# INTERNATIONAL STANDARDIZED PROFILE

**ISO/IEC ISP 10607-6**

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

**Part 6:**
AFT3 — File Management Service

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

*Partie 6: AFT3 — Service de gestion de fichier*

Reference number
ISO/IEC ISP 10607-6:1991(E)

# Contents

# 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 10607-6 was prepared with the collaboration of

- Asia-Oceania Workshop (AOW);
- European Workshop for Open Systems (EWOS);
- OSI 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 2 : Definition of document types, constraint sets and syntaxes - Amendment 1 : Additional definitions*
- *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 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 Workshops : OSI Implementors Workshop (OIW), the European Workshop for Open Systems (EWOS) and the OSI 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 6:
## AFT 3 - File Management Service

## 1 Scope

### 1.1 General

This part of ISO/IEC ISP 10607 (AFT3) covers management of files between the filestores of two end systems, using the OSI connection-mode transport service to provide the interconnection. One end system acts in the initiator role and initiates the file management, the other end system acts in the responder role and provides management of the file in the virtual filestore.

These role combinations and the interoperability are shown in table 1.

**Table 1 - Interoperable configurations**

| | | Initiator | | Responder | |
|---|---|---|---|---|---|
| | | Sender | Receiver | Sender | Receiver |
| Initiator | Sender | | | | x |
| | Receiver | | | x | |
| Responder | Sender | | x | | |
| | Receiver | x | | | |

This part of ISO/IEC ISP 10607 specifies implementations that support file management, i.e. the ability to

a) create and delete a file, and

b) read and change the attributes of a file.

This part of ISO/IEC ISP 10607 shall be implemented with one or more of ISO/IEC ISP 10607-3, ISO/IEC ISP 10607-4, ISO/IEC ISP 10607-5. Therefore, this part of ISO/IEC ISP 10607 specifies only that functionality which is additional to the functionality of the related parts.

This part of ISO/IEC ISP 10607 specifies how the OSI FTAM application standard shall be used to provide the functions defined above. It does not specify total system capability. In particular, a system may operate this profile and at the same time engage in other communications. The requirements placed on an implementation in this part of ISO/IEC ISP 10607 are solely those necessary for operation of the protocol specified.

This part of ISO/IEC ISP 10607 describes the actions and attributes of the virtual filestore, and the service provided by the file service provider to file service users, together with the necessary communications between the initiator and the responder.

### 1.2 Position within the taxonomy

This part of ISO/IEC ISP 10607 is identified in ISO/IEC TR 10000-2 as "AFT3 - File Management Service".

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 establishing an association and managing files in the responder's virtual filestore as shown in figure 1.

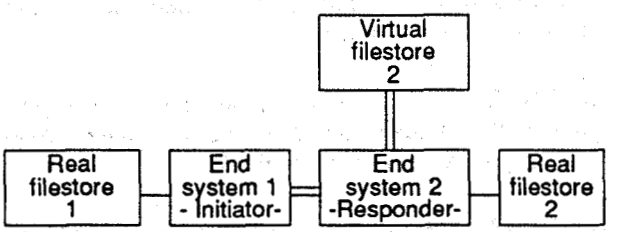


**Figure 1 - File management between two end systems**

Specifications of this part of ISO/IEC ISP 10607 apply on the double lines of figure 1. The mapping between the virtual filestore and the real filestore together with the local data management system is not defined in this part of ISO/IEC ISP 10607.

## 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.

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 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/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 10000-1:1990, *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 10607-1:1990, *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.*

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 10607-2:1990/Amd.1:1991, *Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 2 : Definition of document types, constraint sets and syntaxes - Amendment 1 : Additional definitions.*

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 10607-4:1991, *Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 4 : AFT12 - Positional File Transfer Service (flat).*

ISO/IEC ISP 10607-5:1991, *Information technology - International Standardized Profiles AFTnn - File Transfer, Access and Management - Part 5 : AFT22 - Positional File Access Service (flat).*

## 3 Definitions

For the purpose 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

**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.

For fully supported attributes, this implies that at least the minimum range of attribute values, as defined in ISO 8571-2, shall be supported unless 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. an attribute in an attribute group, a 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 an attribute group with a support level of "o" is chosen to be implemented, then all the attributes in this group that are classified as "m" shall be supported.

