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Information technology — Open Systems Interconnection — Protocol for the Commitment, Concurrency and Recovery service element: Protocol Implementation Conformance Statement (PICS) proforma

*Technologies de l'information — Interconnexion de systèmes
ouverts (OSI) — Protocole pour l'élément de service d'engagement, de
concurrence et de reprise: Formulaire de déclaration de conformité de
mise en œuvre du 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 9805-2 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.853.

ISO/IEC 9805 consists of the following parts, under the general title *Information technology — Open Systems Interconnection — Protocol for the Commitment, Concurrency and Recovery service element*:

- *Part 1: Protocol specification*
- *Part 2: Protocol Implementation Conformance Statement (PICS) proforma*

Annex A forms an integral part of this part of ISO/IEC 9805.

Introduction

This Recommendation | International Standard is one of a set of Recommendations and International Standards produced to facilitate the interconnection of information processing systems. It is related to other Recommendations and International Standards in the set as defined by the Reference Model for Open Systems Interconnection (see ITU-T Rec. X.200 | ISO/IEC 7498-1). The Reference Model subdivides the area of standardization for interconnection into series of layers of specification, each of manageable size.

The goal of Open Systems Interconnection is to allow, with a minimum of technical agreement outside the interconnection standards, the interconnection of information processing systems:

- a) from different manufacturers;
- b) under different managements;
- c) of different levels of complexity; and
- d) of different technologies.

The Recommendations | International Standards for the application-service-element for Commitment Concurrency, and Recovery (CCR) are:

- ITU-T Rec. X.851 | ISO/IEC 9804, CCR service definition;
- ITU-T Rec. X.852 | ISO/IEC 9805-1, CCR protocol specification;
- ITU-T Rec. X.853 | ISO/IEC 9805-2, CCR Protocol Implementation Conformance Statement (PICS) proforma.

To evaluate conformance of a particular implementation, it is necessary to have a statement of which capabilities and options have been implemented for a given OSI protocol. Such a statement is called a Protocol Implementation Conformance Statement.

The PICS proforma, Annex A, has been designed to be a self contained section of this Recommendation | International Standard for use in testing and procurement.

INTERNATIONAL STANDARD**ITU-T RECOMMENDATION****INFORMATION TECHNOLOGY – OPEN SYSTEMS INTERCONNECTION –
PROTOCOL FOR THE COMMITMENT, CONCURRENCY AND RECOVERY
SERVICE ELEMENT: PROTOCOL IMPLEMENTATION CONFORMANCE
STATEMENT (PICS) PROFORMA****1 Scope**

This Recommendation | International Standard defines a Protocol Implementation Conformance Statement (PICS) proforma for the detailed expression of the conformance requirements of ITU-T Rec. X.852 | ISO/IEC 9805-1. This PICS proforma is in compliance with the relevant requirements for a PICS proforma 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. Implementors of implementations claiming conformance to ITU-T Rec. X.852 | ISO/IEC 9805-1 shall complete the proforma as part of the conformance requirements. The level of detail required in the proforma exceeds that of the protocol specification by requiring details to uniquely identify the implementation and the supplier.

NOTE – PICS are related to base standards and only base standards. PICS structure might be expanded and refined for other documents (e.g. ISPs) using the base standards (e.g. ISPICS).

2 Normative references

The following Recommendations and 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 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 Recommendation | 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.210 (1993) | ISO/IEC 10731:1994, *Information technology – Open Systems Interconnection – Basic Reference Model – Conventions for the definition of OSI services.*
- ITU-T Recommendation X.215 (1995) | ISO/IEC 8326:1996, *Information technology – Open Systems Interconnection – Session service definition.*
- ITU-T Recommendation X.216 (1994) | ISO/IEC 8822:1994, *Information technology – Open Systems Interconnection – Presentation service definition.*
- ITU-T Recommendation X.225 (1995) | ISO/IEC 8327-1:1996, *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.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.*

- ITU-T Recommendation X.851 (1993) | ISO/IEC 9805-1:1994, *Information technology – Open Systems Interconnection – Service definition for the commitment, concurrency and recovery service element.*
- ITU-T Recommendation X.852 (1993) | ISO/IEC 9805-1:1994, *Information technology – Open Systems Interconnection – Protocol for the commitment, concurrency and recovery service element: Protocol specification.*

2.2 Paired Recommendations | International Standards equivalent in technical content

- CCITT Recommendation X.208 (1988), *Specification of Abstract Syntax Notation One (ASN.1).*
ISO/IEC 8824:1990, *Information technology – Open Systems Interconnection – Specification of Abstract Syntax Notation One (ASN.1).*
- CCITT Recommendation X.217 (1992), *Service definition for the Association Control Service Element.*
ISO 8649:1988, *Information processing systems – Open Systems Interconnection – Service definition for the Association Control Service Element.*
- CCITT Recommendation X.227 (1992), *Connection-oriented protocol specification for the Association Control Service Element.*
ISO 8650:1988, *Information processing systems – Open Systems Interconnection – Protocol specification for the Association Control Service Element.*
- 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.*
- CCITT Recommendation X.291 (1992), *OSI Conformance testing methodology and framework for protocol Recommendations for CCITT applications – Abstract test suite specification.*
ISO/IEC 9646-2:1994, *Information technology – Open Systems Interconnection – Conformance testing methodology and framework – Part 2: Abstract Test Suite specification.*
- 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.*