

**Implementation of
EN ISP 10610-1:1994**

**Information
technology —
International
Standardized Profile
FOD11 —
Open Document
Format: Simple
document structure —
Character content
architecture only —**

**Part 1: Document Application Profile
(DAP)**

The European Standard EN ISP 10610-1:1994 has the status of a
British Standard

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National foreword

This British Standard reproduces verbatim EN ISP 10610-1:1994 and implements it as the UK national standard. This British Standard supersedes DD ENV 41509:1991 and DD ENV 41511:1991 which are withdrawn.

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

- aid enquirers to understand the text;
- present to the responsible European 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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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN ISP title page, page 2, the ISO/IEC ISP title page, pages ii to viii, pages 1 to 52 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.

English version

Information technology — International Standardized
Profile FOD11 — Open Document Format:
Simple document structure — Character content
architecture only
Part 1: Document Application Profile (DAP)

(Regional variant of ISO/IEC ISP 10610-1:1993)

Technologies de l'information — Profil
normalisé international FOD11 — Format de
document ouvert: Structure de document
simple — Architecture de contenu des
caractères seulement
Partie 1: Profil du document d'application
(DAP)
(Variante régionale
de l'ISO/IEC ISP 10610-1:1993)

Informationstechnik — Internationale
Profilnorm FOD11 — Format für
Bürodokumente — Einfache
Dokumentstruktur beschränkt auf
Inhaltsarchitektur für Schriftzeichen
Teil 1: Dokumentanwendungsprofil
(regionale Version
von ISO/IEC ISP 10610-1:1993)

This European Standard was approved by CEN on 1994-12-05. CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

The Technical Board decided to submit the International Standard *Information Technology — International Standardized Profile FOD11 — Open Document Format: Simple document structure — Character content architecture only — Part 1: Document Application profile (DAP)* (Regional variant of ISO/IEC ISP 10610-1:1993) for adoption by the Unique Acceptance Procedure (UAP), in accordance with clause 4.6 of the CEN/CENELEC Internal Regulations, Part 2 of April 1990.

The result of the Unique Acceptance Procedure was positive.

For the time being this standard exists in the English version only.

This document is the first part of a multi-part Functional Standard identified in M-IT-02 as *F/OD11 Open Document Format — Simple document structure — Character content architecture only*.

M-IT-02 CEN/CENELEC/ETSI Memorandum on taxonomy of profiles and directory of functional standards

This European Standard supersedes ENV 41509:1990 and ENV 41511:1990 which shall be withdrawn.

This European Standard shall be given the status of a National Standard, either by publication of an identical text or by endorsement, at the latest by June 1995, and conflicting national standards shall be withdrawn at the latest by June 1995.

According to the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

Endorsement notice

The text of the International Standard ISO/IEC ISP 10610-1:1993 was approved by CEN as a European Standard with agreed regional variations as given below. Section and line numbers correspond to the equivalent numbers in the International Standard.

1 Scope

Replace the last two paragraphs by:

“A document structure in accordance with this International Standard Profile is represented for interchange by a document application profile which uses the Open Document Interchange Format (ODIF) as defined in CCITT Rec. T.415/ISO 8613-5.”

5.1 Data stream conformance

Replace 5.1, a), with: “the data stream shall be encoded in accordance with the ASN.1 encoding rules defined in CCITT Rec. X.209/ISO/IEC 8825”

5.2 Implementation conformance

Replace 5.2, second paragraph, first sentence with:

“A conforming receiving implementation shall be capable of receiving any data streams conforming to this International Standardized Profile structured in accordance with ODIF.”

8 Interchange format

Replace 8, first paragraph with:

“For conformance to this International Standardized Profile, the interchange format class A shall be used.”

Interchange format SDIF

8.2 and its sub-clauses do not apply.

INTERNATIONAL
STANDARDIZED
PROFILE

ISO/IEC
ISP
10610-1

First edition
1993-11-01

**Information technology — International
Standardized Profile FOD11 — Open
Document Format: Simple document
structure — Character content architecture
only —**

Part 1:
Document Application Profile (DAP)

*Technologies de l'information — Profil normalisé international FOD11 —
Format de document ouvert: Structure de document simple —
Architecture du contenu des caractères seulement —
Partie 1: Profil du document d'application (DAP)*



Reference number
ISO/IEC ISP 10610-1:1993(E)

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Descriptors: Data processing, text processing, information interchange, documentation, documents, document architecture, logical structure, layout, formats, profiles.