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

When receiving an optional parameter which is not subject of negotiation and is not supported by the receiver, the receiver shall at least inform the sender by informative diagnostic and interworking shall not be disrupted.

**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 10607, i.e. it may be ignored, and will therefore not be subject of an ISP conformance test. However the syntax of all parameters of supported PDUs shall be implemented, even if the procedures are not (i.e. the receiver shall be able to decode the PDU).

**3.2.6 not applicable; - :** Any feature denoted by "-" is not defined in the context where it is mentioned, e.g. a parameter which is not part of the respective PDU. The occurrence of "not applicable" features is mainly due to the format of the tables in the ISPICS Requirements List.

## 4 Abbreviations

| | |
|---|---|
| ACSE | Association Control Service Element |
| AFT | Profile sub-class : File Transfer, Access and Management |
| FTAM | File Transfer, Access and Management |
| ISP | International Standardized Profile |
| ISPICS | ISP Implementation Conformance Statement |
| OSI | Open Systems Interconnection |
| PICS | Protocol Implementation Conformance Statement |

Definitions and abbreviations used in ISO/IEC ISP 10607-6, annex A are defined in ISO 8571.

Support level for protocol features

| | |
|---|---|
| m | supported |
| o | optionally supported |
| c | conditionally supported |
| x | excluded |
| i | outside the scope |
| - | not applicable |

## 5 Conformance

This part of ISO/IEC ISP 10607 states requirements upon implementations to achieve interworking. A claim of conformance to this part of ISO/IEC ISP 10607 is a claim that all requirements in the relevant base standards are satisfied, and that all requirements in the following clauses and in annex A are satisfied. Annex A states the relationship between these requirements and those of the base standards.

### 5.1 Conformance statement

For each implementation claiming conformance to this part of ISO/IEC ISP 10607 a PICS shall be made available stating support or non-support of each option identified in this part of ISO/IEC ISP 10607.

### 5.2 FTAM conformance

This part of ISO/IEC ISP 10607 specifies implementation options or selections such that conformant implementations will satisfy the conformance requirements of ISO 8571.

Implementations conforming to this part of ISO/IEC ISP 10607 shall implement all the supported (m) features (identified in annex A), unless they are part of an unimplemented optional feature. They shall state which optionally supported (o) features are implemented.

## 6 Virtual filestore

The support for file and filestore characteristics, file actions, attribute groups and attributes is as specified in the related part(s) of ISO/IEC ISP 10607, clause 6 and annex A.

## 7 File protocol

Annex A summarizes the characteristics of the file protocol regarding only that functionality which is specified in addition to that of the related part(s) of ISO/IEC ISP 10607.

### 7.1 Service classes, functional units

The functions as described in this part of ISO/IEC ISP 10607 shall always be implemented in conjunction with one or more of ISO/IEC ISP 10607-3, ISO/IEC ISP 10607-4, ISO/IEC ISP 10607-5. The service classes and functional units that shall be implemented are specified in A.12.4 and A.12.5.

For an implementation supporting this part of ISO/IEC ISP 10607 in conjunction with ISO/IEC ISP 10607-3 or ISO/IEC ISP 10607-4, any of the service classes T, M or (T, M, TM) may be requested and any of the classes T, M or TM may be responded on F-INITIALIZE.

For an implementation supporting this part of ISO/IEC ISP 10607 in conjunction with ISO/IEC ISP 10607-5, either of the service classes A or M may be requested and responded on F-INITIALIZE.

