UNIT 12 INTERNATIONAL STANDARD BOOK NUMBER AND ITS IMPORTANCE

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12.0 AIMS

The objective of this unit is to introduce and explain the International Standard Book Number, (ISBN) how it originated and how its use has become an essential tool in the international marketing of books. The unit will provide information about various parts of the ISBN, how to obtain an ISBN and how to check whether the number given to each individual title is correct. After going through the unit one would know the importance of using the ISBN. The Unit will also enable the you to learn the application of ISBN on different kinds of publications to distinguish one edition from the other.

12.1 INTRODUCTION

As the publication of books increased in different parts of the world, the international publishing fraternity was on the lookout for an international numbering system for books. The question was first discussed at the Third International Conference on Book Market Research and Rationalization in the Book Trade, held in November 1966 in Berlin. The use of computers for processing of orders and stock control necessitated a system, which could identify a book uniquely from the other.
The booksellers and stationers W.H. Smith developed the ISBN system in the United Kingdom in 1966 and was originally called Standard Book Number or SB. International Organization recommended the system for international use for Standards (ISO) in October 1969. It was accepted by the delegates of the Plenary Session and circulated to all member bodies in 1970.

12.2 ISBN DEFINED

ISBN or sometimes pronounced 'Is-ben' is an acronym for International Standard Book Number. It is given to every book or edition of a book before publication to identify the publisher, the edition and volume number.

What is an ISBN?

The ISBN (International Standard Book Number) is a unique machine-readable identification number, which marks any book unmistakably. This number is defined in ISO Standard 2108. The number has been in use now for 30 years and has revolutionized the international book-trade. 166 countries and territories are officially ISBN members. The ISBN accompanies a publication from its production onwards. It is an essential instrument in modern distribution and rationalisation opportunities in the booktrade.

Activity 1
What does ISBN stand for?

(Check your answer with that given at the end of the unit)

12.3 COVERAGE OF ISBN

The purpose of the international standard is to coordinate and standardize the international use of ISBNs to uniquely identify one title or edition of a title, published by one specific publisher. The book these days has undergone a revolutionary change in its format. A publication is now available in various formats. The ISBN, therefore, is applicable to various forms of the books irrespective of in what physical form the contents is documented and distributed. The ISBN is applicable to the following categories of publications:

- Books of all kinds including pamphlets and maps.
- Educational videos.
- Different editions of a book (Paperback, Hard cover)
- Books on cassettes and CD.
- It is also applicable on Internet publications.

Diaries, calendars, notebooks sound recordings, serial publications are not required to be given an ISBN.
Activity 2

Name any two forms of publications where ISBN is given.

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(Check your answer with that given at the end of the unit)

12.4 ISSN DEFINED

The ISSN (International Standard Serial Number) is an eight-digit number which identifies serial publications as such, including electronic serials. The ISSN is a numeric code which is used as an identifier. It has no significance in itself and does not contain in itself any information referring to the origin or contents of the publication.

The ISSN takes the form of the acronym ISSN followed by two groups of four digits, separated by a hyphen. The eighth character is a control digit calculated according to a modulo 11 algorithm on the basis of the 7 preceding digits; this eighth control character may be an «X» if the result of the computing is equal to «10», in order to avoid any ambiguity.

The ISO 3297 standard (ISSN) which allows agreement on the exact field of application of the ISSN, defines a serial publication as “A publication, in any medium, issued in successive parts, usually having numerical or chronological designations and intended to be continued with no predetermined end”.

12.5 ADMINISTRATION OF ISBN

The administration of the ISBN system is carried out on three levels:

- International agency
- Group agencies
- Publisher level

International agency The international administration and co-ordination of the ISBN system is done through the: International Standard Book Number Agency

Staatsbibliothek zu Berlin, Preussischer Kulturbesitz D-10772 Berlin, GERMANY

Tel: (+49 30) 266 23 38
Fax: (+49 30) 266 28 14, 266 23 78
E=Mail: ISBN@SBB.SPK-Berlin.de

URL: http://www.isbn-international.org/

The main functions of the ISBN Agency are:

- to promote, coordinate and supervise the world-wide use of the ISBN system;
- to approve the definition and structure of group agencies;
- to allocate group identifiers to group agencies;
• to advise on the establishment and functioning of group agencies;
• to advise group agencies on the allocation of international publisher identifiers; and
• to publish the assigned group numbers and publishers’ prefixes in up-to-date form.

