

**Information
technology —
Open Systems
Interconnection —
The Directory:
Directory System
Protocol —
Protocol
Implementation
Conformance
Statement (PICS)
proforma —**

**(ITU-T Rec. X.582 (1995) |
ISO/IEC 14608-2:1997)**

ICS 35.100.05

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National foreword

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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:

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the ISO/IEC title page, pages ii to iv, pages 1 to 22 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.

This British Standard, having been prepared under the direction of the DISC Board, was published under the authority of the Standards Board and comes into effect on 15 September 1997

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INTERNATIONAL
STANDARD

**ISO/IEC
14608-2**

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**Information technology — Open Systems
Interconnection — The Directory: Directory
System Protocol — Protocol
Implementation Conformance Statement
(PICS) proforma**

*Technologies de l'information — Interconnexion de systèmes ouverts
(OSI) — L'annuaire: Protocole du système d'annuaire — Formulaire de
déclaration de conformité d'une instance de protocole (PICS)*



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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 14608-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 21, *Open systems interconnection, data management and open distributed processing*, in collaboration with ITU-T. The identical text is published as ITU-T Recommendation X.582.

ISO/IEC 14608 consists of the following parts, under the general title *Information technology — Open Systems Interconnection — The Directory*:

- *Part 1: Directory Access Protocol — Protocol Implementation Conformance Statement (PICS) proforma*;
- *Part 2: Directory System Protocol — Protocol Implementation Conformance Statement (PICS) proforma*.

Annex A forms an integral part of this part of ISO/IEC 14608.

Introduction

This Recommendation | International Standard, together with the others in the set, has been produced to facilitate the interconnection of information processing systems to provide directory services. The set of all such systems, together with the directory information which they hold, can be viewed as an integrated whole, called the **Directory**. The information held by the Directory, collectively known as the Directory Information Base (DIB), is typically used to facilitate communication between, with or about objects such as application entities, people, terminals and distribution lists.

The Directory plays a significant role in Open Systems Interconnection, whose aim is to allow, with a minimum of technical agreement outside the interconnection standards, the interconnection of information processing systems:

- from different manufacturers;
- under different managements;
- of different levels of complexity; and
- of different technologies.

To evaluate the conformance of a particular implementation, it is necessary to have a description of the capabilities and options which have been implemented. Such a description is called a Protocol Implementation Conformance Statement (PICS).

This Recommendation | International Standard includes the PICS proforma for the Directory System Protocol (DSP) as defined in the 1988 CCITT Rec. X.500-Series | ISO/IEC 9594:1990.

1 Scope

This Recommendation | International Standard provides the Protocol Implementation Conformance Statement (PICS) proforma for the Directory System Protocol (DSP) specified in the 1988 CCITT Rec. X.500-Series | ISO/IEC 9594:1990. This PICS proforma is in compliance with the relevant requirements, and in accordance with the relevant guidance given in ITU-T Rec. X.296 | ISO/IEC 9646-7. Detail of the use of this proforma is provided in this Recommendation | International Standard.

The supplier of an implementation which is claimed to conform to CCITT Rec. X.500-Series | ISO/IEC 9594 is required to complete a copy of the PICS proforma provided in Annex A, and is required to provide the information necessary to identify both the supplier and the implementation.

This PICS proforma applies to a cooperating Directory System Agent (DSA).

2 Normative references

The following Recommendations | 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 the 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 X.200 (1994) | ISO/IEC 7498-1:1994, *Information technology — Open Systems Interconnection — Basic Reference Model: The Basic Model*.
- 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 Conformation Statement (PICS) proforma*.
- ITU-T Recommendation X.249¹⁾ | ISO/IEC 9072-4...¹⁾, *Information technology — Open Systems Interconnection — Remote Operations: Protocol Implementation Conformance Statement (PICS) proforma*.

¹⁾ To be published.

2.2 Paired Recommendations | International Standards equivalent in technical content

- ITU-T Recommendation X.290 (1995), *OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications — General concepts*.
- ISO/IEC 9646-1:1994, *Information technology — Open Systems Interconnection — Conformance testing methodology and framework — Part 1: General concepts*.
- ITU-T Recommendation X.296 (1995), *OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications — Implementation conformance statements*.
- ISO/IEC 9646-7:1995, *Information technology — Open Systems Interconnection — Conformance testing methodology and framework — Part 7: Implementation Conformance Statements*.
- CCITT Recommendation X.500 (1988), *The Directory — Overview of concepts, models and services*.
- ISO/IEC 9594-1:1990, *Information technology — Open Systems Interconnection — The Directory — Part 1: Overview of concepts, models and services*.
- CCITT Recommendation X.501 (1988), *The Directory — Models*.
- ISO/IEC 9594-2:1990, *Information technology — Open Systems Interconnection — The Directory — Part 2: Models*.
- CCITT Recommendation X.509 (1988), *The Directory — Authentication framework*.
- ISO/IEC 9594-8:1990, *Information technology — Open Systems Interconnection — The Directory — Part 8: Authentication framework*.
- CCITT Recommendation X.511 (1988), *The Directory — Abstract service definition*.
- ISO/IEC 9594-3:1990, *Information technology — Open Systems Interconnection — The Directory — Part 3: Abstract service definition*.
- CCITT Recommendation X.518 (1988), *The Directory — Procedures for distributed operation*.
- ISO/IEC 9594-4:1990, *Information technology — Open Systems Interconnection — The Directory — Part 4: Procedures for distributed operation*.
- CCITT Recommendation X.519 (1988), *The Directory — Protocol specifications*.
- ISO/IEC 9594-5:1990, *Information technology — Open Systems Interconnection — The Directory — Part 5: Protocol specifications*.
- CCITT Recommendation X.520 (1988), *The Directory — Selected attribute types*.
- ISO/IEC 9594-6:1990, *Information technology — Open Systems Interconnection — The Directory — Part 6: Selected attribute types*.
- CCITT Recommendation X.521 (1988), *The Directory — Selected object classes*.
- ISO/IEC 9594-7:1990, *Information technology — Open Systems Interconnection — The Directory — Part 7: Selected object classes*.

3 Definitions

For the purposes of this Recommendation | International Standard, the following definitions apply. The following terms defined in ITU-T Rec. X.290 | ISO/IEC 9646-1:

- a) Implementation conformance statement;
- b) Implementation conformance statement proforma;
- c) Protocol Implementation Conformation Statement (PICS); and
- d) PICS proforma.

Additional terms

- a) *Cooperating DSA*: A DSA that has the capability of using the Directory System Protocol.
- b) *Security Level*: Security levels shall be declared for peer entity authentication, originator authentication and results authentication, respectively.
 - For peer entity authentication, there are five security levels: “none”, “simple without password”, “simple with unprotected password”, “simple with protected password” and “strong”.
 - For originator authentication, there are three security levels: “none”, “simple with distinguished name” and “strong”.