

# Information technology — International Standardized Profiles ADInn — OSI Directory —

## Part 4: ADI22 — DSA Invoker Role

ICS 35.100.05

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# National foreword

This British Standard reproduces verbatim ISO/IEC ISP 10615-4:1996 and implements it as the UK national standard.

The UK participation in its preparation was entrusted to Technical Committee IST/21, Open Systems Interconnection, Data Management and Open Distributed Processing, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request.

### Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or using the “Find” facility of the BSI Standards Electronic Catalogue.

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### Summary of pages

This document comprises a front cover, an inside front cover, the ISO/IEC ISP title page, pages ii to iv, pages 1 to 18 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.

### Amendments issued since publication

| Amd. No. | Date | Comments |
|----------|------|----------|
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**Information technology — International  
Standardized Profiles ADInn — OSI  
Directory —**

**Part 4:**  
ADI22 — DSA Invoker Role

*Technologies de l'information — Profils normalisés internationaux  
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*Partie 4: ADI22 — Rôle d'invocateur du DSA*



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**Descriptors:** Data processing, information interchange, network interconnection, open systems interconnection, directories.

## 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 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 a 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 10615-4 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 10615 consists of the following parts, under the general title *Information technology — International Standardized Profiles ADInn — OSI Directory*:

- *Part 3: ADI21 — DSA Performer Role*;
- *Part 4: ADI22 — DSA Invoker Role*.

Annexes A and B form an integral part of this part of ISO/IEC ISP 10615.

## Introduction

This part of ISO/IEC ISP 10615 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 test methods. 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 of this part of ISO/IEC ISP 10615 was developed in close co-operation among the Directory Expert Groups of the three International OSI Workshops: OSE Implementors Workshop (OIW), the European Workshop for Open Systems (EWOS) and the OSI Asia-Oceania Workshop (AOW). This part of ISO/IEC ISP 10615 is harmonized among these three Workshops and it was finally ratified by the Workshops' plenary assemblies.

## 1 Scope

### 1.1 General

This part of ISO/IEC ISP 10615 covers the DSP invoker functions, in which a DSA chains a request and receives a result or an error. The related part of the ISP, ADI32, covers the behaviour of the DSA in fulfilling distributed operations, when considered to be independent of the protocol used.

The objective of ISO/IEC ISP 10615-4 is to define capabilities and constraints on support for DSP by invoker functions of DSAs so that DSAs will be able to interwork within the Directory. Factors outside the scope of ISO/IEC ISP 10615-4 include, but are not limited to, DIT structure, behaviour in distributed operations and some aspects of authentication (e.g., simple authentication with protected passwords, strong authentication, and the use of non-local authentication information).

DSAs that do not support the distributed directory are outside the scope of ISO/IEC ISP 10615.

The scope of ISO/IEC ISP 10615 is limited to the '88 edition of the Directory standards.

### 1.2 Position Within the Taxonomy

This part of ISO/IEC ISP 10615 is identified in ISO/IEC TR 10000-2 as "ADI22 — DSA invoker Role".

It may be combined with other parts of ISO/IEC ISP 10615, with ISO/IEC ISP 10616 specifying use of the directory, and with T-Profiles specifying the OSI connection-mode transport service.

### 1.3 Scenario

The model used is described in Overview of Concepts, Models, and Services in [ISO/IEC 9594-1 | CCITT X.500]. Specifications of ISO/IEC ISP 10615-4 apply to the invoker role of DSP for a DSA within the scenario of Figure 1.

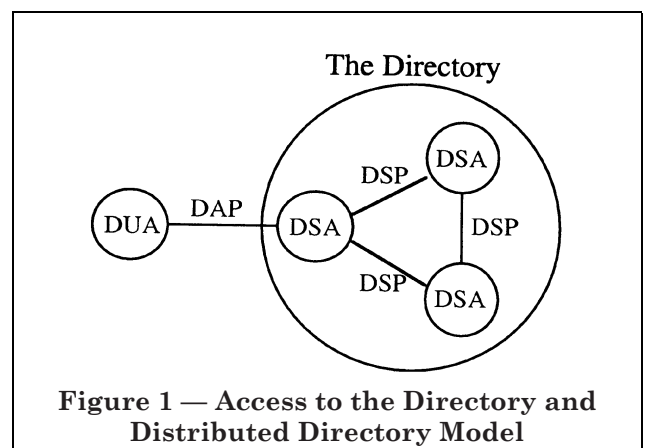


Figure 1 — Access to the Directory and Distributed Directory Model

## 2 Normative References

The following documents contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC ISP 10615. 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 10615 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.