Publishers wishing to have ISBNs assigned to them should contact their appropriate National Agency.

Activity 3
Mention any two functions of the ISBN Agency.

(Check your answer with that given at the end of the unit)

12.6 ADMINISTRATION OF ISBN IN INDIA


Contact Address:
Raja Rammohun Roy National Agency for ISBN
Government of India
Ministry of Human Resource Development
Department of Secondary & Higher Education
A2/W 4, Curzon Road Barracks, New Delhi-110001
Tel. (+91 11) 2338 46 87  E-mail: isbn@nic.in.

It is the responsibility of all publishers to inform their group agency or the organization responsible for the maintenance of title/registration of the ISBNs that have been assigned to published and forthcoming books. Given below is the specimen for applying for ISBN in India.

Application For Registration with ISBN Agency (INDIA)

1. Name of the Publishing House
2. Proprietor’s- Director’s Name
3. Nationality
4. Date of establishment
5. Mailing address
6. Email address
7. Website, if any
8. Telephone/Fax
9. Publishing field- Educational, Religious, STM,
   Social Sciences, Philosophy, Pure Science, Etc.
10. Total output till date
11. Whether you will assign ISBN to the backlog?
    If yes, attach list of books
12. Number of titles expected to publish in the current year
13. Number of titles expected to publish in next five years
14. Have you applied for ISBN before?
15. If yes, what was the assigned publisher's code
16. If yes, have you supplied bibliographic details about assigned ISBNs

Signature

12.7 STRUCTURE OF ISBN

The ISBN is divided into four parts of variable length, which must be separated
clearly by hyphens or spaces. Each part represents a specific field. The parts
identify the country or group of countries of origin of the book, the identity of the
publisher in that group, specific title published by a specific publisher and the check
digit to ensure that the number is correctly given.


These parts are as follows:

3.7.1 Group identifier
3.7.2 Publisher identifier
3.7.3 Title identifier
3.7.4 Check digit

12.7.1 Group Identifier Number

First group of digits are group identifiers and indicate a national, geographical,
language or other convenient group. The group may be of single digit or multiple
digits. The country field is 0 or 1 for English speaking countries, 2 for French
speaking countries, and 3 for German speaking countries. The country field can be
5 digits long. For example 99936 is used for Bhutan. The country code for India
is 81 and 93. The complete list of countries, which have been allotted group code,
is available with the International Book Number Agency in Berlin, Germany.

Example: ISBN 81...(India)

All books produced by Indian publishers will have this group identifier. All
group identifiers are allocated by the International ISBN Agency in Berlin.
12.7.2 Publisher Identifier Number

The publisher identifier number, which may also consist of multiple digits, is awarded by the national Standard Book Number Agency in each country. The second part of the ISBN identifies a particular publisher within a group. The publisher prefix usually indicates the exact identification of the publishing house and its address. If publishers exhaust their initial contingent of title numbers, they may be allocated an additional publisher prefix. The publisher prefix may comprise up to seven digits. In India Raja Ram Mohan Roy Library Foundation established by the government of India has been entrusted with the job of assigning the publisher code and also the block code to the publishers according to their requirements.

Example: ISBN 81-241- ...

12.7.3 Numbers for Individual Titles

The National Standard Book Number Agency gives the numbers in block of ten to hundred (some times even more) at a time according to the publishing program of a publisher. After the block of numbers received by the publisher is utilized the Agency is intimated and a further block may be asked for. In this way a small publisher may receive an ISBN consisting of one digit for the language, seven digits for the publisher and single digit for the individual item. The third part of the ISBN identifies a specific edition of a publication of a specific publisher. A title identifier may consist of up to six digits. As a consequence a different publisher number may correspond to the same publisher. The individual item/title number follows the publisher code.

Example: ISBN 81-241-0614

12.7.4 The Check Digit

The check digit is the last digit of an ISBN. It is calculated on a modulus 11 with weights 10-2, using X in lieu of 10 where ten would occur as a check digit. This means that each of the first nine digits of the ISBN – excluding the check digit itself – is multiplied by a number ranging from 10 to 2 and that the resulting sum of the products, plus the check digit, must be divisible by 11 without a remainder.