### 7.2 Recommendations

**7.2.1** As an additional value for the implementation information parameter the value "AFT3" may be used.

**7.2.2** If the concurrency control parameter is not supported, the following file locks should apply:

a) If the requested access parameter includes only the read or read attribute action, then:

| | |
|---|---|
| requested action | - shared/exclusive (local choice) |
| not requested read attribute action | - not required |
| all other write actions | - no access |

b) If the requested access parameter includes at least one of the replace, extend or delete file actions, then:

| | |
|---|---|
| requested actions | - exclusive |
| all other actions | - no access |

If the concurrency control parameter is supported but not present, then the file locks specified above should also be applied by default.

### 7.3 Diagnostic parameter

A value for the diagnostic parameter in a response FPDU shall be sent when the action result or state result parameters are not success.

For the diagnostic parameter of F-INITIALIZE, F-P-ABORT and F-RECOVER PDUs, the term suggested delay shall be supported if the recovery functional unit is implemented.

# Annex A

(normative)

# ISPICS Requirements List for ISO/IEC ISP 10607-6 (AFT3)

In the event of a discrepancy becoming apparent in the body of this part of ISO/IEC ISP 10607 and the tables in this annex, this annex is to take precedence.

This annex specifies the constraints and characteristics of this part of ISO/IEC ISP 10607 on what shall or may appear in the implementation columns of an ISPICS. This annex is completely based on ISO/IEC 8571-5. It uses only a selection of the tables from ISO/IEC 8571-5 which are necessary for the specification of the ISP status, and retains their numbering, in order to facilitate the filling in of the respective PICS Proforma by an implementor.

Tables marked "(Void)" refer to features that are dependent on features which are outside the scope of this part of ISO/IEC ISP 10607.

The terminology is used as defined in ISO/IEC 8571-5. In addition, the status of this part of ISO/IEC ISP 10607, i.e. the conformance requirements, is specified in the I- and R-columns of the tables in this annex, using the terms as defined in ISO/IEC ISP 10607-6, 3.2.

## Section 1 : (Void)

# Section 2 : General ISO 8571 Detail

## A.3 ISO 8571 Protocol versions

| |
|---|
| See related part(s) of ISO/IEC ISP 10607 |

## A.4 ISO 8571 Addenda

| | | |
|---|---|---|
| 1 | ISO 8571-1 | — |
| 2 | ISO 8571-2 | — |
| 3 | ISO 8571-3 | — |
| 4 | ISO 8571-4 | — |
| 5 | ISO 8571-5 | — |

## A.5 Defect report numbers and amendments

| |
|---|
| See annex B |

## A.6 Global statement of conformance

| | | |
|---|---|---|
| 1 | Does ISO/IEC ISP 10607 conform to ISO 8571 ? | yes |

## A.7 Initiator / Responder capability

| |
|---|
| See related part(s) of ISO/IEC ISP 10607 |

## A.8 Application context name details

| |
|---|
| See related part(s) of ISO/IEC ISP 10607 |

# Section 3 : Syntax Detail

## A.9 Abstract syntaxes

See related part(s) of ISO/IEC ISP 10607

# Section 4 : Virtual Filestore Detail

## A.10 Virtual filestore

See related part(s) of ISO/IEC ISP 10607

# Section 5 : File Protocol Detail

## A.11 File protocol

| |
|---|
| **See related part(s) of ISO/IEC ISP 10607** |

### A.11.1 GraphicString support

**( Void )**

### A.11.2 FTAM regime establishment

| | | D | I | D | R | |
|---|---|---|---|---|---|---|
| 1 | **F-INITIALIZE PDU** | m | **m** | m | **m** | |
| | **FIELD NAME** | | | | | **RANGE OF VALUES OR REFERENCE** |
| 5 | Implementation information | o | **o** | o | **o** | see A.12.1 |
| 7 | Service class | m | **m** | m | **m** | see A.12.4 |
| 8 | Functional units | m | **m** | m | **m** | see A.12.5 |

NOTE - For all other parameters see related part(s) of ISO/IEC ISP 10607.

