# INTERNATIONAL STANDARD

**ISO/IEC 8473-5**

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# Information technology — Protocol for providing the connectionless-mode network service: Provision of the underlying service by ISDN circuit-switched B-channels

*Technologies de l'information — Protocole pour la fourniture du service de réseau en mode sans connexion: Fourniture du service sous-jacent par canaux B commutés au circuit ISDN*

# 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 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 8473-5 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.625.

ISO/IEC 8473 consists of the following parts, under the general title *Information technology — Protocol for providing the connectionless-mode network service*:

—   *Part 1: Protocol specification*

—   *Part 2: Provisions of the underlying service by an ISO/IEC 8802 subnetwork*

—   *Part 3: Provision of the underlying service by an X.25 subnetwork*

—   *Part 4: Provision of the underlying service by a subnetwork that provides the OSI data link service*

—   *Part 5: Provision of the underlying service by ISDN circuit-switched B-channels*

Annex A forms an integral part of this part of ISO/IEC 8473.

# Introduction

This Recommendation | International Standard is one of a set of Recommendations and International Standards produced to facilitate the interconnection of open systems. The set 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 ITU-T Rec. X.200 | ISO/IEC 7498-1. In particular, it defines the way in which the B-channels of an ISDN subnetwork may be used within the Network layer to provide the abstract underlying service with respect to which the protocol defined by ITU-T Rec. X.233 | ISO/IEC 8473-1 is specified.

In order to evaluate the conformance of a particular implementation of this protocol, it is necessary to have a statement of which of the protocol's capabilities and options have been implemented. Such a statement is called a Protocol Implementation Conformance Statement (PICS), as defined in CCITT Rec. X.290 and ISO/IEC 9646-1. A PICS proforma, from which a PICS may be prepared for a specific implementation, is included in this Recommendation | International Standard as Annex A.

INTERNATIONAL STANDARD

ITU-T RECOMMENDATION

# INFORMATION TECHNOLOGY – PROTOCOL FOR PROVIDING THE CONNECTIONLESS-MODE NETWORK SERVICE: PROVISION OF THE UNDERLYING SERVICE BY ISDN CIRCUIT-SWITCHED B-CHANNELS

## 1    Scope

This Recommendation | International Standard specifies the way in which the underlying service assumed by the protocol defined by ITU-T Rec. X.233 | ISO/IEC 8473-1 is provided by a subnetwork that conforms to Recommendation Q.931 through the operation of a Subnetwork Dependent Convergence Function (SNDCF) as described in ISO/IEC 8648.

This Recommendation | International Standard also provides the PICS proforma for this protocol, in compliance with the relevant requirements, and in accordance with the relevant guidance, given in CCITT Rec. X.290 and ISO/IEC 9646-1.

## 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 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 Rec. X.233 (1993) | ISO/IEC 8473-1:1994, *Information technology – Protocol for providing the connectionless-mode Network service: Protocol specification.*

–    ITU-T Rec. X.622 (1994) | ISO/IEC 8473-3:1995, *Information technology – Protocol for providing the connectionless-mode Network service: Provision of the underlying service by an X.25 subnetwork.*

–    ITU-T Rec. X.623 (1994) | ISO/IEC 8473-4:1995, *Information technology – Protocol for providing the connectionless-mode Network service: Provision of the underlying service by a subnetwork that provides the OSI data link service.*

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

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

ISO/IEC 9646-1:1994, *Information technology – Open Systems Interconnection – Conformance testing methodology and framework – Part 1: General concepts.*

### 2.3    Additional references

–    CCITT Recommendation I.231 (1988), *Circuit-mode bearer service categories.*

–    ITU-T Recommendation I.430 (1993), *Basic user-network interface – Layer 1 specification.*

–    ITU-T Recommendation I.431 (1993), *Primary rate user-network interface – Layer 1 specification.*

- ITU-T Recommendation Q.921 (1993), *ISDN user-network interface – Data link layer specification.*

- ITU-T Recommendation Q.931 (1993), *Digital Subscriber Signalling System No. 1 (DSS 1) – ISDN user-network interface layer 3 specification for basic call control.*

- ITU-T Recommendation X.25 (1993), *Interface between Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) for terminals operating in the packet mode and connected to public data networks by dedicated circuit.*

- CCITT Recommendation X.121 (1992), *International numbering plan for public data networks.*

- ISO/IEC 7776:1995, *Information technology – Telecommunications and information exchange between systems – High-level data link control procedures – Description of the X.25 LAPB-compatible DTE data link procedures.*

- ISO/IEC 8208:1995, *Information technology – Data communications – X.25 Packet Layer Protocol for Data Terminal Equipment.*

- ISO 8648:1988, *Information processing systems – Open Systems Interconnection – Internal organization of the Network Layer.*

- ISO/IEC 11575:1995, *Information technology – Telecommunications and information exchange between systems – Protocol mappings for the OSI Data Link service.*