The last digit, which is multiplied by 1, is the check digit chosen to make the sum correct and divisible by 12. If the sum total of the first nine digits thus arrived is divisible by 11 then the check digit is expressed as 0.


Activity 4

Name the four parts of an ISBN

(Add activities related to ISBN components)

(Check your answer with that given at the end of the unit)
12.8 RENDERING OF THE ISBN

Rendering of the ISBN

ISBN basically consists of 10 digits (Arabic 0-9). These digits are formally broken into four parts and these parts appear on the book with the use of hyphen or space in between the parts. For example:

81-241-0614-2 or 81 241 0614 2

1) Part one is the group/ country/ language identifier 81 (India)

2) Part two is the publisher identifier 241 (Publisher code)

3) Part three is the number assigned to each individual title 0614 (Item title code)

4) Part four is the check number or checksum character 2 (Check digit)

The number of digits in the first three parts of the ISBN (group identifier, publisher prefix, title identifier) varies. The number of digits in the group number and in the publisher prefix is determined by the quantity of titles planned to be produced by the publisher or publisher group. Fewer digits represent publishers or publisher groups with large title outputs.

The number of digits in each of the identifying parts 1, 2 and 3 is variable, although the total sum of digits contained in these parts is always 9. These nine digits, together with the check digit, make up the ten-digit ISBN. The number of digits in the group identifier will vary according to the output of books in a group.

12.9 CHECK DIGIT IN 10 DIGIT ISBN

To understand the method of calculating the check digit we shall apply the formula on the following ISBN.

Let us take the example of an ISBN 81-241-0614-2

The first nine digits are multiplied by numbers 10 to 2 as explained in the paragraph (3.7). We will get the following resultant sum total.

\[
\begin{align*}
8 \times 10 &= 80 \\
1 \times 9 &= 9 \\
2 \times 8 &= 16 \\
4 \times 7 &= 28 \\
1 \times 6 &= 6 \\
0 \times 5 &= 0 \\
6 \times 4 &= 24 \\
1 \times 3 &= 3 \\
4 \times 2 &= 8 \\
\end{align*}
\]

Total \hspace{1cm} 174
If we divide this figure with 11 the remainder will be 9. We need to add 2 to make it divisible by 12. If we add this number (2) to 174, it will make 176, which is equally divided by 12. Therefore, the check digit is 2, which is the last digit of the above ten digit ISBN. The number, therefore, is correct.

12.10 USE OF EAN BAR CODE FOR BOOKS

A bar code is a series of vertical bars of varying widths, in which each of the digits zero through nine are represented by a different pattern of bars that can be read by a laser scanner. The bars are commonly found on consumer products and are used especially for inventory control. Bar codes have been utilized to encode many kinds of data, including complete programs for some programmable calculators. The most familiar bar code is the Universal Product Code used with cash registers in supermarkets. When an optical scanner reads the code linked to a computer, the computer can provide and record information about the item, such as its price or the quantity sold, from and to databases.

Every publisher is supposed to receive ISBNs from their group agency responsible for granting ISBNs to them. For retailing of products in USA, The Universal Product Code (UPC). Symbol is used. In other countries of Europe a similar symbol known as European Article Number (EAN). Every EAN begins with a 2 or 3 digit prefix, which indicates the country of origin. EAN’s for companies registered in France, for example, might begin with the prefix 34; Japan’s prefix is 49. Universal Code Council and Agency for European Article Number provide these codes.

Since all countries of the world produce books, UCC and EAN reached an agreement to designate books produced in different parts of the world as a country unto itself and have been assigned its own EAN prefix. Thus the prefix 978 changed the 10 digits ISBN into the 13 digits ISBN.

The Book land EAN is a 13-digit code. To convert the ISBN to the Book land EAN, begin with the Book land Prefix 978. The next 9 digits are the first 9 digits of the ISBN, with the hyphens deleted. The 13th digit is the check digit, calculated mathematically For example; the ISEN 81-241-0614-2 becomes Book land EAN 978 81 241 0614 3 without a hyphen when used in bar code.

Bar Code Graphics automatically calculates the EAN check digits. since the method of calculating the check digit differs, the check digit may change in the 13 digits ISBN.

