

Implementation of
ISO/IEC TR 9573-11:1992

Information processing — SGML support facilities — Techniques for using SGML —

Part 11: Application at ISO Central
Secretariat for International Standards
and Technical Reports

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National foreword

This British Standard reproduces verbatim ISO/IEC TR 9573-11:1992 and implements it as the UK national standard.

This British Standard is published under the direction of the Information Systems Technology Standards Policy Committee whose Technical Committee IST/18 has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international committee any enquiries on interpretation, or proposals for change, and keep UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the ISO/IEC TR title page, pages ii to vi, pages 1 to 65 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

**Information processing — SGML support
facilities — Techniques for using SGML —**

Part 11:

Application at ISO Central Secretariat for
International Standards and Technical Reports

*Traitement de l'information — Facilités de support pour SGML —
Techniques d'utilisation du SGML —*

*Partie 11: Application au Secrétariat central de l'ISO pour les Normes
internationales et les Rapports techniques*



Reference number
ISO/IEC TR 9573-11:1992(E)

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

The main task of technical committees is to prepare International Standards, but in exceptional circumstances a technical committee may propose the publication of a Technical Report of one of the following types:

- type 1, when the required support cannot be obtained for the publication of an International Standard, despite repeated efforts;
- type 2, when the subject is still under technical development or where for any other reason there is the future but not immediate possibility of an agreement on an International Standard;
- type 3, when a technical committee has collected data of a different kind from that which is normally published as an International Standard (“state of the art”, for example).

Technical Reports of types 1 and 2 are subject to review within three years of publication, to decide whether they can be transformed into International Standards. Technical Reports of type 3 do not necessarily have to be reviewed until the data they provide are considered to be no longer valid or useful.

ISO/IEC/TR 9573-11, which is a Technical Report of type 3, was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Sub-Committee SC 18, *Document processing and related communication*.

ISO/IEC/TR 9573 consists of the following parts, under the general title *Information processing — SGML support facilities — Techniques for using SGML*:

- *Part 1: SGML tutorial*;
- *Part 2: Basic techniques*;
- *Part 3: Advanced techniques*;
- *Part 4: Using short references for identifying markup*;
- *Part 5: Using non-Latin alphabets*;
- *Part 6: Referencing and synchronisation*;
- *Part 7: Mathematics and chemistry*;
- *Part 8: Tables*;
- *Part 9: Using SGML for computer to computer interchange*;
- *Part 10: Designing application for database interfacing*;
- *Part 11: Application at ISO Central Secretariat for International Standards and Technical reports*;
- *Part 12: Public entity sets for general and publishing symbols*;
- *Part 13: Public entity sets for mathematics and science*;
- *Part 14: Public entity sets for Latin based alphabets*;
- *Part 15: Public entity sets for non-Latin based alphabets*;
- *Part 16: Public entity sets for ideograms*.

ISO/IEC/TR 9573 was first published in 1988 as a single volume. The material has undergone revision and expansion and some of the tutorial material of ISO 8879:1986 has been incorporated in some parts:

- a) Part 1 replaces ISO 8879:1986 Annexes B and C (in part);
- b) Part 2 replaces ISO/IEC/TR 9573:1988 clauses **4, 5, 6, 7, 10, 13**, and **14**, and ISO 8879:1986 Annex E (in part);
- c) Part 3 replaces ISO 8879:1986 Annexes C (in part), and D (in part);
- d) Part 5 replaces ISO/IEC/TR 9573 clauses **11, 12**, and **15**;
- e) Part 7 replaces ISO/IEC/TR 9573 clause **8**;
- f) Part 8 replaces ISO/IEC/TR 9573 clause **9**;
- g) Part 12 replaces ISO 8879:1986 Annex D (in part);
- h) Part 13 replaces ISO 8879:1986 Annex D (in part);
- i) Part 14 replaces ISO 8879:1986 Annex D (in part);
- j) Part 15 replaces ISO 8879:1986 Annex D (in part);

Annex A and Annex B of this part of ISO/IEC/TR 9573 are for information only.

Introduction

ISO 8879, *Information processing — Text and office systems — Standard Generalized Markup Language (SGML)*, states the rules for the description and markup of documents for publishing and interchange. ISO/IEC TR 9573 complements ISO 8879 by providing additional tutorial information. It is not intended, and should not be regarded, as an extension, modification, or interpretation of ISO 8879.

ISO/IEC TR 9573 includes a tutorial on the basic components of the SGML language. It includes notes on the analysis of a document prior to the writing of a formal document type definition, and a series of examples illustrating the use of SGML in various situations together with a discussion of the advantages and disadvantages of different approaches. One example given is for a general document type, others of a general nature are for letter and memorandum, and the mixing of text and graphics. The special considerations that apply for use of SGML with non-Latin based languages, as well as linguistic applications, are discussed and examples shown. Other parts of ISO/IEC TR 9573 contain sample applications of a specialized nature, such as for mathematics, chemistry, and tables. Public entity sets covering a wide variety of widely used special graphic characters are defined.

The titles of the parts of ISO/IEC TR 9573 are listed in the foreword.

1 Scope

This part of ISO/IEC TR 9573 defines the “ISO Central Secretariat SGML application” (i.e. elements required, generic identifiers, attributes, and their structure) for International Standards and Technical Reports. Annex A contains the formal SGML Document Type Definition (DTD).

The specifications in this document refer to

- working drafts;
- committee drafts;
- draft International Standards;
- International Standards;
- Technical Reports;
- International Standardized Profiles [JTC 1].

It does not cover supplements (technical corrigenda and amendments).

The application includes features that have been added to permit its use by other interested standardization bodies. The formal DTD has been divided into a common part and a specific part in order to ease its use by others.

NOTE 1 Differences are mainly found in the front matter.

A procedure will be developed to allow consultation of other interested standardization bodies regarding future amendments to the DTD.