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. In addition to developing International Standards, ISO/IEC JTC 1 has created a Special Group on Functional Standardization for the elaboration of International Standardized Profiles.

An International Standardized Profile is an internationally agreed, harmonized document which identifies a standard or group of standards, together with options and parameters, necessary to accomplish a function or set of functions.

Draft International Standardized Profiles are circulated to national bodies for voting. Publication as an International Standardized Profile requires approval by at least 75 % of the national bodies casting a vote.

International Standardized Profile ISO/IEC ISP 10610-1 was prepared with the collaboration of

- OSI Asia-Oceania Workshop (AOW);
- European Workshop for Open Systems (EWOS);
- OSE Implementors' Workshop (OIW);
- CCITT Study Group VIII.

ISO/IEC ISP 10610 consists of the following part under the general title *Information technology — International Standardized Profile FOD11 — Open Document Format: Simple document structure — Character content architecture only*.

- *Part 1: Document Application Profile (DAP)*.

Further parts of this International Standardized Profile may be developed.

Annex A forms an integral part of this part of ISO/IEC ISP 10610. Annex B and Annex C are for information only.

Introduction

This International Standardized Profile (ISP) is defined within the context of Functional Standardization, in accordance with the principles specified by ISO/IEC TR 10000, “*Framework and Taxonomy of International Standardized Profiles*”. The context of Functional Standardization is one part of the overall field of Information Technology (IT) standardization activities, covering base standards, profiles and registration mechanisms. A Profile defines a combination of base standards that collectively perform a specific well-defined IT Function. Profiles standardize the use of options and other variations in the base standards, and provide a basis for the development of uniform, internationally recognized conformance test suites.

One of the most important roles for an ISP is to serve as the basis for the development (by organizations other than ISO and IEC) of internationally recognized tests and test centres. ISPs are produced not simply to “legitimize” a particular choice of base standards and options, but to promote real systems interoperability. The development and widespread acceptance of tests based on this and other ISPs is crucial to the successful realization of this goal.

Development of this document application profile has been done in close cooperation between several organizations. These include ODA expert groups within the Asia-Oceania Workshop (AOW), CCITT Study Group VIII, European Workshop for Open Systems (EWOS) and OSE Implementors’ Workshop (OIW). The liaison between these organizations has occurred within the meetings of the Profile Alignment Group for ODA (PAGODA). These meetings have focused on the development of a single set of Internationally aligned ODA document application profiles. This ISP is harmonized among the three workshops and has been ratified by the three workshops’ plenary assemblies.

The purpose of this International Standardized Profile (ISP) is to facilitate the interworking of applications interchanging documents based on ODA, CCITT Rec. T.410 series | ISO 8613. This International Standardized Profile is suitable for interchanging documents in formatted form, processable form or formatted processable form and has been defined in accordance with CCITT Rec. T.411 | ISO 8613-1. The format of this International Standardized Profile is in accordance with the standardized proforma and notation defined in Addendum 1 — Annex F of CCITT Rec. T.411 | ISO 8613-1.

The specification of FOD11 is identical to the specification of PM-11, except that PM-11 only defines the use of the ODIF interchange format.

1 Scope

This International Standardized Profile specifies interchange formats for the transfer of structured documents between equipment designed for word or document processing. Such documents contain character content.

The documents that can be interchanged using this International Standardized Profile range from memos and letters to simple structured documents. This International Standardized Profile provides a comprehensive level of features for the transfer of documents between these systems.

This International Standardized Profile allows documents to be interchanged in the following forms:

- formatted form;
- processable form;
- formatted processable form.

The architecture levels defined for these three forms have matching functionalities so that the interchange formats of a document are convertible from a processable form to any other form.

This International Standardized Profile is independent of the processes carried out in an end system to create, edit or reproduce documents. It is also independent of the means to transfer documents which, for example, may be by means of communication links or storage media.

A document structured in accordance with this International Standardized Profile is represented for interchange by one of two DAPs. One DAP uses the Office Document Interchange Format (ODIF), the other DAP uses the Office Document Language (ODL), both as defined in ISO 8613-5.