Activity 5

What is a bar code?

What does EAN stand for?

(Check your answer with that given at the end of the unit)
12.11 CONVERSION TO ISBN-13

Rapid worldwide expansion of barcode scanning has brought into prominence the agreement reached between European Access number (EAN) and Universal CoJe council (UCC) which allowed 10 digit ISBN to be converted into 13 digits. This has made ISBN an internationally identifier with worldwide bar code system.

The agreement replaced the 10 digit ISBN with a special ‘bookland’ identifier represented by the digit ‘978’ for books. The digit 978 is prefixed by the first nine digits of an ISBN and the check digit is worked out on the basis of EAN rules (Modulus 10). The 13 digits new ISBN format increased the available numbers of ISBNs worldwide and enabled conformity to the EAN global numbering system.

12.11.1 Timing for the Transition

Beginning from January 1, 2007, ISBN agencies all over the world were asked to assign new ISBN numbers that are 13 digits long, replacing the 10 digit numbers that were currently provided. Since ISBN numbers are used to identify books for production, ordering, inventory, or researching, it is imperative that publishers understand the rationale and ramifications behind this upcoming major change.

The complexity of making the transition will vary from publisher to publisher, depending on existing systems and practices. After January 1, 2007, the numbers issued by all ISBN agencies will have the new 13-digit structure; but as blocks of ISBN-13s built on existing ISBN-10s are exhausted, new blocks will be prefixed with 979 instead of the current 978.

Since it was not possible to convert systems and data to 13 digit ISBN overnight, the book industry was provided a dual numbering system to be used from January 1, 2005. It suggested completion by January 1, 2006 and change over to complete before 1 January 2007.

Dual numbering means that a publisher may give both a book’s ISBN-10 and ISBN-13 on the books. The purpose of the dual numbering approach was to allow each organization to make the transition at its own pace instead of subjecting the industry to an abrupt change. Transition to the ISBN-13 was to be completed as soon as possible and after January 1, 2007 ISBN-13 became officially the “ISBN”; and the ISBN-10 was phased out.

Activity 6

What is meant by dual numbering system in ISBN?

(Complete with your answer)

(Check your answer with that given at the end of the unit)


1. Begin with prefix of “978”

2. Use the first nine numeric characters of the ISBN (include dashes) 978-81-241-0614-2

3. Calculate the EAN check digit using the “Modulus 10 Algorithm”
   978-81-241-0614-2
   ISBN-13 978-81-241-0614-(Check digit will be calculated with the new formula)

### 12.12 CHECK DIGIT IN 13 DIGIT ISBN

The International ISBN Agency’s official 2005 manual covering ISBNs explains how the 13-digit ISBN check digit, which is the last digit of the 13-digit ISBN, is calculated differently from the old 10-digit ISBN check digit. In the 13 digit ISBN check digit is calculated on a modulus 10, of the alternately weighted (by 1 and 3) products of the first 12 digits, with additional calculation of this result.

In other words calculating an ISBN 13 check digit requires that each of the first twelve digits of the 13-digit ISBN — excluding the check digit itself — be multiplied alternately by 1 and 3. Next, take the sum modulo 10 of these products. This result is subtracted from 10. The result is the check digit. If the check digit calculates to 10, 0 is used.


Prefix 978 to the 10-digit ISBN ISBN 978-81-241-0614-

\[
\begin{align*}
9 \times 1 &= 9 \\
7 \times 3 &= 21 \\
8 \times 1 &= 8 \\
8 \times 3 &= 24 \\
1 \times 1 &= 1 \\
2 \times 3 &= 6 \\
4 \times 1 &= 4 \\
1 \times 3 &= 3 \\
0 \times 1 &= 0 \\
6 \times 3 &= 18 \\
1 \times 1 &= 1 \\
4 \times 3 &= 12 \\
\text{Total} &= 107
\end{align*}
\]

When we divide 107 by 10 the remainder is 7. The result is subtracted from 10.

The resultant 3 is the check digit in 13 digits ISBN.

The complete sequence of 13 digits ISBN, therefore, would be 978-81-241-0614-3
12.13 CARE IN APPLICATION OF ISBN

It is to be remembered that each title is given a new ISBN to identify the group agency, specific publisher and each individual title or edition of title. The purpose of this exercise is to facilitate its use in trade directories like Books in Print and Internet sites for sale and information. The use of ISBN and barcode has given a product number to each title for its retail management, processing of orders management of royalties and other related activities of book trade.