It is intended that the application be implemented through an SGML-sensitive editor when used by project editors, project leaders, and secretariats for working drafts during the development of a standard and for submission of these documents to the ISO Central Secretariat for publication. In such an implementation, prompting by more meaningful names than element names (restricted to 8 characters) will be available, as well as on-line help both for the different elements and for rules contained in the *ISO/IEC Directives*.

2 References

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC/TR 9573. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO/IEC/TR 9573 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 8879:1986, *Information processing — Text and office systems — Standard Generalized Markup Language (SGML)*.

ISO 639:1988, *Code for the representation of names of languages*.

ISO 3166:1988, *Codes for the representation of names of countries*.

ISO/IEC Directives, Part 3: Drafting and presentation of International Standards.

3 Structure

A standard is composed of

- a) bibliographic information, which consists of
 - either
 - a bibliographic information block
 - or
 - a “standard” element with attributes of a bibliographic nature
 - front matter, which consists of
 - title page
 - table of contents (optional)
 - foreword
 - introduction (optional)
- b) general warning (optional)

c) body, which consists of

— either

- Scope
- Conformance (optional)
- Normative references (optional)
- Definitions (optional)
- Symbols and abbreviations (optional)
- additional technical normative clauses (optional)

— or a “general” section, followed by one or more further sections. Each section consists of one or more clauses. The general section (GENSEC) consists of

- Scope
- Conformance (optional)
- Normative references (optional)
- Definitions (optional)
- Symbols and abbreviations (optional)
- one or more further clauses (optional)

As a special case when the “general” section consists only of “Scope” it is replaced by “SCOPESEC”.

d) normative annexes (optional)

e) informative annexes (optional)

f) index (optional)

The markup is:

<STANDISO>

<BIBINFO APPLY=ISO>

or

< STANDARD>

<FRONTM>

<TITLEP>

...

<TOC>

<FOREWORD>

...

<INTRO>

...

<GENWARN>

</GENWARN>

<BODY>

<SCOPE>

...

<CONF>

...

<REFS>

...

<DEFS>

...

< SYMABB> or <SYMS>

<H1>Title of clause

...

or

<GENSEC> or <SCOPESEC>

<SCOPE>

...

<SECTION>

<CONF>

...

...

<REFS>

...

<DEFS>

...

<SYMABB> or <SYMS>

...

<SECTION>Title of section

<H1>Title of clause

...

<ANNEXN>Title of 1st normative annex

...

<ANNEXN>Title of 2nd normative annex

...

<ANNEXI>Title of 1st informative annex

...

<ANNEXI>Title of 2nd informative annex

...

<INDEX>

</STANDARD>

3.1 Bibliographic information

The bibliographic information element (BIBINFO) is composed mainly of the information that appears on the front cover page and back cover page of the published (paper) document. Other, optional, information elements contain information that typically is present in a project monitoring database; e.g. date of various stages in the development of the document.

NOTE 2 This information is normally only present for documents interchanged between standards bodies. Some of the information applicable to the sender body may be used by the receiver body for their own bibliographic information.

The bibliographic information element has an attribute (APPLY=), which is used to specify the standards body to which the information contained within the element is applicable. This attribute is required.

<BIBINFO APPLY=ISO>

The bibliographic information element may be repeated. In this case the value of the APPLY attribute has to be different for each repetition.

NOTE 3 The use of the BIBINFO element is an alternative to the use of the “standard” element, with bibliographic attributes plus the front matter elements. Thus the occurrence indicator of the BIBINFO element is “*”.

The BIBINFO element is composed of

- a) titles
- b) edition
- c) version (optional)
- d) language
- e) document number

- f) document source (optional)
 - g) notes (optional)
 - h) endorsement information (optional)
 - i) development cycle information
 - j) information regarding other documents that the current document replaces or is replaced by (optional)
 - k) abstract (optional)
 - l) classification information (optional)
 - m) keywords (optional)
 - n) related standards (optional)
 - o) production information (optional)
- NOTE 4 This information is typically used only for the production of the documents on some physical medium; it is not used for any intellectual information.
- p) other information (optional)

NOTE 5 Some of the optional elements are not used for ISO documents. These elements are: version, abstract, related standards, and other information.

Markup example

```
<BIBINFO APPLY=ISO>
<MTITLE langcode=EN>
Smokers' paraphernalia &mdash;
second title element if any
<PTITLE>Ashtrays
<MTITLE langcode=FR>
Accessoires pour fumeurs &mdash;
deuxi&egrave;me &eacute;l&eacute;ment
du titre,
s'il y en a
<PTITLE>Cendriers
<EDITION>Second
<VERSION>2
<LANGUAGE>EN
<WDNUMBER>ISO/IEC JTC1/SC18/WG8
<SERNUM>N7777
<NUMBER>9999
<PART>1
< SOURCEOD>ISOIEC
<NOTES>MULT.TC CR45.83
<ENDORSMT>
<ENDORSND>Smokers Doc 1
<ENDORSNT>Explanation of the reasons of endorsement.
<DEVELOPC>
<STATUS>WD <SCDATE>1986-07-14
< STATUS>DIS<SCDATE>1987-01-18
<VOTESTRT>1987-02-15<VOTEEND>1987-08-15
<STATUS>DIS<SCDATE>1988-03-18
<VOTESTRT>1988-05-15<VOTEEND>1988-11-15
<STATUS>IS <SCDATE>1989-10-01
<ABSTRACT>The text of an abstract.
<P>Another paragraph in the abstract.
<CLASSIFN type=UDC>123.456.789
<KEYWORD>ashtray
<KEYWORD>smoking
<RELSTD>UOS 1234
```

```
<PRODINFO>
<PRODPARM>toc <PRODVAL>3 2
<PRODPARM>fastpage<PRODVAL>2
<PRODPARM>pprice <PRODVAL>14
<PRODPARM>crc <PRODVAL>palatino
<OTHERPRM TYPE=mysparm>34
<OTHERTEXT TYPE=mytext>Some text whose
type is not explicitly
included in the DTD.
```

3.1.1 Titles

The title information consists of one or more occurrences of

- a) main title (MTITLE)
- b) part title (PTITLE)

elements. The language of the title is indicated by the `LANGCODE=` attribute with values in accordance with ISO 639.