When this document refers to *this International Standardized Profile*, it is referring to either of the document application profiles defined by this International Standardized Profile.

2 Normative references

The following documents contain provisions which, through reference in this text, constitute provisions of this International Standardized Profile. At the time of publication, the editions indicated were valid. All documents are subject to revision, and parties to agreements based on this International Standardized Profile are warned against automatically applying any more recent editions of the documents listed below, since the nature of references made by ISPs to such documents is that they may be specific to a particular edition. Members of IEC and ISO maintain registers of currently valid International Standards and ISPs, and CCITT maintains published editions of its current Recommendations.

2.1 Paired Recommendations | International Standards equivalent in technical content

- CCITT Recommendation T.411(1988), *Open Document Architecture (ODA) and Interchange Format: Introduction and General Principles*.
- ISO 8613-1:1989, *Information processing — Text and office systems — Office Document Architecture (ODA) and interchange format — Part 1: Introduction and general principles*.
- CCITT Recommendation T.411 Annex F (1991), *Open Document Architecture (ODA) and Interchange Format: Introduction and General Principles — Annex F: Document Application Profile Proforma and Notation*.
- ISO 8613-1 Add.1: *Information processing — Text and office systems — Office Document Architecture (ODA) and interchange format — Part 1: Introduction and general principles — Addendum 1: Document Application Profile Proforma and Notation¹⁾*.
- CCITT Recommendation T.412(1988), *Open Document Architecture (ODA) and Interchange Format: Document Structures*.
- ISO 8613-2:1989, *Information processing — Text and office systems — Office Document Architecture (ODA) and interchange format — Part 2: Document structures*.
- CCITT Recommendation T.414(1988), *Open Document Architecture (ODA) and Interchange Format: Document Profile*.
- ISO 8613-4:1989, *Information processing — Text and office systems — Office Document Architecture (ODA) and interchange format — Part 4: Document profile*.
- CCITT Recommendation T.415(1988), *Open Document Architecture (ODA) and Interchange Format: Open Document Interchange Format (ODIF)*.
- ISO 8613-5:1989, *Information processing — Text and office systems — Office Document Architecture (ODA) and interchange format — Part 5: Office Document Interchange Format (ODIF)*.
- CCITT Recommendation T.416(1988), *Open Document Architecture (ODA) and Interchange Format: Character Content Architecture*.
- ISO 8613-6:1989, *Information processing — Text and office systems — Office Document Architecture (ODA) and interchange format — Part 6: Character content architectures*.
- CCITT Recommendation X.208(1988), *Specification of abstract syntax notation one (ASN.1)*.
- ISO/IEC 8824:1990, *Information technology — Open Systems Interconnection — Specification of Abstract Syntax Notation One (ASN.1)*.
- CCITT Recommendation X.209(1988), *Specification of basic encoding rules for abstract syntax notation one (ASN.1)*.
- ISO/IEC 8825:1990, *Information technology — Open Systems Interconnection — Specification of Basic Encoding Rules for Abstract Syntax Notation One (ASN.1)*.
- CCITT Recommendation T.505, *Document Application Profile PM-26 | FOD26 — Open Document Format: Enhanced document structure — Character, raster graphics and geometric graphics content architectures²⁾*.
- ISO/IEC ISP 11181-1:1993, *Information technology — International Standardized Profile FOD26 — Open Document Format: Enhanced document structure — Character, raster graphics and geometric graphics content architectures — Part 1: Document Application Profile (DAP)*.

¹⁾ To be published.

²⁾ To be published. The title of this recommendation may be changed.

— CCITT Recommendation T.506, *Document Application Profile PM-36 | FOD36 — Open Document Format: Extended document structure — Character, raster graphics and geometric graphics content architectures*³⁾.

ISO/IEC ISP 11182-1:1993, *Information technology — International Standardized Profile FOD36 — Open Document Format: Extended document structure — Character, raster graphics and geometric graphics content architectures — Part 1: Document Application Profile (DAP)*.

NOTE In the titles of the various parts of ISO 8613 the term “Office” occurs. ISO has decided that this shall be changed to “Open” and the new edition of ISO 8613 (to be published) will use “Open” in place of “Office”. For this reason this International Standardized Profile uses the term “Open” in its title.