### A.11.3 FTAM regime termination (orderly)

| |
|---|
| **See related part(s) of ISO/IEC ISP 10607** |

### A.11.4 FTAM regime termination (abrupt) by service user

| |
|---|
| **See related part(s) of ISO/IEC ISP 10607** |

### A.11.5 FTAM regime termination (abrupt) by service provider

| |
|---|
| **See related part(s) of ISO/IEC ISP 10607** |

### A.11.6 File selection

| |
|---|
| **See related part(s) of ISO/IEC ISP 10607** |

### A.11.7 File deselection

| See related part(s) of ISO/IEC ISP 10607 |
|---|

### A.11.8 File creation

| | | D | I | D | R | |
|---|---|---|---|---|---|---|
| 1 | F-CREATE PDU | c | m | c | m | see A.11, A.12.5 |
| | FIELD NAME | | | | | RANGE OF VALUES OR REFERENCE |
| 7 | Requested access | m | m | ——— | | see A.12.16 |
| 9 | Concurrency control | o | o | ——— | | see A.12.13, 7.2.2 |

NOTE - For all other parameters see related part(s) of ISO/IEC ISP 10607.

### A.11.9 File deletion

| | | D | I | D | R | |
|---|---|---|---|---|---|---|
| 1 | F-DELETE PDU | c | m | c | m | see A.11, A.12.5 |

NOTE - For all parameters see related part(s) of ISO/IEC ISP 10607.

### A.11.10 Read attributes

| | | D | I | D | R | |
|---|---|---|---|---|---|---|
| 1 | F-READ-ATTRIB PDU | c | m | c | m | see A.11, A.12.5 |

NOTE - For all parameters see related part(s) of ISO/IEC ISP 10607.

### A.11.11 Change attributes

| | | D | I | D | R | |
|---|---|---|---|---|---|---|
| 1 | F-CHANGE-ATTRIB PDU | c | m | c | m | see A.11, A.12.5 |
| | FIELD NAME | | | | | RANGE OF VALUES OR REFERENCE |
| 2 | Action result | ——— | | m | m | all values defined in ISO 8571 |
| 3 | Attributes | m | m | o | m | see A.10 |
| 4 | Diagnostic | ——— | | o | m | see A.12.6, 7.3 |

### A.11.12 File open

| |
|---|
| i |

### A.11.13 File close

| |
|---|
| i |

### A.11.14 Beginning of grouping

| |
|---|
| See related part(s) of ISO/IEC ISP 10607 |

### A.11.15 End of grouping

| |
|---|
| See related part(s) of ISO/IEC ISP 10607 |

### A.11.16 Regime recovery

| |
|---|
| i |

### A.11.17 Locate file access data unit

| |
|---|
| i |

### A.11.18 Erase file access data unit

| |
|---|
| i |

### A.11.19 Read bulk data

| |
|---|
| i |

### A.11.20 Write bulk data

| |
|---|
| i |

### A.11.21 End of data transfer

| |
|---|
| i |

### A.11.22 End of transfer

| |
|---|
| i |

### A.11.23 Cancel data transfer

| |
|---|
| i |

### A.11.24 Restart data transfer

| |
|---|
| i |

## A.12 Expanded PDU field detail

This clause identifies further PDU field detail to expand on that given in A.11.

### A.12.1 Implementation information detail

| |
|---|
| See 7.2.1 |

### A.12.2 Access control detail

| |
|---|
| See related part(s) of ISO/IEC ISP 10607 |

### A.12.3 Access control element detail

#### A.12.3.1 Action list detail (initiator)

( Void )

#### A.12.3.2 Action list detail (responder)

( Void )

### A.12.3.3 Concurrency access term

If the concurrency access term is supported in the access control element the following details of the concurrency control to be available with each action.

| | Action | not required D | not required R | shared D | shared R | exclusive D | exclusive R | no access D | no access R |
|---|---|---|---|---|---|---|---|---|---|
| 6 | Read attributes | o | o | o | o | o | o | o | o |
| 7 | Change attributes | o | o | o | o | o | o | o | o |
| 8 | Delete file | o | o | o | o | o | o | o | o |

NOTE - For all other values see related part(s) of ISO/IEC ISP 10607.