NOTE 6 Dashes in the titles are keyboarded using the `—` entity. In the case of a multipart standard the dash between the title and the title of the part **is not keyboarded**, since it is not part of the title. In the appropriate places this dash is added by the system.

NOTE 7 Titles in languages not using the latin alphabet are key-boarded using entity references. For interchange it is recommended that latin letters with diacritics are represented using entity references.

Typical markup is

```
<MTITLE langcode=EN>
Smokers' paraphernalia &mdash;
second title element if any
<PTITLE>Ashtrays
<MTITLE langcode=FR>
Accessoires pour fumeurs &mdash;
deuxi&egrave;me &eacute;l&eacute;ment
du titre,
s'il y en a
<PTITLE>Cendriers
```

3.1.2 Edition

The edition is identified by the `<EDITION>` tag. The markup is:

```
<EDITION>Second
```

3.1.3 Version

The (optional) version of the document is identified by the `<VERSION>` tag. It is used to indicate the version of a draft International Standard. The markup is:

```
<VERSION>2
```

3.1.4 Language

The language of the document is identified by the `<LANGUAGE>` tag. The content of the element is in accordance with ISO 639. The markup is:

```
<LANGUAGE>en
```

NOTE 8 The language indicator in the reference number of a standard, E, F, or R, is derived from the content of this element.

3.1.5 Document number

The document number consists of

- number of the working draft (WDNUMBER); a prefix followed by a serial number (SERNUM) element
- number of the standard (NUMBER)
- number of the part (PART) (if the standard is published in parts)
- type (TYPE) with content 1, 2 or 3 (if the document is a Technical Report)

The markup is:

```
<WDNUMBER>ISO/IEC JTC1/SC18/WG8
<SERNUM>N7777
<NUMBER>9999
<PART>1
```

3.1.6 Document source

The source of the document is identified by the <SOURCEOD> tag. The content of the element is either ISO, or ISOIEC. The element is optional and a source of ISO is implied for a <BIBINFO APPLY=ISO> element. The markup is:

<SOURCEOD>ISOIEC

3.1.7 Notes

Notes, if any, applicable to the document are identified by the <NOTES> tag. The content is one or more tokens:

- FT (for Fast Track)
- NONCOMP (for documents which are not yet resident in the system: in this case the system is used to generate only a cover page and foreword)
- CR45.83 (for Council resolution 45/1983)
- CR21.86 (for Council resolution 21/1986)
- LATE.F (French text late arriving)
- LATE.E (English text late arriving)
- MULT.TC (Note to consult experts in several fields)

The markup is:

<NOTES>MULT.TC CR45.83

3.1.8 Endorsement information

Endorsement information, if any, is identified by the <ENDORSMT> tag. The content of this element is one or more occurrences of

- endorsed document (ENDORSN) reference number
- explanation of endorsement (ENDORSNT) (optional)

The markup is:

```
<ENDORSMT>
<ENDORSN>Smokers Doc 1
<ENDORSNT>Explanation of the reasons for endorsement.
```

3.1.9 Development cycle information

Information pertaining to the development cycle of the document is contained in the DEVELOPC element. This element consists of one or more occurrences of

- status of the document (STATUS), with content
 - IS: International Standard
 - ISP: International Standardized Profile
 - TR: Technical Report
 - DIS: Draft International Standard
 - DISP: Draft International Standardized Profile
 - DTR: Draft Technical Report
 - AMDS: Amended Draft (Standard)
 - AMDT: Amended Draft (Technical Report)
 - AMDP: Amended Draft (International Standardized Profile)
 - CD: Committee Draft
 - PDTR: Proposed Draft Technical Report
 - WD: Working Draft
- date at which the document reached the status (SCDATE)
- date of the start of the vote at the status (VOTESTRT) (if applicable)
- date of the end of the vote at the status (VOTEEND) (if applicable)
- an explanatory report (REPORT) (optional)

The last status entry indicates the current status of the document.

The markup is:

```
<DEVELOPC>
<STATUS>WD <SCDATE>1986-07-14
<STATUS>DIS<SCDATE>1987-01-18
<VOTESTRT>1987-02-15<VOTEEND>1987-08-15
<STATUS>DIS<SCDATE>1988-03-18
<VOTESTRT>1988-05-15<VOTEEND>1988-11-15
<STATUS>IS <SCDATE>1989-10-01
```

3.1.10 Replacement information

A document may replace one or more documents, either fully or in part. Similarly a document may be replaced by one or more documents. Such replacement information is identified by the REPLACES and REPLACED elements, respectively. These elements are repeatable.

These elements consist of

- an external reference (see 5.14)
- a comment regarding the replacement

The markup for replacing another document is:

```
<REPLACES><EXTREF><REFREF>ISO 8879:1986
<REFSPEC>Annex D</REPLACES>
```

3.1.11 Abstract

An (optional) Abstract is identified by the <ABSTRACT> tag. The content is a sequence of paragraphs.

NOTE 9 The content of this element is not used for published paper copies of International Standards. The information is used for bibliographic products.

The markup is:

```
<ABSTRACT>The text of an abstract.
<P>Another paragraph in the abstract.
```

3.1.12 Classification information

Classification numbers are identified by the <CLASSIFN> tag. An attribute TYPE= is used to identify the classification scheme.

NOTE 10 Currently only UDC number are used for International Standards.

