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**Information technology —  
Telecommunications and information  
exchange between systems — Private  
Integrated Services Network —  
Inter-exchange signalling protocol — PINX  
clock synchronization**

*Technologies de l'information — Télécommunications et échange  
d'information entre systèmes — Réseau privé à intégration de services —  
Protocole de signalisation d'interéchange — Synchronisation d'horloge  
PINX*

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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 15507 was prepared by ECMA (as ECMA-245) and was adopted, under a special “fast-track procedure”, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

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

## Introduction

This International Standard is one of a series of standards defining services and signalling protocols applicable to Private Integrated Services Networks. The series uses the ISDN concepts as developed by ITU-T and is also within the framework of standards for open systems interconnection as defined by ISO.

This International Standard specifies the signalling protocol for the support of PINX clock synchronization.

This International Standard is based upon the practical experience of ECMA member companies and the results of their active and continuous participation in the work of ISO/IEC JTC 1, ITU-T, ETSI and other international and national standardization bodies. It represents a pragmatic and widely based consensus.

# Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — PINX clock synchronization

## 1 Scope

This International Standard specifies the signalling protocol for the support of clock synchronization (SYNC-SIG) between Private Integrated Services Network Exchanges (PINXs) connected together within a Private Integrated Services Network (PISN).

This protocol supports the synchronization of a PISN using the different sources of clocks available to each PINX. The protocol is based on the method of synchronization described in annex F of the International Standard ISO/IEC 11573.

This International Standard is applicable to PINXs which can be interconnected to form a PISN.

## 2 Conformance

In order to conform to this International Standard, a PINX shall satisfy the requirements identified in the Protocol Implementation Conformance Statement (PICS) proforma in annex A.

## 3 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

- ISO/IEC 11573:1994, *Information technology — Telecommunications and information exchange between systems — Synchronization methods and technical requirements for Private Integrated Services Networks.*
- ISO/IEC 11579-1:1994, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Part 1: Reference configuration for PISN Exchanges (PINX).*
- ISO/IEC 11582:1995, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Generic functional protocol for the support of supplementary services — Inter-exchange signalling procedures and protocol.*
- ITU-T Rec. I.112:1993, *Vocabulary of terms for ISDNs.*
- ITU-T Rec. Z.100:1993, *Specification and description language.*