Procedures for Development and Access to Published Standards

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Introduction

There are two kinds of national and international technical standards affecting libraries, information services and publishing: official or de jure standards developed under formal procedures, and de facto standards. Adherence to either type of standard is voluntary, unless compliance is requested by a government agency. The official U.S. standards are American National Standards approved by, but not necessarily published by, the American National Standards Institute (ANSI) (1430 Broadway, New York, NY 10018). The official international standards are both approved by and published by the International Organization for Standardization (ISO) in Geneva, Switzerland. There are also two Unesco documents which may be considered official international standards because they were developed under formal procedures.

It is easier to describe the procedures for developing official standards than those for de facto standards, because they are explicit and detailed and because fewer organizations produce them. A recent Unesco publication contains hundreds of standards and guidelines produced by scores of organizations relating to information handling. The official standards development procedures will be treated comprehensively and in detail; the discussion of procedures for developing de facto standards is more by way of illustration.

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Official American National Standards

American National Standards, of which there are now about 10,000, are developed in three ways: by the canvass method, by the accredited organization method, and by the standards committee method. In order to be approved by ANSI as American National Standards, detailed procedures published by ANSI must be followed. Since there are no American National Standards affecting libraries, information services and publishing which have been developed by the canvass method, this procedure will not be described. To become accredited, an organization must submit its procedures for standards development to ANSI for approval. The substance of the procedures ANSI requires of accredited organizations is similar to procedures which are described below for the standards committee method. ANSI may audit accredited organizations to confirm that the required procedures are followed. A good example of an accredited organization is the American Society for Testing and Materials (ASTM), which develops and publishes scores of new and revised American National Standards each year, primarily in engineering fields. ASTM publishes annual volumes of all of its current American National Standards. At least three ASTM standards dealing with the degree of acidity in paper have some interest to libraries, information services and publishing.

To establish an American National Standards Committee, the organizers must submit to ANSI for approval the name of an organization which will undertake the duties and responsibilities of serving as the secretariat for the proposed committee. These responsibilities include:

1. organizing the committee;
2. submitting a list of committee members for ANSI approval;
3. determining that the committee member organizations participate actively, and that all those having a substantial concern with, and competence in, standards within the committee's scope have the opportunity to participate;
4. submitting proposed revisions of the title and scope of the committee to ANSI for approval;
5. arranging for selection of committee officers;
6. appointing a committee secretary;
7. proposing programs of work, together with proposed completion dates, and giving direction and guidance to the committee;
8. ensuring that meetings of the committee are not closed to the concerned public;
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9. ensuring that ANSI procedures are followed when letter ballots are taken on proposed standards;
10. reporting results of voting on proposed standards to ANSI in accordance with its procedures;
11. maintaining standards within the scope of the committee in an up-to-date condition, arranging for publication of approved standards and ensuring that information on newly-published standards reaches the concerned public;
12. establishing a procedure within the secretariat to hear appeals of actions or inactions of the committee;
13. submitting status reports of the work in progress to ANSI, at least annually, and promptly announcing the initiation of new work;
14. encouraging the use of the ANSI Style Manual in drafting proposed standards; and
15. securing financial support for the committee.

If approved by ANSI, the secretariat may then organize a standards committee following the detailed requirements of the ANSI procedures. If product standards are to be developed, the committee membership must be "balanced," with appropriate representation of organizations concerned with the production and the consumption of the product and of the general public.

Several American National Standards Committees develop standards affecting libraries, information services and publishing: X3, Information Processing Systems; PH5, Micrographic Reproduction; Z85, Standardization of Library Supplies and Equipment; and Z39, Library and Information Sciences and Related Publishing Practices. Of these, Z39 has developed more standards directly related to these fields than others. There are thirty-eight American National Standards developed by Z39; fourteen others are in process of development. The procedures are followed by Z39 in developing standards conform to ANSI requirements and consist of the following principal stages, all of which are set forth in detail in the Z39 Bylaws and Handbook for Subcommittees.

1. Officers of the committee are elected by the voting membership for staggered terms: chairperson, chairperson-elect; and nine members of the Executive Council, three each representing libraries, information services and publishing.
2. Organizations applying for Z39 voting membership are recommended by the Executive Council and approved by the Z39 Secretariat, the Council of National Library and Information Associations.
3. The Executive Council recommends and the voting membership must then approve the establishment of subcommittees to develop specific standards. Proposals for new standards may originate in the Z39 membership, the Executive Council, or outside sources.

4. The subcommittee chairs are appointed by the Z39 chair, and they in turn recommend other members to serve. The Z39 chair then appoints the remaining members of the subcommittees.