In order to achieve better results from the system every publisher should take care in the proper application of the system. The following points need to be noted:

- Every new title or edition of title must be assigned a new ISBN.
- If a book is produced in more than one format, each edition should be given a separate ISBN.
- A publisher operating in several places, which are listed together in the imprint of the book, will assign only one ISBN to the book. This ISBN should be assigned by the office or branch responsible for publication.
- An ISBN, once assigned, can never be re-used, under any circumstances. This is of the utmost importance to avoid confusion. If, through a clerical error, a number is incorrectly assigned, the number must be deleted from the list of useable numbers and must never be assigned to another title.

Publishers should advise the group agency of the number(s) deleted and of the titles to which they were erroneously assigned.

- In a multi-volume book the whole set is assigned one ISBN if the book is sold as a set. If each individual volume is sold separately, each volume will be assigned a separate ISBN.
- If a book is a multi volume publication, the whole set should be given one ISBN.
- If each volume is sold separately every volume should be given a separate ISBN.
- If the book has a price change, it should not be given a new ISBN.
- If a new edition with substantial changes is produced it should be mentioned in the book and should be given a new ISBN.
12.14 PRINTING OF ISBN

For the efficient running of the system the ISBN must appear:

- on the verso of the title page (copyright page);
- on the lower section of the outside back cover;
- on the foot of the title page, if there is no space elsewhere;
- on the bottom of the back dust jacket or any protective case, or wrapper; and
- on the base of the spine (only if the product is a paperback book).

Activity 8

Mention any two positions where ISBN should appear on the book

(Check your answer with that given at the end of the unit)

12.15 ADVANTAGES OF THE ISBN

The use of ISBN and introduction of EAN Book land number has brought books in line with any other product, which is being sold with machine-readable product code. The advantages of the system in international marketing of books are many. Some of the main advantages are listed below

- The ISBN is a unique international identifier for monographic publications; the ten-digits number (now 13), therefore, replaces the handling of long bibliographic descriptive records. It saves the time of the staff and mistakes can be avoided.
- It has made possible the making and updating book trade directories where information new and old titles can be easily found.
- Ordering and distribution of books with computer soft wares is mainly done with speed and efficiency.
- The 13-digit Book land EAN bar code is machine-readable and avoids mistakes.
- The ISBN is now necessary for the sale of book with electronic point-of-sale systems in bookshops.
- Rights management is mainly done on the basis of ISBN.
- It is easier to monitor sales and control the inventory in a store

It may be added here that there is, in general, no requirement for a publisher to assign an ISBN to a book or for that to display its number, but in the age of computers and Internet selling many publishers and booksellers may find it more convenient to deal in books that carry an ISBN.
12.16 SUMMING UP

In this unit we have discussed the International Standard Book Number, its origin, need and development from ten digits to thirteen digits and its compatibility with the bar code system.

We have learnt the structure of ISBN and how International Agency grants group numbers to national agencies and group agencies further accord publisher specific numbers who in turn give individual numbers to each book. The formula of calculating the check digit has also been explained.

The growth and usefulness of EAN in marketing and inventory control and use of bar code has been accepted worldwide. We have also discussed how in order to keep pace with the marketing needs, Book Land number 978 has been added to 10 digits ISBN.

The process of registration for grant of ISBNs for a specific publisher in India, has also been explained.

After going through this Unit you would know the importance of ISBN and also where to print ISBN in a publication. The advantages of ISBN have been enumerated to encourage the publishers to use it for their marketing benefits.

12.17 AIDS TO ANSWERS

Activity 1 ISBN
Activity 2
1. Books of all kinds including pamphlets and maps.
2. Books on cassettes and CDs.
Activity 3
1. To promote, coordinate and supervise the worldwide use of the ISBN system. 2. To allocate group identifiers to group agencies.
Activity 4
1. Group identifier 2. Publisher identifier 3. Title identifier 3. Check digit
Activity 5 European Article Number
Activity 7 From 1st January 2007
Activity 8
1. On the verso of the title page (copyright page).
2. On the bottom of the back dust jacket, or any protective case.