INTERNATIONAL STANDARD

ISO/IEC 8613-5

Second edition
1994-12-15

Information technology — Open Document Architecture (ODA) and Interchange Format: Open Document Interchange Format

Technologies de l'information — Architecture des documents ouverts (ODA) et format d'échange: Format d'échange des documents ouverts

Reference number
ISO/IEC 8613-5:1994(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. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

International Standard ISO/IEC 8613-5 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology,* Subcommittee SC 18, *Document processing and related communication,* in collaboration with ITU-T. The identical text is published as ITU-T Rec. T.415.

This second edition cancels and replaces the first edition (ISO 8613-5:1989), which has been technically revised.

ISO/IEC 8613 consists of the following parts, under the general title *Information technology — Open Document Architecture (ODA) and Interchange Format*:

- *Part 1: Introduction and general principles*
- *Part 2: Document structures*
- *Part 3: Abstract interface for the manipulation of ODA documents*
- *Part 4: Document profile*
- *Part 5: Open Document Interchange Format*
- *Part 6: Character content architectures*
- *Part 7: Raster graphics content architectures*
- *Part 8: Geometric graphics content architectures*
- *Part 9: Audio content architectures*
- *Part 10: Formal specifications*
- *Part 11: Tabular structures and tabular layout*
- *Part 12: Identification of document fragments*
- *Part 13: Spreadsheet*
- *Part 14: Temporal relationships and non-linear structures*

Annex E forms an integral part of this part of ISO/IEC 8613. Annexes A, B, C, D, F and G are for information only.

INTRODUCTION

This ITU-T Recommendation | International Standard was prepared as a joint publication by CCITT Study Group VIII and ISO/IEC Joint Technical Committee 1.

At present, ITU-T Rec. T.410 Series | ISO/IEC 8613 consists of:

- Introduction and general principles;
- Document structures;
- Document profile;
- Open document interchange format;
- Character content architectures;
- Raster graphics content architectures;
- Geometric graphics content architectures;
- Formal specification of the Open Document Architecture (FODA).

  (The formal specification is applicable to ISO/IEC 8613 only.)

Further Recommendations | International Standards may be added to this set of Recommendations | International Standards.

Development of this set of Recommendations | International Standards was originally in parallel with the ECMA-101 standard: *Open Document Architecture*.

This set of Recommendations | International Standards is a new edition of the CCITT T.410 Series of Recommendations (1988) and ISO 8613:1989.

Significant technical changes are the inclusion of the following amendments as agreed by CCITT and ISO/IEC:

- Alternative Representation;
- Annex on use of MHS/MOTIS;
- Colour;
- Conformance Testing annex;
- Document Application Profile Proforma and Notation;
- Security;
- Streams;
- Styles;
- Tiled Raster Graphics.

In addition, a number of technical corrigenda have been applied.

This Recommendation | International Standard contains seven annexes:

- Annex A (non-integral): Coded representation;
- Annex B (non-integral): Application class tag assignments;
- Annex C (non-integral): Summary of object identifiers;
- Annex D (non-integral): Examples;
- Annex E (integral): Open Document Language (ODL) (this annex is applicable to ISO/IEC 8613-5 only);
- Annex F (non-integral): Examples of Open Document Language representations (this annex is applicable to ISO/IEC 8613-5 only);
- Annex G (non-integral): Use of the Distinguished or Canonical Encoding Type.

INTERNATIONAL STANDARD

ITU-T RECOMMENDATION

INFORMATION TECHNOLOGY – OPEN DOCUMENT ARCHITECTURE (ODA) AND INTERCHANGE FORMAT: OPEN DOCUMENT INTERCHANGE FORMAT

1 Scope

The purpose of ITU-T Rec. T.410 Series | ISO/IEC 8613 is to facilitate the interchange of documents.

In the context of these Recommendations | International Standards, documents are considered to be items such as memoranda, letters, invoices, forms and reports, which may include pictures and tabular material. The content elements used within the documents may include graphic characters, raster graphics elements and geometric graphics elements, all potentially within one document.

