

INTERNATIONAL STANDARDIZED PROFILE

ISO/IEC
ISP
10607-1

Second edition
1995-12-15

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 — Profils normalisés internationaux AFTnn —
Transfert, accès et gestion de fichier —*

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



Reference number
ISO/IEC ISP 10607-1:1995(E)
AVA Documents
Document Sharing Hub

Contents

	Page
Foreword.....	iii
Introduction.....	iv
1 Scope.....	1
2 Normative references.....	1
3 Definitions	2
4 Abbreviations.....	2
5 Conformance.....	3
6 FTAM specific requirements for FTAM functions without restart data transfer and recovery.....	3
7 Additional FTAM specific requirements for FTAM functions with restart data transfer and recovery	4

Annexes

A Profile Requirements List for ISO/IEC ISP 10607-1.....	5
B Corrigenda	11
C Main differences between the 1st edition (1990) and the 2nd edition (1995) of this part of ISO/IEC ISP 10607	12

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 or 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 JTC1. In addition to developing International Standards, ISO/IEC JTC1 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);
- Open Systems Environment Implementors' Workshop (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*

This second edition cancels and replaces the first edition (ISO/IEC ISP 10607-1 : 1990), which has been technically revised. It also incorporates amendment 1:1994.

Annex A forms an integral part of this part of ISO/IEC ISP 10607. Annexes B and C are for information only.

Introduction

This part of ISO/IEC ISP 10607 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 part of ISO/IEC ISP 10607 was developed in close co-operation among the FTAM Expert Groups of the three International OSI/OSI Workshops : OSI Implementors' Workshop (OIW), the European Workshop for Open Systems (EWOS) and the Asia-Oceania Workshop (AOW). This part of ISO/IEC ISP 10607 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).

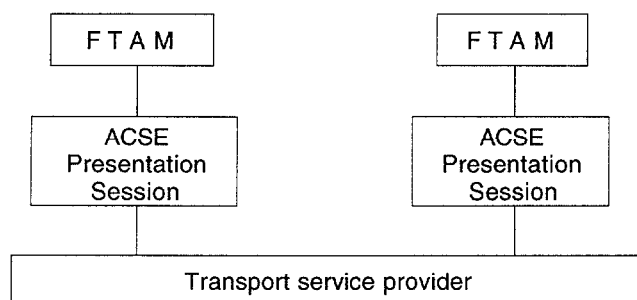


Figure 1 - Model of the supportive layers

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 Recommendations and International Standards 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 ITU-T maintains published editions of its current Recommendations.

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

2.1 Identical Recommendations | International Standards

- ITU-T Recommendation X.225 (1994) | ISO/IEC 8327-1:_¹), *Information technology - Open Systems Interconnection - Connection-oriented session protocol : Protocol specification.*
- ITU-T Recommendation X.226 (1994) | ISO/IEC 8823-1:1994, *Information technology - Open Systems Interconnection - Connection-oriented presentation protocol : Protocol specification.*
- ITU-T Recommendation X.227 (1995) | ISO/IEC 8650-1:_¹), *Information technology - Open Systems Interconnection - Connection-oriented protocol for the Association Control Service Element : Protocol specification.*
- ITU-T Recommendation X.245 (1995) | ISO/IEC 8327-2:_¹), *Information technology - Open Systems Interconnection - Connection-oriented session protocol : Protocol Implementation Conformance Statement (PICS) proforma.*
- ITU-T Recommendation X.246 (1994) | ISO/IEC 8823-2:1995, *Information technology - Open Systems Interconnection - Connection-oriented presentation protocol : Protocol Implementation Conformance Statement (PICS) proforma.*
- ITU-T Recommendation X.247 (1994) | ISO/IEC 8650-2:1995, *Information technology - Open Systems Interconnection - Protocol specification for the Association Control Service Element : Protocol Implementation Conformance Statement (PICS) proforma.*

¹) To be published.

- ITU-T Recommendation X.680 (1994) | ISO/IEC 8824-1:1995, *Information technology - Abstract Syntax Notation One (ASN.1) : Specification of basic notation*.
- ITU-T Recommendation X.690 (1994) | ISO/IEC 8825-1:1995, *Information technology - ASN.1 encoding rules : Specification of Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER)*.

2.2 Additional references

- 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*.
- ISO 8571-4:1988/Amd.4:1992, *Information processing systems - Open Systems Interconnection - File Transfer, Access and Management - Part 4 : File Protocol Specification - Amendment 4*.
- ISO/IEC 8571-5:1990, *Information processing systems - Open Systems Interconnection - File Transfer, Access and Management - Part 5 : Protocol Implementation Conformance Statement Proforma*.
- ISO/IEC TR 10000-1:1992²⁾, *Information technology - Framework and taxonomy of International Standardized Profiles - Part 1 : Framework*.
- ISO/IEC TR 10000-2:1994²⁾, *Information technology - Framework and taxonomy of International Standardized Profiles - Part 2 : Principles and Taxonomy for OSI Profiles*.
- ISO/IEC ISP 10607-2:1995, *Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 2 : Definition of document types, constraint sets and syntaxes*.
- ISO/IEC ISP 10607-3:1995, *Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 3: AFT11 - Simple File Transfer Service (unstructured)*.
- ISO/IEC ISP 10607-4:1995, *Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 4 : AFT12 - Positional File Transfer Service (flat)*.
- ISO/IEC ISP 10607-5:1995, *Information technology - International Standardized Profiles AFTnn - File*

Transfer, Access and Management - Part 5 : AFT22 - Positional File Access Service (flat).

- ISO/IEC ISP 10607-6:1995, *Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 6 : AFT3 - File Management Service*.
- ISO/IEC ISP 11188-1:1995, *Information technology - International Standardized Profile - Common upper layer requirements - Part 1 : Basic connection oriented requirements*.
- ISO/IEC ISP 11188-3:1995, *Information technology - International Standardized Profile - Common upper layer requirements - Part 3 : Minimal OSI upper layer facilities*.

3 Definitions

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

The 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

3.1.1 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, this part of ISO/IEC ISP 10607 makes use of the following terms defined in ISO/IEC ISP 11188-1 :

- supported (m);
- optionally supported (o);
- conditionally supported (c);
- outside the scope (i);
- not applicable (-).

4 Abbreviations

AARE	Associate response APDU
AARQ	Associate request APDU
AB	Abort SPDU
ABRT	Abort APDU
AC	Accept SPDU
ACSE	Association Control Service Element
AE	Application Entity
AFT	Profile sub-class : File Transfer, Access and Management
AP	Application Process
APDU	Association Control Protocol Data Unit
AS	Abstract syntax
ASN.1	Abstract Syntax Notation One

²⁾ Currently under revision.