2.2 Additional references

- ISO/IEC 646:1991, *Information technology — ISO 7-bit coded character set for information interchange*.
- ISO 2022:1986, *Information processing — ISO 7-bit and 8-bit coded character sets — Code extension techniques*.
- ISO 2375:1985, *Data processing — Procedure for registration of escape sequences*.
- ISO 6937-2:1983, *Information processing — Coded character sets for text communication — Part 2: Latin alphabetic and non-alphabetic graphic characters*.
- ISO 6937-2 Add.1:1989, *Information processing — Coded character sets for text communication — Part 2: Latin alphabetic and non-alphabetic graphic characters — Addendum 1*.
- ISO/IEC 7350:1991, *Information technology — Registration of repertoires of graphic characters from ISO/IEC 10367*.
- ISO 8859-1:1987, *Information processing — 8-bit single-byte coded graphic character sets — Part 1: Latin alphabet No. 1*.
- ISO 8879:1986, *Information processing — Text and office systems — Standard Generalized Markup Language (SGML)*.
- ISO 9069:1988, *Information processing — SGML support facilities — SGML Document Interchange Format (SDIF)*.
- ISO 9293:1987, *Information processing — Volume and file structure of flexible disk cartridges for information interchange*.
- ISO/IEC TR 10000-1:1992, *Information technology — Framework and taxonomy of International Standardized Profiles — Part 1: Framework*.
- ISO/IEC TR 10000-2:1992, *Information technology — Framework and taxonomy of International Standardized Profiles — Part 2: Taxonomy of OSI Profiles*⁴⁾.
- CCITT Recommendation T.400(1988), *Introduction to Document Architecture, Transfer and Manipulation*.
- CCITT Recommendation T.502, *Document Application Profile PM-11 | FOD11 Open Document Format: Simple document structure — Character content architecture only*⁵⁾.

3 Definitions

For the purposes of this International Standardized Profile, the following definitions apply.

The definitions given in CCITT Rec. T.411 | ISO 8613-1 are applicable to this International Standardized Profile.

Constituent constraint names: Each constituent that may be included in a document that conforms to this International Standardized Profile has been given a unique name which serves to associate that constituent with a constituent constraint defined in this International Standardized Profile.

³⁾ To be published. The title of this recommendation may be changed.

⁴⁾ Taxonomy of this document is based on the first edition of ISO/IEC TR 10000-2 (published 1990). In the present edition of ISO/IEC TR 10000-2 (published 1992), the profile identifiers FOD11, FOD26 and FOD36 were changed to FOD011, FOD026 and FOD036.

⁵⁾ To be published. The title of this recommendation may be changed.

The convention is that full names are used (i.e., no abbreviations are used), two or more words in a name are concatenated and each word begins with a capital. Examples of constituent constraint names used in this International Standardized Profile are BodyText and RectoPage.

In clause 6, each constituent constraint provided by this International Standardized Profile is italicized once at the point in the text at which the purpose of that constituent constraint is defined. This also serves to identify all the constituent constraints provided by this International Standardized Profile.

The same constituent constraint names are also used in the technical specification in clause 7 so that there is a one-to-one correspondence between the use of these names in clauses 6 and 7.

Although the constituent constraint names relate to the purpose of the constituent constraints, the semantics of constituents shall not be implied from the names that are used. Also, these names do not appear in an interchanged document but a mechanism for associating constituents in a document with constituent constraints is provided (see 6.6.1). Thus in an application using this International Standardized Profile, the constituents may be known to the user by different names.

4 Relationship with other International Standardized Profiles

This International Standardized Profile belongs to a series of hierarchically related International Standardized Profiles which include FOD26 and FOD36.

The features supported by this International Standardized Profile are a subset of the features supported by the International Standardized Profiles FOD26 and FOD36 and thus all data streams conformant to this International Standardized Profile are also conformant to FOD26 and FOD36, apart from the DAP identifier.

NOTE This International Standardized Profile is identical to CCITT Recommendation T.502 (PM-11) (to be published), except that PM-11 only defines the use of the ODIF interchange format.

5 Conformance

In order to conform to this International Standardized Profile, a data stream representing a document shall meet the requirements specified in 5.1.

This part of the International Standardized Profile does not define implementation support requirements. These requirements are defined in other parts that make use of this International Standardized Profile.