5. The subcommittee drafts a standard, which may be sent to the Z39 voting members for comment.

6. The subcommittee may then request a formal written ballot on a proposed draft standard. It may do this without going through the comment stage.

7. When authorized by the Z39 chair, the draft standard is mailed by the Z39 Executive Director to the membership with a written ballot, which must be returned within six weeks. Three types of votes are provided: approval (with or without comment), disapproval (with reasons required), or abstention. Member organizations not returning ballots must be reminded to do so by the end of the voting period.

8. All comments and negative votes are supplied to the subcommittee chairs, who must then attempt to resolve objections. This process may result in substantive changes in the draft and thus require a reballot on a revised draft.

9. At some stage, either at the start of the ballot in Z39 or later, the text of the proposed standard must be submitted to ANSI for "public review:" publication of a notice of the proposed standard in the biweekly ANSI publication, Standards Action. Anyone wishing to review the proposed standard may request a copy from the originating organization and comment on it within a two-month period. Written response to comments thus received must be made by the originating organizations.

10. When the proposed standard is ready, it is then submitted to the ANSI Board of Standards Review through the secretariat. The submission of the text of the proposed standard must also include the following documentation:

   a. the title and designation of the proposed American National Standard;
   b. whether the submittal is a revision, reaffirmation, or withdrawal of an existing American National Standard;
   c. a copy of the proposed American National Standard as finally approved by Z39;
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d. final results of the letter ballot, including identification of those voting negative (with reasons therefore), abstaining, and those not responding (despite follow-up);
e. a list of the Z39 committee personnel at the time of balloting, as well as a list of the relevant Z39 subcommittee personnel, if the standard was developed or revised by a subcommittee.
f. identification of negative votes outstanding and a history of the attempts to resolve them, with copies of all related correspondence;
g. results of the ANSI public review, with copies of all related correspondence;
h. a brief history of the development of the standard; and
i. a confirmation that ANSI's procedures for the American National Standards Committee Method are followed.

The formal ANSI requirements for the submission of a proposed American National Standard to ANSI for approval provide that if at least a majority of the votes cast are affirmative, the secretariat may use its discretion as to whether a draft standard is ready for submission to the ANSI Board of Standards Review. However, if at least two-thirds of the total possible votes of the standards committee are affirmative, it is mandatory that the draft standard with the accompanying exhibits be submitted. As a practical matter, however, Z39 almost always succeeds in resolving all negative votes of Z39 members before submitting draft standards to the Board of Standards Review, even though this may require more than one ballot.

The same series of steps is usually followed for the mandatory reaffirmation, revision or withdrawal of standards, five years after the last ANSI approval. In the case of reaffirmation, however, Z39 on the recommendation of the Executive Council will send out a ballot on reaffirmation without setting up a subcommittee if there is no known reason for a revision.

It will be seen that the process of developing American National Standards is long, drawn-out, and provides ample opportunity for all interested parties to contribute expertise and to make their views known. In addition to the ANSI public review process with its notices published in Standards Action, Z39 makes every effort to keep its constituency informed by free subscriptions to its quarterly newsletter, the *Voice of Z39*, each issue of which contains a detailed account of the work being carried on in the development of new and revised standards.
Official International Standards

The two principal official international standardization bodies are the International Electrotechnical Commission (IEC) and the International Organization for Standardization (ISO). Only the latter is relevant to this article. The ISO membership consists of national bodies most representative of standardization in their countries. Standards development in ISO is carried out by numerous Technical Committees (TCs). Several ISO Technical Committees develop standards affecting libraries, information services and publishing, including TC 37, terminology; TC 46, documentation; TC 97, information systems; and TC 171, micrographics. Of these, TC 46 produces the most standards of direct interest to libraries, information services and publishing.

Each TC has a secretariat, a national standards body designated by ISO. The secretariat for TC 46, Documentation, is held by the Deutsches Institut für Normung E.V. (DIN), with headquarters in West Berlin. Any national member body of ISO may elect to become either a participating (voting) member of a technical committee or merely to be kept informed of the work of the committee by being registered for observer status. The United States has participating member status on TC 46, Documentation.

The procedures for developing ISO standards are set forth in the ISO publication, Directives for the Technical Work of ISO. ISO standards constitute agreements between the member bodies. These agreements must pass through a number of stages before they can be accepted as an international standard. The work toward an international standard generally begins with an initial working draft of the standard being circulated within a subcommittee or a working group of a subcommittee. Once agreement is reached, a draft proposal (DP) is prepared and circulated within the technical committee. An approved DP is then sent to the ISO Central Secretariat for registration as a draft international standard (DIS). The DIS is then circulated to all ISO member bodies for voting. If 75 percent vote in favor of the DIS, it is sent to the ISO Council for acceptance as an international standard. ISO standards are generally reviewed every five years to prevent them from becoming out of date due to technological evolution or the introduction of new methods, materials, quality, or safety requirements since the standard was approved.