### A.12.3.4 Identity term

( Void )

### A.12.3.5 Initiator access passwords

| See related part(s) of ISO/IEC ISP 10607 |
|---|

### A.12.3.6 Responder access passwords

If the passwords term of the access control element is implemented the following values shall be implemented for the responder role.

| | | OctetString D | OctetString R | GraphicString D | GraphicString R |
|---|---|---|---|---|---|
| 6 | Read-attribute-password | o | o | o | o |
| 7 | Change-attribute-password | o | o | o | o |
| 8 | Delete-password | o | o | o | o |

NOTE - For all other values see related part(s) of ISO/IEC ISP 10607.

### A.12.3.7 Location term

( Void )

#### A.12.3.7.1 Application Entity Titles detail

( Void )

### A.12.3.8 Access control element combinations

| See related part(s) of ISO/IEC ISP 10607 |
|---|

### A.12.4 Service class field detail

**See 7.1**

| | AFT3 in conjunction with ISO/IEC ISP 10607-3 or ISO/IEC ISP 10607-4 | D | I | R |
|---|---|---|---|---|
| 1 | Transfer class | o | m | m |
| 2 | Access class | o | i | i |
| 3 | Management class | o | m | m |
| 4 | Transfer and management class | o | m | m |
| 5 | Unconstrained class | o | i | i |

NOTE - A conformant initiator is only permitted to specify those combinations defined in ISO 8571-3.

| | AFT3 in conjunction with ISO/IEC ISP 10607-5 | D | I | R |
|---|---|---|---|---|
| 6 | Transfer class | o | i | i |
| 7 | Access class | o | m | m |
| 8 | Management class | o | m | m |
| 9 | Transfer and management class | o | i | i |
| 10 | Unconstrained class | o | i | i |

NOTE - A conformant initiator is only permitted to specify those combinations defined in ISO 8571-3.

### A.12.5 Functional unit field detail

| | AFT3 in conjunction with ISO/IEC ISP 10607-3 or ISO/IEC ISP 10607-4 | SERVICE CLASSES | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Transfer | | | Management | | | Transfer and Management | | |
| | FUNCTIONAL UNITS | D | I | R | D | I | R | D | I | R |
| 1 | Kernel | | | | m | m | m | | | |
| 2 | Read | | | | ——— | | | | | |
| 3 | Write | | | | ——— | | | | | |
| 4 | File Access | | | | ——— | | | | | |
| 5 | Limited File Management | o | m | m | m | m | m | | | |
| 6 | Enhanced File Management | o | m | m | o | m | m | o | m | m |
| 7 | Grouping | | | | m | m | m | | | |
| 8 | FADU Locking | | | | ——— | | | | | |
| 9 | Recovery | | | | ——— | | | | | |
| 10 | Restart data transfer | | | | ——— | | | | | |

NOTE - This table lists only the additional functionality as defined by this part of ISO/IEC ISP 10607.

| | AFT3 in conjunction ISO/IEC ISP 10607-5 | SERVICE CLASSES | | | | | |
|---|---|---|---|---|---|---|---|
| | | Access | | | Management | | |
| | FUNCTIONAL UNITS | D | I | R | D | I | R |
| 11 | Kernel | | | | m | m | m |
| 12 | Read | | | | ——— | | |
| 13 | Write | | | | ——— | | |
| 14 | File Access | | | | ——— | | |
| 15 | Limited File Management | o | m | m | m | m | m |
| 16 | Enhanced File Management | o | m | m | o | m | m |
| 17 | Grouping | | | | m | m | m |
| 18 | FADU Locking | | | | ——— | | |
| 19 | Recovery | | | | ——— | | |
| 20 | Restart data transfer | | | | ——— | | |

NOTE - This table lists only the additional functionality as defined by this part of ISO/IEC ISP 10607.