5.1 Data stream conformance

The following requirements apply to the encoding of data streams which conform to this International Standardized Profile:

- a) the data stream shall be encoded either in accordance with the ASN.1 encoding rules defined in CCITT Rec. X.209|ISO/IEC 8825 or the SGML encoding rules defined in ISO 8879;
- b) the data stream shall be structured in accordance with the interchange formats defined in clause 8;
- c) the document, as represented by the data stream after resolution of any external references, shall be structured in accordance with one of the documents architecture classes as defined in 6.1 and shall contain all mandatory constituents specified for that class; other constituents may be included, provided that they are permitted for that class, as specified in clause 7;
- d) each constituent shall contain all those attributes specified as required for that constituent in this International Standardized Profile; other attributes may be specified provided that they are permitted for that constituent;
- e) the attribute values specified shall be within the range of permissible values specified in this International Standardized Profile;
- f) the encoded document shall be constructed in accordance with the abstract document architecture defined in CCITT Rec. T.412|ISO 8613-2;
- g) the document shall be structured in accordance with the characteristics and constraints specified in clause 6.

5.2 Implementation conformance

This subclause states the requirements for implementations claiming conformance to this International Standardized Profile.

A conforming receiving implementation shall be capable of receiving *either* any data streams conforming to this International Standardized Profile structured in accordance with ODIF *or* any data streams conforming to this International Standardized Profile structured in accordance with ODL *or* both of these. Receiving usually, but not always, involves recognizing and further processing the data stream elements. The explicit meaning of “receiving” is determined by another part of this International Standardized Profile.

6 Characteristics supported by this document application profile

This clause describes the characteristics of documents which may be represented by data streams conforming to this International Standardized Profile. This clause also describes how these characteristics are represented in term of constituent constraints.

6.1 Overview

6.1.1 General

This International Standardized Profile supports the interchange of documents in the following forms:

- processable form, which facilitates the revision of a document by a recipient;
- formatted form, which facilitates the reproduction of a document as intended by the originator;
- formatted processable form, which facilitates the reproduction of a document as intended by the originator or facilitates the revision of a document by a recipient.

The constituents that make up these three classes of data stream are defined in **6.1.2**, **6.1.3** and **6.1.4**. Constituents defined as “required” shall occur in any data stream that conforms to this International Standardized Profile. Constituents listed as “optional” may or may not be present in the data stream depending on the requirements of the particular data stream.

6.1.2 Formatted form documents

Required constituents:

- a document profile;
- layout object descriptions representing a specific layout structure;
- content portion descriptions associated to the basic objects in the specific layout structure.

Optional constituents:

- layout object class descriptions representing a factor generic layout structure;
- presentation styles.

6.1.3 Processable form documents

Required constituents:

- a document profile;
- logical object class descriptions representing a complete or partial generic logical structure;
- logical object descriptions representing a specific logical structure;
- content portion descriptions associated to the basic objects in the specific logical structure.

Optional constituents:

- layout object class descriptions representing a complete generic layout structure;
- layout styles;
- presentation styles;
- content portion descriptions associated to the basic object classes in the generic logical structure.

In the case of processable form documents, when the generic layout structure is not present, additional restrictions are placed on the layout directives that may be included in layout styles. These restrictions are defined in **6.4.3**.

Note that when the generic layout structure is present, a layout style is required by the constituent constraint of the type Passage.

6.1.4 *Formatted processable form documents*

Required constituents:

- a document profile;
- logical object class descriptions representing a complete or partial generic logical structure;
- logical object descriptions representing a specific logical structure;
- layout object class descriptions representing a complete generic layout structure;
- layout object descriptions representing a specific layout structure;
- content portion descriptions associated to the basic objects in the specific logical/layout structure;
- layout styles.

Optional constituents:

- presentation styles;
- content portion descriptions associated to the basic object classes generic logical structure.

6.2 Logical characteristics

6.2.1 *Introduction*

This subclause defines the logical constituent constraints provided by this International Standardized Profile to represent the characteristics of documents containing logical component descriptions.

Different constituent constraints may be used to represent and distinguish parts of a document that have different logical characteristics. This subclause describes the general characteristics and typical uses of the constituent constraints that are provided.