Although ANSI is the U.S. participating member in ISO TC 46, the substantive work is carried on by an ANSI-appointed technical advisory group (TAG), which in this case is American National Standards Committee Z99. All requests for U.S. comments or votes on ISO draft proposals or draft international standards received by ANSI from the TC 46
Secretariat or ISO are referred to Z39, which in turn sends them to experts in the subject matter involved—usually, but not always, chairs or members of Z39 subcommittees, present or past, or individuals in Z39 member organizations. Z39 then recommends to ANSI how the U.S. votes shall be cast or what comments should be submitted. Votes in ISO are similar to those in Z39: affirmative (with or without comments); negative (with reasons), or abstentions. TC 46 also sends out ballots on whether standards and proposed standards should be added to, or deleted from, the TC 46 program of work.

**Unesco Recommendations**

The United Nations Educational, Scientific and Cultural Organization (Unesco), with headquarters in Paris, has a procedure for making “Recommendations,” which in effect are standards, to the nations which make up its membership. These recommendations are not binding on the member nations, but they carry substantial weight and are frequently followed, as is the case with two recommendations relevant to this article: “Recommendation Concerning the International Standardization of Statistics Relating to Book Production and Periodicals,” 1964, and “Recommendation Concerning the International Standardization of Library Statistics,” 1970.

The usual procedure for developing a Unesco Recommendation involves the following steps:

1. Provision for the development of a recommendation in the budget and the program of work.
2. Preparation of a draft by the Unesco staff.
3. Calling a small conference of invited technical experts to review and revise the staff draft.
4. Holding a formal conference of technical experts appointed by all member countries interested in doing so for the preparation of still another draft, which is approved by formal vote.
5. Transmission of the draft agreed to by the international conference of experts to Unesco member nations.
6. Debate, modification and vote on the international experts’ conference draft at a Unesco General Conference held every two years.

cal to the book-production portions of the 1964 Unesco Recommendation.

**De Facto National Standards**

The Library of Congress (LC) is undoubtedly the agency which has developed the largest number of *de facto* national standards affecting libraries, information services and publishing. One example is the three-by-five-inch dimension of a catalog card, which was adopted by LC when it began selling catalog cards to other libraries in 1901. These dimensions have now been incorporated into at least one American National Standard, Z39.30-1982, "Standard Order Form for Single Titles of Library Materials in three inch by five inch Format." Another example is the bibliographic content of the cataloging in Cataloging in Publication (CIP) Data prepared by LC and now printed annually in thousands of U.S. book titles as well as titles originating in other countries. LC ordinarily consults with the library and other affected communities in establishing programs such as CIP which it originates and administers, but there is no fixed procedure for consultation and no formal arrangements for voting.

The American Library Association (ALA) is another organization which has developed a number of *de facto* national standards. An example is the interlibrary loan form which is in widespread use. (This form is now being considered by American National Standards Committee Z39 for conversion through formal procedures into an American National Standard.) Like the Library of Congress, ALA does not have a uniform formal procedure for developing and voting upon its *de facto* standards.

**De Facto International Standards**

**IFLA**

The International Federation of Library Associations and Institutions (IFLA), with headquarters in The Hague, Netherlands, and an office for Universal Bibliographic Control (UBC) in London, is the principal developer and publisher of *de facto* international standards relating to libraries. The list of IFLA publications in the *IFLA Directory 1980-81* includes a considerable number of publications of the IFLA Committee on Cataloguing (to 1976) and the International Office for UBC. Many of these documents may be considered to be *de facto* international standards, such as the following: *ISBD(M)*, first standard
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edition; List of Uniform Headings for Higher Legislative Bodies, second edition; Corporate Headings; The Arrangement of Entries for Complex Material; and List of Uniform Titles of Liturgical Works.