The markup is:

```
<CLASSIFN type=UDC>123.456.789
```

3.1.13 Keywords

Each keyword for the document is identified by the <KEYWORD> tag. This element can occur zero or more times.

NOTE 11 Keywords (descriptors) are assigned by the ISO Central Secretariat.

The markup is:

```
<KEYWORD>ashtray
<KEYWORD>smoking
```

3.1.14 Related standards

Standards related to the documents are each identified by the <RELSTD> tag.

NOTE 12 This element is not used for International Standards.

The markup is:

```
<RELSTD>UOS 1234
```

3.1.15 Production information

Production parameters are specified in the PRODINFO element. This element consists of pairs of

- PRODPARM element whose content is the name of the production information parameter
- PRODVAL element whose content is the value of the parameter

Production information is used to specify, if applicable,

— “toc” to indicate that the document should have a table of contents. The level to which subclauses are entered is controlled by the content of the PRODVAL element; the first number indicates the level for the body and the second number the level for the annexes. For example, to include levels H0 to H3 in the body and H1 to H2 in the annexes, the specification is:

```
<PRODPARM>toc <PRODVAL>3 2
```

— “fastpage” to indicate the page, in camera ready copy received by the ISO Central Secretariat, where the comment regarding fast tracking of a document occurs.

— “pprice” to indicate the number of pages on which the price of the standard is based.

NOTE 13 This attribute is only used for standards in French and is the number of pages of the English edition. ISO pricing policy is to base the price of a standard on the number of technical pages in the English language edition of a standard; for this edition the number of pages is calculated automatically.

— “crc” to indicate the typeface of camera ready copy received by the ISO Central Secretariat.

NOTE 14 The only production parameter relevant for submission of complete documents is “toc”. The other parameters are used internally in the ISO Central Secretariat.

The markup is:

```
<PRODINFO>
<PRODPARM>toc <PRODVAL>3 2
<PRODPARM>fastpage<PRODVAL>2
<PRODPARM>pprice <PRODVAL>14
<PRODPARM>crc <PRODVAL>palatino
```

3.1.16 Other information

No other information is used by ISO.

3.2 Attributes on STANDARD tag

— STATUS= with value:

- IS: International Standard
- ISP: International Standardized Profile
- TR: Technical Report
- DIS: Draft International Standard
- DISP: Draft International Standardized Profile
- DTR: Draft Technical Report
- AMDS: Amended Draft (Standard)
- AMDT: Amended Draft (Technical Report)
- AMDP: Amended Draft (International Standardized Profile)
- CD: Committee Draft
- PDTR: Proposed Draft Technical Report
- WD: Working Draft

- TYPE= with value 1, 2, or 3, when STATUS=TR, DTR, PDTR, or CD (if the document is a Technical Report)
- VERSION= to indicate the version of a DIS
- SOURCE= with value ISO or ISOIEC. The value ISO is default and thus the attribute need only be specified for ISO/IEC standards.
- NOTES= with one or more values of
 - FT (for Fast Track)

NOTE 15 The attribute FASTPAGE= is used to indicate the page number where the comment regarding the fast tracking is to be found in camera ready copy of a document to be fast tracked.

- NONCOMP (for documents which are not yet resident in the system: in this case the system is used to generate only a cover page)
- CR45.83 (for Council resolution 45/1983)
- CR21.86 (for Council resolution 21/1986)
- LATE.F (French text late arriving)
- MULT.TC (Note to consult experts in several fields)
- PPRICE= indicates the number of pages on which the price of the standard is based

NOTE 16 This attribute is only used for standards in French and is the number of pages of the English edition. ISO pricing policy is to base the price of a standard on the number of technical pages in the English language edition of a standard; for this edition the number of pages is calculated automatically.

3.3 Front matter

3.3.1 Title page

The title page element is composed of the information that appears on the front cover page and on the back cover page. Some of the elements are extracted from a database, whereas others are keyboarded in the standard. Some of the latter may in future be used to update the database.

The line “price based on *n* pages” is generated automatically for the English language version, the value of *n* being calculated by the system.

3.3.1.1 Information obtained from database

The fields extracted from the database are:

- TC/SC number and title
- TC/SC secretariat
- subject field and group
- UDC number

NOTE 17 As a temporary measure, the UDC can also be entered manually using a <UDC> tag. This is placed just after the LANGUAGE element (see 3.3.1.2).

- descriptors

3.3.1.2 Document number

The document number is split up into

- working draft number (optional) consisting of
 - a prefix
 - serial number

For example

<WDNUMBER>ISO/IEC JTC1/SC18/WG8
<SERNUM>N1234

- number of the standard
- number of the part
- number of the edition
- date. This date is normally only the issue date of the edition, but there can also be additional dates representing the issue date of a corrected and reprinted version of the same edition, the submission date, or the voting close date. The type of date is indicated by the TYPE= attribute with values PUBL (publication date), CDREG (date of registration of Committee Draft), WD (date of working draft), CORREP (date for corrected and reprinted version), SUBM (date of submission to vote), or VOTE (date of voting period close).
- language(s); E, F, or R for English, French, or Russian respectively.

3.3.1.3 Title

The title is either

- title (in the language of the standard)
- main title (TITLE)
- title of the part (optional, i.e. only present if a part)
- part title (PTITLE)
- title (in the second language — French if the standard is in English, English if the standard is in French).
- main title in second language (STITLE) In the cases when the title in the second language is not yet known, a “missing” attribute is added (<STITLE MISSING>).
- title of the part in the second language (optional, i.e. only present if a part)
- part title in second language (PSTITLE)
- or
- an mlttitle (multi-lingual title) element containing a repeatable group of title and (optional) title of part

NOTE 18 Dashes in the titles are keyboarded using the — entity. In the case of a multipart standard the dash between the title and the title of the part **is not keyboarded**, since it is not part of the title. In the appropriate places this dash is added by the system.