ISO/IEC 2022:1994, *Information technology — Character code structure and extension techniques*.

ISO 3166:1993, *Codes for the representation of names of countries*.

ISO/IEC 8824:1990, *Information technology — Open Systems Interconnection — Specification of Abstract Syntax Notation One (ASN.1)*. (See also CCITT Recommendation X.208:1988.)

ISO/IEC 8825:1990, *Information technology — Open Systems Interconnection — Specification of Basic Encoding Rules for Abstract Syntax Notation One (ASN.1)*. (See also CCITT Recommendation X.209:1988.)

ISO/IEC 9594-1:1990, *Information technology — Open Systems Interconnection — The Directory — Part 1: Overview of concepts, models, and services*. (See also CCITT Recommendation X.500:1989.)

ISO/IEC 9594-2:1990, *Information technology — Open Systems Interconnection — The Directory — Part 2: Models*. (See also CCITT Recommendation X.501:1989.)

ISO/IEC 9594-3:1990, *Information technology — Open Systems Interconnection — The Directory — Part 3: Abstract Service Definition*. (See also CCITT Recommendation X.511:1989.)

ISO/IEC 9594-4:1990, *Information technology — Open Systems Interconnection — The Directory — Part 4: Procedures for distributed operation*. (See also CCITT Recommendation X.518:1989.)

ISO/IEC 9594-5:1990, *Information technology — Open Systems Interconnection — The Directory — Part 5: Protocol specifications*. (See also CCITT Recommendation X.519:1989.)

ISO/IEC 9594-6:1990, *Information technology — Open Systems Interconnection — The Directory — Part 6: Selected attribute types*. (See also CCITT Recommendation X.520:1989.)

ISO/IEC 9594-7:1990, *Information technology — Open Systems Interconnection — The Directory — Part 7: Selected object classes*. (See also CCITT Recommendation X.521:1989.)

ISO/IEC 9594-8:1990, *Information technology — Open Systems Interconnection — The Directory — Part 8: Authentication framework*. (See also CCITT Recommendation X.509:1989.)

ISO/IEC 9646-1:1994, *Information technology — Open Systems Interconnection — Conformance testing methodology and framework — Part 1: General concepts*. (See also ITU-T Recommendation X.290:1995.)

ISO/IEC 9646-2:1994, *Information technology — Open Systems Interconnection — Conformance testing methodology and framework — Part 2: Abstract Test Suite specification*. (See also ITU-T Recommendation X.291:1991.)

ISO/IEC TR 10000-1:1995, *Information technology — Framework and taxonomy of International Standardized Profiles — Part 1: General Principles and documentation framework*.

ISO/IEC TR 10000-2:1995, *Information technology — Framework and taxonomy of International Standardized Profiles — Part 2: Principles and Taxonomy for OSI profiles*.

CCITT Recommendation T.61:1988, *Character Repertoire and Coded Character Sets for the International Teletex Service*.

CCITT Recommendation X.581:1992, *Directory Access Protocol — Protocol Implementation Conformance Statement (PICS) Proforma*.

CCITT Recommendation X.582:1992, *Directory System Protocol — Protocol Implementation Conformance Statement (PICS) Proforma*.

### 3 Definitions

For the purposes of this part of ISO/IEC ISP 10615, the following definitions apply.

Terms used in this part of ISO/IEC ISP 10615 are defined in the referenced base standards.

In addition, the following terms are defined.

#### 3.1 General

##### 3.1.1

**APDU size** (for sending/receiving)

the size of the sent/received transfer encoding, including the ROSE header

##### 3.1.2

**supported** (for reception by an initiator)

a feature (capability, result, error or protocol element) is supported for reception by an initiator if the implementation is able to process the feature in accordance with the base standard and this part of ISO/IEC ISP 10615 to accomplish the function associated by the base standard with that feature. If a protocol element is claimed to be supported, the full range of values shall be supported, unless stated otherwise

##### 3.1.3

**supported** (for sending by an initiator)

a feature (capability, operation or protocol element) is supported for sending by an initiator if the implementation is able to generate the feature for chaining a request from a DUA or another DSA in order to complete it in accordance with the base standard and this part of ISO/IEC ISP 10615