The procedures followed by IFLA for developing these de facto standards vary and do not involve a formal voting process such as that required by ISO. A good description of the status of the IFLA standard-like documents, especially the series of International Standard Bibliographic Descriptions (ISBDs) has recently appeared in an article by Richard H.A. Cheffins, Project Officer, IFLA International Office for UBC:

These constitute the family of ISBDs. But what is their status, and by what authority are they issued? Although there has been some coyness about the matter, there can be no real doubt that their status is that of standards. Their authority rests on IFLA being the international body representative of librarianship throughout the world. But IFLA was not conceived as a standardizing authority and its constitution (revised as recently as 1976) makes no specific provision for this activity, though in defining its purpose there is a useful catch-all provision that..."(IFLA) shall undertake such other activities as will promote fulfillment of theoretical and practical objectives in every field of library activity." The first ISBD (1971 edition of "M") was issued as recommendations of a Working Group set up at the IMCE which in turn had been convened by IFLA; it was revised by an editorial group in accordance with the decisions of the Revision Meeting organized by the IFLA Committee on Cataloguing. Subsequent ISBDs were issued by other Working Groups set up by the IFLA Committee (later Section) on Cataloguing either alone or jointly with other Committee/Sections (or in the case of ISBD(PM) with IAML—the International Association of Music Libraries). More recently texts are specifically stated to have been approved by the Standing committees of the appropriate IFLA Sections.

AACR

The second edition (1978) of the Anglo-American Cataloging Rules is a major example of a de facto international standard. However, the procedure for the development and approval of these rules was more formal than is ordinarily the case for de facto standards. The preface to the second edition contains a detailed description of the procedures used in formulating and voting upon the revised rules. Although many organizations and individuals contributed to the revision, the final text was approved by the Joint Steering Committee for Revision of AACR. This committee consisted of one voting and one non-voting delegate from each of the following participating organizations: the American Library Association, the British Library, the Cana-
dian Committee on Cataloguing, the Library Association, and the Library of Congress.

**Access and Use of Standards**

Bibliographic and physical access to official and *de facto* standards relating to libraries, information services and publishing varies widely and leaves much room for improvement.

**Publication and Physical Access**

Only one out of ten American National Standards (but all Z39 standards) are published by ANSI, but all published American National Standards are listed in the ANSI annual catalog and numbered supplements, and may be purchased from ANSI. In addition, ANSI publishes smaller catalogs or flyers for certain categories of American National Standards, including standards in the Z39 series. The ANSI catalogs and flyers are published in addition to catalogs produced by other organizations developing and publishing American National Standards, such as the National Micrographics Association. ISO and the IEC also publish annual catalogs, which in the United States may be purchased from ANSI along with the actual ISO and IEC standards. ISO in 1977 also published a compilation of texts of ISO standards relating to information transfer. *De facto* national and international standards are generally listed in publications of the originating organizations and must be purchased from them.

There are no depository libraries in the United States for national and international standards which are authorized to supply photocopies of individual standards. However, the Standards Information Service of the U.S. National Bureau of Standards will provide bibliographic information from its comprehensive collection of the U.S. and international standards and those of many individual countries.

**Bibliographic Access**

Bibliographic access to standards relating to libraries, information services and publishing, especially Z39 standards, has improved significantly since 1979, but further improvement needs to be made. In 1980, the American National Standards in the Z39 series became the first American National Standards to carry Library of Congress CIP Data. In 1981, American National Standards in the Z39 series became a monographic series assigned the International Standard Serial Number 1076-0762. Prior to 1980 even the American National Standards in the Z39
series were not cataloged promptly by the Library of Congress, but they are now as new standards and revisions are published as part of the CIP program.

Cataloging information on published standards in the Z39 series has been entered into the data banks of two Z39 member organizations: the National Technical Information Service and OCLC, Inc. ANSI does not have a data bank accessible online for its own standards or for those of ISO and IEC, but is designing such a data bank for published American National Standards and those in process of development. ANSI and ISO do not assign International Standard Book Numbers to American National Standards and ISO Standards. Some de facto standards, such as those published by ALA and IFLA, carry ISBNs and CIP or similar data. Only in 1980 did Unesco publish its excellent bibliography of standards and guidelines (normative materials) relating to information handling.15

Use of Standards

Evidence on the use of standards relating to libraries, information services and publishing has not been collected in any systematic way. Some widespread uses are readily apparent, such as the printing of ISSN in serials and ISBNs in monographs, and adherence to American National Standard Z39.2, "Bibliographic Information Interchange on Magnetic Tape."16 A number of the standards developed by American National Standards Committee X3, Information Processing Systems, have been designated as Federal Information Processing Standards (FIPS), and thus have become mandatory for federal agencies. Evidence of uses of other Z39 standards is fragmentary, although individual examples are frequently brought to the attention of the Z39 office and are reported in the professional literature. Research on the use of Z39 and ISO standards relating to libraries, information services and publishing would make excellent dissertation topics for library school students and would be valuable to standards-developing and standards-approving bodies.

References

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Additional References


The *Bowker Annual* has carried articles on ANSC Z39 in almost every annual edition since 1969, written by various authors associated with the committee. Beginning with the 1969 edition, the work of ISO TC 46, Documentation, has also been covered, either as a separate article or as a part of the article on Committee Z39.


