the 13-digit format (prefixed by 978) by 1 January 2007. This will apply to records for any title for which transactions may occur and should therefore include out-of-print titles as well as those currently in the catalogue.

The ISBN and bar code on books will not need to be changed until the book is reprinted, as the bar code already represents the EAN-13 which is the same number as the new 13-digit ISBN.

May publishers reuse existing 10-digit ISBNs on a new publication by adding a 978 prefix?

No. The addition of a 978 prefix to a previously used ISBN does not make a new ISBN and for that reason must not be assigned to a new publication.

Will I be able to communicate with trading partners using 10-digit ISBNs after 1 January 2007?

After 1 January 2007 the ISBN will be a 13-digit number, and all mechanical systems will have to accommodate its use in that form. Commercial systems may not support 10-digit ISBNs after that date. In the transitional period, however, arrangements may be made between trading partners to support both formats.

Will publishers have to change to 13-digit ISBNs or can they continue using the 10-digit ones?

Publishers will have to change all their systems to accommodate the 13-digit ISBN by 1 January 2007 in order to avoid the possibility of ambiguity (when the additional 979 prefix comes into use). Although this possibility will be remote to begin with, publishers are strongly encouraged to make the necessary conversions no later than that date. It is essential that mechanical systems are adapted by that date to enable communication with trading partners to continue without interruption.

If our company still has many 10-digit ISBNs, why do we need to reformat them as 13-digit ISBNs?

The International ISBN standard is changing. The ISBN system drives all trading in the industry internationally, and the allocation of ISBN is organised on an international basis.

The 13-digit ISBN is necessary because existing stocks of numbers in certain parts of the world are running low. In order to maintain the system, therefore, the additional 979 prefix is being adopted to expand number availability.

May publishers use the 979 prefix on their existing 10-digit ISBNs?

No. See next FAQ below.

Will our publishing company get the same prefixes in the new 979 range as we have in the 978 range?

Almost certainly not. One of the reasons for the current shortage of 10-digit ISBNs is that prefixes were allocated too generously in the past, resulting in some publishers having many more numbers than they require. ISBN agencies will seek to assign smaller blocks of numbers in the future, and this will lead to new criteria for the allocation of prefixes.

Should both a 10-digit and a 13-digit ISBN be printed in a publication?

For books published after 1 January 2007 only the 13-digit ISBN should be printed. In order to minimise the amount of change that will be required, publishers are encouraged to print both the 10-digit and 13-digit ISBNs on the title verso of their publications as soon as possible in such a way that the 10-digit version can be deleted from reprints after that date.

There is no need to include the 13-digit ISBN above the bar code before 1 January 2007 since the Bookland EAN number already shown in the bar code and in eye-readable form below the bar code is the same number as the ISBN-13 (although without hyphenation). However, for publications published after 1 January 2007, publishers should print the 13-digit ISBN in eye-readable form above the bar code on the back cover of their publications, retaining the correct hyphenated structure.

International Systems Development Guidance

Systems developers are encouraged to consider the following when designing software that interacts with ISBN:

ISBN data input – general considerations

While the ISBN standard defines a single 13-digit standard, 10-digit manifestations associated with the 978 EAN.UCC prefix will be encountered within the supply chain for a number of years. Developers should consider the degree to which input routines will accept and convert 10-digit or 13-digit ISBN manifestations for internal system requirements.

Where a 10-digit ISBN is being converted to a 13-digit ISBN, the prefix element 978 precedes the first 9 digits of the 10-digit ISBN and is followed by a check digit calculated using the modulus 10 check digit formula in section 4.5.

As all EAN.UCC product identifiers may be represented in 14-digit form, it is recommended that systems developers incorporate compliance with the GTIN in their design. For further information on GTIN, please see section 13.2.

ISBN data input – validation considerations

Two levels of validation are available to confirm that input data is a plausible ISBN:

- Check digit validation (see section 4.5)
 - The check digit validation process is a simple mathematical formula that can be used to validate the internal consistency of ISBN input data. Check digit validation will trap many data input errors but will not confirm that the ISBN is for a registrant from a defined registrant group range.
- Registrant group and registrant validation (see section 4.6)
 - This two-step formulaic process will validate that the registrant group is defined and that the registrant range within that group is defined by the International ISBN Agency. When either the registrant group or the registrant group range is undefined, the ISBN is invalid. When the registrant group and registrant range are defined, information from this process is available to split the ISBN into its five elements:
 - Prefix element
 - Registration group element
 - Registrant element
 - Publication element
 - Check digit
 - The assignment and definition of registrant group ranges is an ongoing process overseen by the International ISBN Agency. Current registrant group range information will be available from a standard URL on the International ISBN Agency website. System developers are encouraged to check this URL on a regular basis for up-to-date validation and splitting data.

ISBN data output – general considerations

All external transmission of the ISBN should utilise the 13-digit manifestation after 1 January 2007.