

INTERNATIONAL STANDARDIZED PROFILE

ISO/IEC
ISP
10607-1

First edition
1990-12-15

Corrected and reprinted
1991-04-15

Information technology — International Standardized Profiles AFTnn — File Transfer, Access and Management —

Part 1:

**Specification of ACSE, Presentation and Session
Protocols for the use by FTAM**

*Technologies de l'information — Profil normalisé international AFTnn — Transfert,
accès et gestion de fichier —*

*Partie 1: Spécifications des protocoles ACSE, présentation et session pour emploi
par FTAM*



Reference number
ISO/IEC ISP 10607-1:1990 (E)

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Contents

	Page
Foreword	iii
Introduction	iv
1 Scope	1
2 Normative references	1
3 Definitions	2
4 Abbreviations	3
5 Conformance	3
6 Association Control Service Element (ACSE)	3
7 Presentation layer	4
8 Transfer syntax	5
9 Session layer	5

Annexes

A ISPICS Requirements List for ACSE, Presentation and Session	7
B Amendments and corrigenda	16

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Printed in Switzerland

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 10607-1 was prepared with the collaboration of

- Asia-Oceania Workshop (AOW);
- European Workshop for Open Systems (EWOS);
- NIST OSI Implementors Workshop (NIST OIW).

ISO/IEC ISP 10607 consists of the following parts, under the general title *Information technology — International Standardized Profiles AFTnn — File Transfer, Access and Management*:

- *Part 1: Specification of ACSE, Presentation and Session Protocols for the use by FTAM*
- *Part 2: Definition of document types, constraint sets and syntaxes*
- *Part 3: AFT11 — Simple File Transfer Service (unstructured)*
- *Part 4: AFT12 — Positional File Transfer Service (flat)*
- *Part 5: AFT22 — Positional File Access Service (flat)*
- *Part 6: AFT3 — File Management Service*

Annexes A and B form an integral part of this part of ISO/IEC ISP 10607.

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 system tests.

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 system interoperability. The development and widespread acceptance of tests based on this and other ISPs is crucial to the successful realization of this goal.

The text for this ISP was developed in close co-operation among the FTAM Expert Groups of the three International OSI Workshops NIST Workshop for Implementors of OSI (NIST OIW), the European Workshop for Open Systems (EWOS) and the OSI Asia-Oceania Workshop (AOW). This ISP is harmonized among these three Workshops and it was finally ratified by the Workshops' plenary assemblies.

Information technology — International Standardized Profiles AFTnn — File Transfer, Access and Management —

Part 1: Specification of ACSE, Presentation and Session Protocols for the use by FTAM

1 Scope

1.1 General

This part of ISO/IEC ISP 10607 specifies how the Association Control Service Element, the Presentation Layer, and the Session Layer standards shall be used to provide the FTAM functions for the International Standardized Profiles ISO/IEC ISP 10607 (see also figure 1). These specifications are therefore the common basis for the application functions as defined in ISO/IEC ISP 10607-3, ISO/IEC ISP 10607-4, ISO/IEC ISP 10607-5 and ISO/IEC ISP 10607-6, and any of the subsequent parts that might be developed.

1.2 Position within the taxonomy

This part of ISO/IEC ISP 10607 is the first part, as common text, of a multi-part ISP identified in ISO/IEC TR 10000-2 as "AFT, File Transfer, Access and Management" (see also ISO/IEC TR 10000-1, 8.2 for the definition of multipart ISPs).

It may be combined with any T-Profiles (see ISO/IEC TR 10000) specifying the OSI connection-mode transport service.

1.3 Scenario

The model used is one of two end systems running an end-to-end association using the ACSE, Presentation and Session services and protocols (see figure 1).

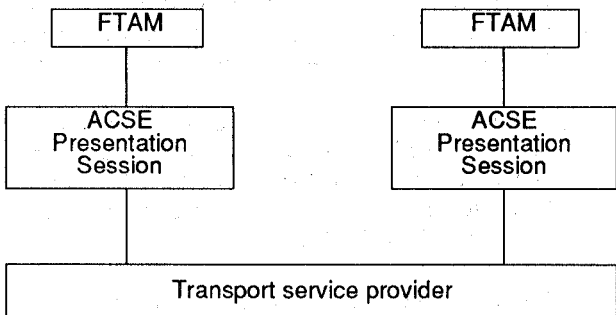


Figure 1 - Model of the supportive layers

2 Normative references

The following documents contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC ISP 10607. At the time of publication, the editions indicated were valid. All documents are subject to revision, and parties to agreements based on this part of ISO/IEC ISP 10607 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.

