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INTERNATIONAL STANDARD

# ISO/IEC 8602

Second edition
1995-04-01

# Information technology — Protocol for providing the OSI connectionless-mode transport service

*Technologies de l'information — Protocole pour la fourniture du service de transport OSI en mode sans connexion*

Reference number
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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 8602 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology,* Subcommittee SC 6, *Telecommunications and information exchange between systems,* in collaboration with ITU-T. The identical text is published as ITU-T Recommendation X.234.

This second edition cancels and replaces the first edition (ISO 8602:1987).

Annexes A and B form an integral part of this International Standard. Annex C is for information only.

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## Introduction

This Recommendation | International Standard is one of a set of Recommendations and International Standards produced to facilitate the interconnection of computer systems. The set of Recommendations and International Standards covers the services and protocols required to achieve such interconnection.

This Recommendation | International Standard is positioned with respect to other related Recommendations and International Standards by the layers defined in the Reference Model for Open Systems Interconnection (see ITU-T Rec. X.200 | ISO/IEC 7498-1). In particular, it is a protocol of the Transport Layer. It is most closely related to the transport service definition (see ITU-T Rec. X.214 | ISO/IEC 8072) and the network service definition (see CCITT Rec. X.213 | ISO/IEC 8348). The interrelationship between these Recommendations and International Standards is illustrated in Figure 1.

The structure of this Recommendation | International Standard is similar to the structure of ITU-T Rec. X.224 | ISO/IEC 8073 in order to facilitate cross reference between the two transport protocols.

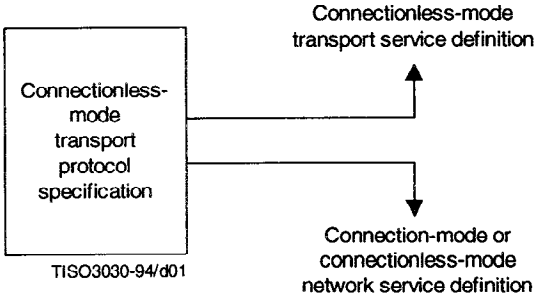


**Figure 1 – Relationship between the connectionless-mode transport protocol and adjacent services**

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**INTERNATIONAL STANDARD**

**ITU-T RECOMMENDATION**

# INFORMATION TECHNOLOGY – PROTOCOL FOR PROVIDING THE OSI CONNECTIONLESS-MODE TRANSPORT SERVICE

## 1 Scope

This Recommendation | International Standard specifies

a) procedures for the connectionless-mode transmission of data and protocol control information from one transport entity to one peer transport entity;

b) the encoding of the transport-protocol-data-units used for the transmission of data and control information;

c) procedures for the correct interpretation of transport protocol control information; and

d) the functional requirements for implementations claiming conformance to this Recommendation | International Standard.

The procedures are defined in terms of

a) the interactions among peer transport entities through the exchange of transport-protocol-data-units;

b) the interactions between a transport entity and a transport service user through the exchange of transport service primitives; and

c) the interaction between a transport entity and a network service provider through the exchange of network service primitives.

This Recommendation | International Standard specifies the connectionless-mode transport protocol and provides the PICS Proforma in compliance with the relevant requirements, and in accordance with the relevant guideline, given in CCITT Rec. X.291 | ISO/IEC 9646-2. The protocol for providing the connection-mode transport service is specified in ITU-T Rec. X.224 | ISO/IEC 8073.

## 2 Normative references

The following Recommendations and International Standards contain provisions, which through references in the 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 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.*

– CCITT Recommendation X.213 (1992) | ISO/IEC 8348:1993, *Information technology – Open Systems Interconnection – Network Service Definition.*

– ITU-T Recommendation X.214 (1993) | ISO/IEC 8072:1994, *Information technology – Open Systems Interconnection – Transport service definition.*

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## 2.2 Paired Recommendations | International Standards equivalent in technical content

- ITU-T Recommendation X.224 (1993), *Protocol for providing the OSI connection-mode transport service.*

  ISO/IEC 8073:1992, Information technology – *Telecommunications and information exchange between systems – Open Systems Interconnection – Protocol for providing the connection-mode transport service.*

- ITU-T Recommendation X.264 (1993), *Transport protocol identification mechanism.*

  ISO/IEC 11570:1992, Information technology – *Telecommunications and information exchange between systems – Open Systems Interconnection – Transport protocol identification mechanism.*

- CCITT Recommendation X.290 (1992), *OSI conformance testing methodology and framework for protocol Recommendations for CCITT applications – General Concepts.*

  ISO/IEC 9646-1:1991, *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 9646-2:1991, *Information technology – Open Systems Interconnection – Conformance testing methodology and framework – Part 2: Abstract test suite specification.*