3.3.1.4 Markup example

The markup is:

```
<STANDARD STATUS=DIS VERSION=2
NOTES="CR45.83 MULT.TC">
<FRONTM>
<TITLEP>
<DOCNUM>
<NUMBER>9999
<PART>1
<EDITION>Second
<DATE TYPE=SUBM>1991-05-01
<DATE TYPE=VOTE>1991-11-01
<LANGUAGE>E
  <TITLE>
    Smokers' paraphernalia &mdash;
    second title element if any
  </TITLE>
  <PTITLE>
    Ashtrays
  </PTITLE>
  <STITLE>
    Accessoires pour fumeurs &mdash;
    deuxi&egrave;me &eacute;l&eacute;ment
    du titre,
    s'il y en a
  </STITLE>
  <PTITLE>
    Cendriers
  </PTITLE>
  or
  <MLTITLE>
  <TITLE>
    Smokers' paraphernalia &mdash;
    second title element if any
  </TITLE>
  <PTITLE>
    Ashtrays
  </PTITLE>
  <TITLE>
    Accessoires pour fumeurs &mdash;
    deuxi&egrave;me &eacute;l&eacute;ment
    du titre,
    s'il y en a
  </TITLE>
  <PTITLE>
    Cendriers
  </PTITLE>
</MLTITLE>
```

3.3.2 Contents

If the standard is to contain a table of contents the <TOC> tag is inserted. The entries in the table of contents are generated automatically by the text formatter. An optional LEVEL attribute permits control over the level to which the subclauses are entered in the table of contents for the body of the standard. An analogous LEVELA attribute is used to control the level for the annexes. For example, to include levels H0 to H3 in the body and H1 to H2 in the annexes, the tagging is:

```
<TOC LEVEL=3 LEVELA=2>
```

3.3.3 Foreword

The foreword contains a large amount of fixed text, which is not keyboarded, but inserted by the text formatter. It can thus be changed *in one place*, if required. Several elements are defined for providing the variable information in the foreword.

Origin of the document:

- a) if developed in an ISO committee:
 - one or more TC, or JTC elements specifying the originator technical committee, or one or more TCSC, or JTCSC elements specifying the originator technical committee and sub-committee
 - optionally one or more COLLAB elements specifying other organizations that have collaborated in the development of the text
- b) if developed outside ISO committees:
 - a SOURCE element specifying the source of the document
 - a TCADOPT element specifying the TC that has adopted document

If the document is replacing another standard:

- a) a cancellation of another standard is indicated by a CANCEL element. The content of the element is the number and year of publication of this standard.
- b) a replacement of an earlier edition is indicated by a REPLACE element whose content is the edition, number, and year of publication of the replaced edition. This element is followed by a REPCOM element explaining the reason for replacement.

This block is followed by paragraphs (optional) and by (optional) list of part titles (PARTLIST) (if the document is one of a series of parts) and further paragraphs.

The markup is:

```
<FOREWORD>

<TCSC>999/1
<TCSC>998/2
<JTSC>1/4
<COLLAB>the International Smokers'
Federation.
or
<SOURCE>the International Smokers'
Federation
<TCADOPT>998

<CANCEL>1234:1950
or
<REPLACE>first edition
(ISO 9999-1:1980)
<REPCOM>which covered only
glass ashtrays.
<PARTLIST>
```

3.3.4 Introduction

The introduction, if present, is identified by the <INTRO> tag. The content is the same as clauses (see below).

The markup is:

```
<INTRO>
<P>
This part of ISO 9999
was . . . . . redundant.
```

3.4 General warning

The general warning element (GENWARN), which is an optional element, consists of text in one or more paragraphs. Both the start- and end-tags are required.

```
<GENWARN>
Text of the first paragraph of
the warning.
<P>Text of a second paragraph.
</GENWARN>
```

3.5 Body

The body is identified by the <BODY> tag. The optional attribute COLS=1 is used for a standard where the body should be set in one column rather than the normal two-column mode.

3.5.1 Scope

The Scope is identified by the <SCOPE> tag. The content is the same as clauses (see below).

The markup is:

```
<SCOPE>
<P>
This part of ISO 9999 specifies
requirements for ashtrays, . . . .
```

3.5.2 Conformance

The (optional) Conformance clause is identified by the <CONF> tag. The content is the same as clauses (see below).

The markup is:

```
<CONF>
<P>
This . . . .
```

3.5.3 Normative references

This clause is headed by fixed text that is automatically inserted by the text formatter. The fixed text has two variants: one when it applies to the whole standard; and one when it applies only to the particular part of the standard. The APPLY= ALL or PART attribute is used to select the variant. A minor variation, handled automatically, is when there is only one reference and one when there are more.

The tag identifying the reference list is <REFLIST>. Each reference element is identified by a <REFREF> tag. The content of the element is a string identifying the reference. It is composed of the ISO or IEC document number. The title of the reference is obtained from a database of titles. A verification is made to see that the latest edition is referred to and a warning message is issued if this is not the case. If the reference is not found an error message is issued. Optionally the title of the reference is added manually if the reference is not in the database.

NOTE 19 IEC publications are not yet included in the ISO database.

The markup is:

```
<REFS APPLY=PART>
<REFLIST>
<REFREF>ISO/R 573:1964
<REFREF>ISO 5361-3:1984
<REFREF>ISO/TR 7329:1984
<REFREF>IEC 160:1963
<REFREF>ISO 1234:-
<REFREF>ISO/IEC 9541-ALL:1991
<REFREF>Davidoff 123<REFTIT>
<CIT>The Davidoff Guide to
Ashtrays</CIT>, Geneva 1985.
```

NOTE 20 Reference to an unpublished document (i.e. DIS) is indicated by a “—” instead of a year. (In this case a footnote indicating that the document is “to be published” is generated by the system).