NOTE – These Recommendations | International Standards are designed to allow for extensions, including hypermedia features, spreadsheets and additional types of content such as audio and video.

In addition to the content types defined in these Recommendations | International Standards, ODA also provides for arbitrary content types to be included in documents.

These Recommendations | International Standards apply to the interchange of documents by means of data communications or the exchange of storage media.

These Recommendations | International Standards provide for the interchange of documents for either or both of the following purposes:

- to allow presentation as intended by the originator;
- to allow processing, such as editing and reformatting.

The composition of a document in interchange can take several forms:

- formatted form, allowing presentation of the document;
- processable form, allowing processing of the document;
- formatted processable form, allowing both presentation and processing of the document.

These Recommendations | International Standards also provide for the interchange of ODA information structures used for the processing of interchanged documents.

This Recommendation | International Standard defines

- the format of the data stream used to interchange documents structured in accordance with ITU-T Rec. T.412 | ISO/IEC 8613-2;
- the representation of the constituents which may appear in an interchanged document.

NOTES

1 This ITU-T Recommendation | International Standard does not specify the coded representation of content elements.

2 Data formats for presentation attributes and coding attributes are defined in other Recommendations | International Standards in ITU-T Rec. T.410 Series | ISO/IEC 8613.

2 Normative references

The following Recommendations and International Standards contain provisions which, through reference in this text, constitute provisions of this Recommendation | International Standard. At the time of publication, the editions indicated were valid. All Recommendations and Standards are subject to revision, and parties to agreements based on this Recommendation | International Standard are encouraged to investigate the possibility of applying the most recent edition of the Recommendations and Standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards. The Telecommunication Standardization Bureau of the ITU maintains a list of currently valid ITU-T Recommendations.

2.1 Identical Recommendations | International Standards

- ITU-T Recommendation T.411 (1993) | ISO/IEC 8613-1:1994, *Information technology – Open Document Architecture (ODA) and Interchange Format: Introduction and general principles.*
- ITU-T Recommendation T.412 (1993) | ISO/IEC 8613-2:1994, *Information technology – Open Document Architecture (ODA) and Interchange Format: Document structures.*
- ITU-T Recommendation T.414 (1993) | ISO/IEC 8613-4:1994, *Information technology – Open Document Architecture (ODA) and Interchange Format: Document profile.*
- ITU-T Recommendation T.416 (1993) | ISO/IEC 8613-6:1994, *Information technology – Open Document Architecture (ODA) and Interchange Format: Character content architectures.*
- ITU-T Recommendation T.417 (1993) | ISO/IEC 8613-7:1994, *Information technology – Open Document Architecture (ODA) and Interchange Format: Raster graphics content architectures.*
- ITU-T Recommendation T.418 (1993) | ISO/IEC 8613-8:1994, *Information technology – Open Document Architecture (ODA) and Interchange Format: Geometric graphics content architectures.*
- ITU-T Recommendation X.209-3[1] | ISO/IEC 8825-3:...[1], *Information technology – Open Systems Interconnection – Specification of ASN.1 Encoding Rules: Distinguished and Canonical encoding rules.*
- ITU-T Recommendation X.509 (1993) | ISO/IEC 9594-8:1994, *The Directory – Authentication framework.*

2.2 Paired Recommendations | International Standards equivalent in technical content

- 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).*

2.3 Additional references

- ISO 2022:1986, *Information processing – ISO 7-bit and 8-bit coded character sets – Code extension techniques.*
- ISO 8601:1988, *Data elements and interchange formats – Information interchange – Representation of dates and times.*
- ISO/IEC 8613-10:1991, *Information processing – Text and office systems – Office Document Architecture (ODA) and Interchange Format – Part 10: Formal specifications.*
- 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/IEC 9541-2:1991, *Information technology – Font information interchange – Part 2: Interchange format.*

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[1] Presently at the stage of draft.