Amendments and corrigenda to the base standards referenced : See annex B for a complete list of these documents which are used in this part of ISO/IEC ISP 10607.

ISO 8327:1987, *Information processing systems - Open Systems Interconnection - Basic Connection Oriented Session Protocol Specification*.

ISO 8327/Add.2:---¹⁾, *Information processing systems - Open Systems Interconnection - Basic Connection Oriented Session Protocol Specification - ADDENDUM 2: Incorporation of unlimited user data*.

ISO 8571-1:1988, *Information processing systems - Open Systems Interconnection - File Transfer, Access and Management - Part 1 : General introduction*.

ISO 8571-2:1988, *Information processing systems - Open Systems Interconnection - File Transfer, Access and Management - Part 2 : Virtual Filestore Definition*.

ISO 8571-3:1988, *Information processing systems - Open Systems Interconnection - File Transfer, Access and Management - Part 3 : File Service Definition*.

ISO 8571-4:1988, *Information processing systems - Open Systems Interconnection - File Transfer, Access and Management - Part 4 : File Protocol Specification*.

¹⁾ To be published.

ISO 8571-5:---¹⁾, *Information processing systems - Open Systems Interconnection - File Transfer, Access and Management - Part 5 : Protocol Implementation Conformance Statement Proforma.*

ISO 8650:1988, *Information processing systems - Open Systems Interconnection - Protocol specification for the Association Control Service Element.*

ISO 8823:1988, *Information processing systems - Open Systems Interconnection - Connection Oriented Presentation Protocol Specification.*

ISO 8824:1987, *Information processing systems - Open Systems Interconnection - Specification of Abstract Syntax Notation One (ASN.1).*

ISO 8825:1987, *Information processing systems - Open Systems Interconnection - Specification of Basic Encoding Rules for Abstract Syntax Notation One (ASN.1).*

ISO/IEC TR 10000-1:1990, *Information technology - Framework and taxonomy of International Standardized Profiles - Part 1 : Framework.*

ISO/IEC TR 10000-2:1990, *Information technology - Framework and taxonomy of International Standardized Profiles - Part 2 : Taxonomy of Profiles.*

ISO/IEC ISP 10607-2:1990, *Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 2 : Definition of document types, constraint sets and syntaxes.*

ISO/IEC ISP 10607-3:1990, *Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 3 : AFT11 - Simple File Transfer Service (unstructured).*

ISO/IEC ISP 10607-4:---¹⁾, *Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 4 : AFT12 - Positional File Transfer Service (flat).*

ISO/IEC ISP 10607-5:---¹⁾, *Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 5 : AFT22 - Positional File Access Service (flat).*

ISO/IEC ISP 10607-6:---¹⁾, *Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 6 : AFT3 - File Management Service.*

¹⁾ To be published.

3 Definitions

For the purpose of this part of ISO/IEC ISP 10607, the following definitions apply.

Terms used in this part of ISO/IEC ISP 10607 are defined in the referenced base standards.

In addition, the following terms are defined.

3.1 General

Interwork : to be able to communicate to satisfy the intent of the Initiator.

3.2 Support level

To specify the support level of protocol features for this part of ISO/IEC ISP 10607, the following terminology is defined.

3.2.1 supported; m : Any feature denoted by "m" is mandatory or optional in the base standard. That feature shall be supported, i.e. its syntax and procedures shall be implemented as specified in the base standard or in this part of ISO/IEC ISP 10607 by all implementations claiming conformance to this part of ISO/IEC ISP 10607.

However, it is not a requirement that the feature shall be used in all instances of communication, unless mandated by the base standard or stated otherwise in this part of ISO/IEC ISP 10607.

NOTES

1 For features which are optional in the base standard, conformant implementations shall be able to interwork with other implementations not supporting this feature.

2 The support of a feature can be conditional, depending on the support of a class of features to which it belongs, e.g. parameter in a PDU, a PDU in a functional unit.

3.2.2 optionally supported; o : Any feature denoted by "o" is left to the implementation as to whether that feature is implemented or not.

If a parameter is optionally supported, then the syntax shall be implemented, but it is left to each implementation whether the procedures are implemented or not.

3.2.3 conditionally supported; c : Any feature denoted by "c" shall be supported under the conditions specified in this part of ISO/IEC ISP 10607. If these conditions are not met, the feature is outside the scope of this part of ISO/IEC ISP 10607.

3.2.4 excluded; x : Any feature denoted by "x" is excluded in this part of ISO/IEC ISP 10607, i.e. it shall not be implemented.

3.2.5 outside the scope; i : Any feature denoted by "i" is outside the scope of this part of ISO/IEC ISP