NOTE 21 Reference to all parts of a multipart standard is indicated by “ALL” instead of a part number.

NOTE 22 The <CIT> tag is used to identify the title of the cited document.

3.5.3.1 Other references to ISO standards

The <REFREF> tag can also be used outside a reference list for extracting the title of an ISO standard in e.g. a bibliography. In this case the end-tag is required.

```
<REFREF>ISO 5361-3:1984</REFREF>
```

NOTE 23 In this case the text is placed inline and no full stop is added after the title.

3.5.4 Definitions

This optional element is identified by the <DEFS> tag. The fixed text heading the definitions is automatically inserted by the text formatter. The fixed text comes in two variants: one when it applies to the whole standard; and one when it applies only to the particular part of the standard. The APPLY= ALL or PART attribute is used to select the variant. In the cases where definitions from other standards apply these standards are indicated using the <DEFREF> tag. Then follows the (optional) definitions list (<DL>). Defined terms are tagged <DT>. Their definitions are tagged <DD>.

The markup is:

```
<DEFS>
<DEFREF>ISO 1234
<DEFREF>ISO 6789
<DL>
<DT>ashtray
<DD>Receptable . . .
by the user.
<DT QUAL="of an ashtray">rated capacity
<DD>The quantity of . . .
under specified conditions.
. . .
</DL>
```

There can be more than one DT per DD. A SOURCE= attribute can be used to further qualify each DD; e.g. SOURCE="Encyclopedia Britannica". The following attributes can be used to qualify each DT:

TYPE= with values

- SYN (synonym)
- DEPR (deprecated)
- DEPOSENSE (deprecated in this sense)
- DEPBAN (strongly deprecated)

COUNTRY = (country); e.g. GB, US, CH, BE, in accordance with ISO 3166

LANG = (language); e.g. en, fr, in accordance with ISO 639

QUAL = (qualifier); e.g. "of a book", or "of a machine tool"

In addition an ID= attribute can be added for referencing a definition using a <LIREF REFID= > tag.

In cases where there are more than one DD for one DT a DDG tag is used;

```
<DT>ashtray
<DDG>ashtray
<DD>Receptable . . .
by the user.
<DD>Ornament . . .
</DDG>
```

In cases where the definitions are substructured a DTH is used:

```
<DL>
<DTH>term group 1
<DL>
<DT>term
<DD>description
. . .
</DL>
<DTH>term group 2
<DL>
<DT>term
<DD>description
. . .
</DL>
</DL>
```

NOTE 24 Tagging of terminology data, particularly for multilingual vocabulary standards, is described in 5.7.

3.5.5 Symbols and abbreviations or Symbols

The optional Symbols and abbreviations clause is identified by the <SYMABB> tag. The alternative Symbols clause is identified by the <SYMS> tag. The content of these elements would normally be a symbols list (<SYML>). Symbols defined are tagged <SYM>. Their definitions are tagged <DESC>.

The markup is:

```
<SYMABB>
<P>The following symbols and
abbreviations are used in this
International Standard.
<SYML>
<SYM>&alpha;<DESC>acceleration
<SYM>ARA<DESC>Ashtray Registration
Authority
. . .
</SYML>
```

3.5.6 Additional technical normative clauses

These clauses are identified by <H1> tags, see 4.1.

3.6 Annexes

Normative annexes are identified by an <ANNEXN> tag; and informative annexes by an <ANNEXI> tag. Both are followed by <H1> tags. The value of the identifier attribute (ID=) can be used when referring to an annex, so must be a unique reference in the document. The short title attribute (STITLE=) may be used, typically to input a short version of the heading to be used as a running head or foot. Annexes normally start a new page; short annexes may not need to start a new page so an attribute PAGE=NO can be used on the <ANNEXN> or <ANNEXI> tag. The header of an annex is normally full page width. The COLSH=2 attribute can be used to specify that it should only be column width.

NOTE 25 PAGE=NO and COLSH=2 are normally only used to "squeeze" an annex into a small space remaining on a page.

The optional attribute COLS=1 is used when the annex should be set in one column rather than the normal two column mode.

The markup is:

<ANNEXN>Title for first normative annex

NOTE 26 The ORIGIN= attribute is no used by ISO.

4 Basic body elements

4.1 Clauses and subclauses

The <H1>, <H2>, <H3>, <H4>, <H5>, and <H6> tags are used to identify the clauses and subclauses of the document. The value of the identifier attribute (ID=) can be used when referring to the clause or subclause, so must be a unique reference in the document. The short title attribute (STITLE=) may be used, on the <H1> and <H2> tags, typically to input a short version of the heading to be used as a running head or foot. No end-tag is necessary.

```
<H1 ID=BAS
stitle="Becoming Acquainted with SGML">
Becoming Acquainted with
the Standard Generalized Markup
Language
```

The content of a clause or a subclause is a mixture of the basic body elements — e.g. paragraphs, notes, various types of lists, figures, tables, footnotes, and quotations — as well as subclauses of a lower level.

For purposes of retrieval a classification of the content of an H1 element is indicated by the CONTENT= attribute. Values of this attribute are:

- material; for materials
- desman; for design and materials
- matdsman; for material, design, and manufacturing
- require; for requirements
- sampling; for sampling
- testmeth; for testmethods
- inspec; for inspection
- class; for classification
- classdes; for classification and designation
- marking; for marking
- labeling; for labeling
- packing; for packing
- marklbpk; for marking, labeling, and packaging
- terms; for terminology
- other; for non-specific/classified content

4.1.1 Clause, subclause or numbered paragraph reference

The clause or subclause reference is used within the document to refer to the identified clause, subclause, or numbered paragraph. The appropriate value for the reference identifier attribute (REFID=) must be provided.