The descriptions of the logical characteristics represented by each of the constituent constraints is provided for guidance only. It is the responsibility of the user to determine how a document is to be represented using the constituents provided. Adherence to these guidelines can enhance the mutual understanding of a document by an originator and a recipient.

6.2.2 *Overview of the logical structure*

From the logical point of view, the document consists of two parts, namely a body part and a common part. The body part represents the main content of a document and is intended to be reproduced in the body area of the pages that make up the document. The body part shall be included in all documents that are interchanged in accordance with this International Standardized Profile.

The common part represents common content that is to be placed in reserved header and footer areas on each page of a document. Header and footer content are independently optional and so may be included in an interchanged document only if required.

6.2.3 *Body part of the logical structure*

6.2.3.1 *DocumentLogicalRoot*

DocumentLogicalRoot is a constituent constraint representing the top level in the document logical structure. Its immediate subordinates consist of a sequence of one or more constituent constraints of the type *Passage*.

6.2.3.2 *Passage*

Passage is a constituent constraint that represents the first level of logical subdivision of a document. It may be used to indicate a logical grouping of subordinate parts of a document that are to be regarded as an entity for reading or that have common layout and presentation characteristics.

Passages are typically used to represent:

- the contents to be placed on the title page of a report;
- the front matter in the table of contents or foreword;
- the main matter of the document;
- the back matter, consisting of appendices, glossary or index.

The immediate subordinates of a *Passage* consist of a sequence of one or more constituent constraints of the type *BodyText*.

A document contains only one class definition of the type *Passage*, which defines the common characteristics of sets of *Passages* within the document such as layout properties. For example, when the generic layout structure is present, *Passage* shall be entirely laid out in the pages of one page set.

6.2.3.3 *BodyText*

BodyText is a constituent constraint which represents the lowest level of logical subdivision of a document. This constituent constraint is a subdivision of *Passages*. This allows the layout and presentation requirements of different parts of the document to be specified.

This is a basic logical constituent that directly refers to content portions that contain character content. *BodyText* in the specific logical structure shall refer to one or more content portions each containing processable, formatted or formatted processable character content. However, this constituent in the generic logical structure shall not refer to generic content.

6.2.4 *Common content part of the logical structure*

6.2.4.1 *CommonContent*

CommonContent is a constituent constraint that represents common content that is to be laid out in the header and footer areas of the pages of a document. Common content consists of character content.

Any number of constituent constraints of the type *CommonContent* may be contained in a document. *CommonContent* is a composite logical object class whose immediate subordinates consist of an arbitrary ordered sequence of one or more of the following constituent constraints:

- *CommonText*;
- *PageNumber*.

When the generic layout structure is present, constituents of the type *CommonContent* and their associated subordinate constituents are constrained to be laid out in frames representing header or footer areas using the “logical source” mechanism (see 6.3.6).

6.2.4.2 *CommonText*

CommonText is a constituent constraint that represents the common character content that is to be laid out in the header or footer area of a document. For example, header or footer content that appears on each page in a sequence of pages may be represented by this constituent.

CommonText is a constituent constraint for a basic logical object class that references one content portion containing processable, formatted or formatted processable character content.

6.2.4.3 *PageNumber*

PageNumber is a constituent constraint that represents the common character content that is to be laid out in the header or footer area of a document. This constituent constraint is specifically used when it is required to present a header or footer content which contains an automatically generated page number.

PageNumber is a basic logical object class that contains a content generator. This content generator contains a reference to a page number which is automatically evaluated when the document is laid out. This provides the means of representing the page numbers that are displayed on the consecutive pages of a document.

Each page number consists of a single number which may be represented in the form of Arabic or Roman numerals or in its alphabetic equivalent. Page numbering schemes may start at 0 or any value greater than 0 at the document root or page set level.

The format of the content generators is defined in 6.6.3.

6.3 *Layout characteristics*

This subclause defines the constituent constraints for layout components which are provided by this International Standardized Profile to represent the characteristics of documents.

Different constituent constraints may be used to represent and distinguish parts of a document that have different layout characteristics. This subclause describes the general characteristics and typical uses of the constituent constraints that are provided.

The descriptions of the layout characteristics represented by each of the constituent constraints is provided for guidance only. It is the responsibility of the user to determine how a document is to be represented using the constituents provided. Adherence to these guidelines can enhance the mutual understanding of a document by an originator and a recipient.