See <HREF REFID=BAS>, where

If a reference occurs at the beginning of a sentence (and the phrase therefore should start with a capital letter) UC is added as an attribute.

<HREF REFID=BAS UC> describes . . .

4.2 Paragraphs

4.2.1 Simple paragraphs

Each paragraph is preceded by <P>.

```
<P>
A correct designation . . . .
```

4.2.2 Numbered paragraphs

The tags for numbered paragraphs are analogous to the tags for subclauses (<H2> etc.). Each numbered paragraph is preceded by a <P2>, <P3>, <P4>, <P5>, or <P6> tag, depending on the level. The value of the identifier attribute (ID=) can be used when referring to the numbered paragraph (using the normal <HREF REFID= > tag) so must be a unique reference in the document.

In annexes, numbered paragraphs of level 1 (<P1>) are permitted.

Example:

```
<H1>Clause title
<P2>Text of numbered paragraph.
<P2>Another numbered paragraph
at this level.
<H3>A subclause title.
<H3>Another subclause title.
<P4>Text of a numbered paragraph
one level deeper.
<P4>Text of another numbered
paragraph.
<P2>Text of numbered paragraph
at level 2.
```

4.3 Notes

4.3.1 Single note

A note to be included in the text is preceded by <NOTE>. This is treated in a different way from footnotes. (Many documents have both notes printed at the point of occurrence, and footnotes printed at the bottom of the page in which reference is made to them.) When all the text or paragraphs of the note have been keyed in, </NOTE> is input to indicate the end of the note.

```
<NOTE>It is extremely important
to be consistent in the design
of a document type definition. </NOTE>
```

If the note is to be referred to, an ID= attribute is used to give the note a unique identifier.

4.3.2 List of notes

A list of notes is preceded by the <NL> tag and ended by an </NL> tag. Each note in the list is preceded by a tag.

```
<NL>
<LI>Some commercial contracts
require additional information.
<LI>For certain destinations,
a higher proportion of chips may
be permitted.
</NL>
```

The tag can take an ID= attribute to give the note a unique identifier that can be used in the NOTEREF element to refer to the note.

4.3.3 Note reference

The note reference is used within the document to refer to the identified note. The appropriate value for the reference identifier attribute (REFID=) must be provided.

One use of a note in ISO documents is given in <NOTEREF REFID=ZF>.

4.4 Footnotes

4.4.1 The footnote itself

The <FN> tag precedes text for a footnote that should be input at the point of occurrence. The application software will cause an indicator to be inserted at that point, and cause the footnote itself to appear at the bottom of the page. The value of the identifier attribute (ID=) can be used when referring to the footnote so must be a unique reference in the document. The footnote text is terminated by </FN>.

Many publications contain both notes and footnotes. <FN ID=NF>The latter are used, for example, when referring to a draft International Standard to indicate that publication is anticipated in due course.</FN>

Whereas notes are printed where they occur, footnotes are collected at the bottom of the page in which reference is made to them.

For the rare cases where a specific symbol is to replace the superscript number distinguishing the footnote, the SYMBOL attribute can be used to specify explicitly the symbol to be used.

```
<FN SYMBOL="*">
```

4.4.2 Footnote reference

The footnote reference is used within the document to refer to the identified footnote. The appropriate value for the reference identifier attribute (REFID=) must be provided.

One use of a footnote in ISO documents is given in <FNREF REFID=NF>.

4.5 Warning and caution

Warning and caution elements are identified by the <WARNING> and <CAUTION> tags. The end-tag is required.

```
<WARNING>
It is dangerous to cross a street
against a red light.
</WARNING>
```

4.6 Quotations

4.6.1 Short quotation

A short quotation, occurring within running text, to be enclosed within quotation marks, is preceded by <Q> and followed by </Q>. (This distinguishes it from a word or phrase that would appear within quotation marks for a different purpose.) Quotations may be nested.

The standard states clearly <Q>the tolerances shall not exceed the specified values</Q>.

4.6.2 Long quotation

Longer quotations are usually set in a different style from short ones, and are therefore treated differently, being delimited by <LQ> and </LQ>.

4.7 Examples

4.7.1 Examples

Single examples in the text are identified by the <XMP> tag. The end-tag is required.

A group of examples are identified by the <XMPS> tag. The end-tag is required. The content is two or more XMP elements.

The content of an XMP element is basic elements; such as paragraphs, artwork, and computer listing.

4.7.2 Examples of computer source or listing

Examples of computer source or listing are identified by the <CPTR> tag. The end-tag is required. Attributes are

— TYPE= with values SOURCE or LISTING; default is SOURCE.

— KEEP= with a value indicating whether the example can be split or not; default value is ALL indicating no split. A numeric value indicates the number of lines to be kept together.

— WIDTH= with values COLUMN or PAGE; default is COLUMN.

NOTE 27 CPTR elements are normally contained in XMP elements.

4.8 Highlighted phrases

The <HP1>, <HP2>, <HP3>, <HP4>, and <HP0> tags variously precede a word or a phrase to be high-lighted, where there are different kinds of highlighting. The four kinds are: 1 italics; 2 bold; 3 bold italics; 4 underlined; 0 no emphasis. An end-tag is required. Highlighted phrases may be nested.

The term <HP1>element</HP1> has a special meaning in the context of SGML.

<HP3>This long highlighted phrase has
<HP0>one</HP0> non-highlighted word</HP3>.

4.9 Terms

Terms, defined either in the Definitions clause, or in a terminology list, are identified by the <TERM> tag. An end-tag is required.

4.10 Lists

4.10.1 Ordered list

The tag precedes an ordered list. When all the individual items have been input, the end-tag is required. Lists may be nested. is followed immediately by .

4.10.2 Unordered list

The tag precedes an unordered list. When all the individual items have been input, the end-tag is required. Lists may be nested. is followed immediately by .

4.10.3 Simple list

The <SL> tag precedes a simple list. When all the individual items have been input, the end-tag </SL> is required. Lists may be nested. <SL> is followed immediately by .

4.10.4 List item

Each individual list item is preceded by . The value of the identifier attribute (ID=) can be used when referring to the item so must be a unique reference in the document.

Example of markup:

<LI ID=LITAG>List Item Tag

4.10.5 List item reference

The list item reference is used within the document to refer to an identified list item by which it is replaced. The appropriate value for a reference identifier attribute (REFID=) must be provided.

Example of markup:

... in <LIREF REFID=LITAG> ...

4.10.6 Compacted lists

In certain, rare, cases the usual line spaces between the list items are not desired. This is indicated by a COMPACT attribute on the start-tag for the list.

<OL COMPACT>

4.10.7 Interrupting the items in a list by a list paragraph

The <LP> tag indicates the start of a list paragraph which interrupts the items in a list that is subsequently continued. The text of the list paragraph will be positioned so that it appears at the same level of indentation as the annotation symbols for the list items. For example:

```
<OL>
<LI>This is the first list item.
<LP>This is the first line of the list paragraph.
<LI>This is the second list item.
</OL>
```

4.10.8 Examples of lists

The markup of an unordered list is:

```
<P>Vibrations in the ashtray may be caused by
<UL>
<LI>aerodynamic loads;
<LI>shaky hands of the smoker.
</UL>
```

A nested list

- a) First item in first-level list
 - 1) First item in second-level list
 - 2) Second item in second-level list
 - 3) Third item in second-level list
- b) Second item in first-level list
 - 1) First item in second-level list
 - First item in third-level list
 - Second item in third-level list
 - 2) Second item in second-level list
 - 3) Third item in second-level list

is marked-up:

```
<OL>
<LI>First item in first-level list
<OL>
<LI>First item in second-level list
<LI>Second item in second-level list
<LI>Third item in second-level list
</OL>
<LI>Second item in first-level list
<OL>
<LI>First item in second-level list
<UL>
<LI>First item in third-level list
<LI>Second item in third-level list
</UL>
```

```
<LI>Second item in second-level list
<LI>Third item in second-level list
</OL>
</OL>
```

4.10.9 Variables list

Mathematical formulae are frequently followed by a list of variables used and their definitions. The list is identified by a <VARL> tag and ended by a </VARL>. The content of the list is pairs of <VAR> (for variable), and <DESC> (for description) elements.

NOTE 28 For special cases a TSIZE= attribute can be used to change the width reserved for the variable name. The default value is 10.

The markup is:

```
<VARL>
<VAR>&alpha;<DESC>angular acceleration
...
</VARL>
```

4.11 Figures and tables

4.11.1 Figure

The figure tag <FIG> precedes figure text, a diagram or other illustration, an end-tag being required. The value of the identifier attribute (ID=) can be used when referring to the figure so must be unique in the document.

The frame attribute (FRAME=) takes one of the values: BOX, RULE, or NONE. The value BOX means that the figure should be enclosed in a box; RULE means that a horizontal rule will be used before and after the figure; and NONE means that no frame will be used. NONE is default.

The place attribute (PLACE=) takes one of the values: TOP, FIXED, or BOTTOM. TOP means that the figure will be floated to the top of the next page; BOTTOM that it will be floated to the bottom of the current page, if there is room for it, or to the bottom of the next page if not (the remainder of the current output column will be filled with the text after the </FIG> tag); FIXED means that if the figure will not fit the current output column, the rest of the column will be left blank and the figure will be positioned at the top of the next column.

The width attribute (WIDTH=) takes the value COLUMN or PAGE for a column-wide or page-wide figure.

The align attribute (ALIGN=) specifies how the figure should be aligned horizontally in the column or on the page. It takes the value LEFT, RIGHT, or CENTER; CENTER being the default.

The lines attribute (LINES=) specifies whether text in the figure body should be left “as is” (LINES=LINES), not formatted, or if normal flowing text should be used (LINES=FLOW).

The number attribute (NUMBER=) can be used in cases where the number of a figure does not follow the normal rules of numbering. The attribute value, any arbitrary text, is used as the number.

NOTE 29 The NUMBER attribute should only be used for the very special cases where the editorial rules for numbering figures have been waived.

Associated with a figure may be a figure caption, <FIGCAP>, and a figure description, <FIGDESC>. The end-tag </FIG> is input after all the figure elements.

```
<FIG ID=DR>
<FIGCAP>Distribution of Rainfall
<FIGDESC>The amount of rainfall is influenced by the
position of the Pennines and the prevailing wind conditions.
</FIG>
```

4.11.2 Figure body

This element, where both the start- and end-tags can be omitted, immediately follows the <FIG> tag.

The content of the figure body is

- figure comment, <FIGCOMM>, (optional)
- artwork and “paragraph” sequences (in any order). “Paragraph sequences” are paragraphs with lists, formulae etc.

4.11.3 Figure comment

The <FIGCOMM> tag is used to identify comments to a figure (e.g. “Dimensions in millimetres”). This element is optional. The end-tag can be omitted.

4.11.4 Artwork

This tag, <ARTWORK> with a NAME attribute, is used to refer to artwork. Normally this tag would be used in a figure body, but it can also be used else-where. The artwork element has no content and the end-tag can be omitted.

```
<FIG ID=DR>
<FIGCOMM>Dimensions in millimetres
<ARTWORK NAME=D5678>
<FIGCAP>Widget
</FIG>
```

4.11.5 Figure caption

The figure caption is preceded by <FIGCAP>. No end-tag is necessary. The tag is valid only in a figure element. This element is optional.

4.11.6 Figure description

The description of a figure is preceded by <FIGDESC>. No end-tag is necessary. The tag is valid only in a figure element. This element is optional.