INTERNATIONAL STANDARD

ISO/IEC 11572

Second edition 1997-06-15

Information technology —
Telecommunication and information
exchange between systems — Private
Integrated Services Network — Circuit
mode bearer services — Inter-exchange
signalling procedures and protocol

Technologies de l'information — Télécommunications et échange d'information entre systèmes — Réseau privé avec intégration de services — Services porteurs en mode circuit — Procédures et protocoles de signalisation d'interéchange



ISO/IEC 11572:1997(E)

Contents

	C.	Page
1	Scope	1
2	Field of Application	1
3	Normative References	1
4	Definitions	
5	List of acronyms	
6	General principles	
	Protocol Control states	
7	Call Control	5
8		
9	General procedures	
10	Circuit-switched Call Control procedures	
11	Procedures for layer management	
12	Protocol timers	
13	Functional definition of messages	31
14	General message format and coding of information	on elements34
Anr	exes	
A	Protocol Implementation Conformance Statement (PICS) for ISO/IEC 11572	49
В	Use of the cause information element	57
С	Examples of message sequences	
D	Manufacturer specific information	63
E	SDL diagram for the procedures over a symmetri link between two peer PINX's	
_	SDL diagram for the procedures on either side of a Transit-PINX	97
F	side of a Transit-PINX	0/
F G	Bibliography	102

© ISO/IEC 1997

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

ISO/IEC Copyright Office • Case postale 56 • CH-1211 Genève 20 • Switzerland Printed in Switzerland

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 11572 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 6, *Telecommunications and information exchange between systems*.

This second edition cancels and replaces the first edition (ISO/IEC 11572:1994), which has been technically revised.

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

Introduction

Private Signalling System Number 1 (PSS1) is a set of standards produced by ISO for the purpose of defining the signalling procedures and protocol for the interconnection of Private Integrated Services Network Exchanges (PINXs) to form Private Integrated Services Networks (PISNs).

PSS1 is independent of the scenario used to interconnect the PINXs.

This International Standard is part of PSS1 and defines the signalling procedures and protocol for circuit-switched Call Control between PISN exchanges (PINXs), i.e., for the support of circuit-mode basic bearer services used either on their own or in support of teleservices.

nis in.
Iding serv. The circuit mode basic services for (PISNs) specified in this International Standard complement, and are compatible with, the corresponding services for public ISDNs as specified by ITU-T.

Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Circuit mode bearer services — Inter-exchange signalling procedures and protocol

1 Scope

This International Standard defines the signalling procedures and protocol for the purpose of circuit-switched Call Control at the Q-reference point between Private Integrated Network Exchanges (PINXs) connected together within a Private Integrated Services Network (PISN). This standard is part of PSS1, being defined by ISO for PISNs.

This International Standard is based upon that described in ITU-T Recommendation Q.931, including the provisions for symmetrical operation described in annex D of that recommendation.

NOTE — The signalling procedures and protocol defined in this International Standard satisfies the requirements identified in ISO/IEC11574 and ISO/IEC 11584.

2 Field of Application

This International Standard is applicable to PINXs which interconnect to form a PISN.

The protocol at the Q-reference point applies to interconnection scenarios which satisfy the performance requirements for Inter-PINX connections.

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 ro 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 8886:1992¹⁾, Information technology - Telecommunications and information exchange between systems - Data link service definition for Open Systems Interconnection.

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

ISO/IEC 11579-1:1994, Information technology - Telecommunications and information exchange between systems - Private integrated services network - Reference configuration for PISN Exchanges (PINX).

CCITT Rec. E.164 (1991), Numbering plan for the ISDN era [Blue Book, Volume II, Fascicle II.2].

CCITT Rec. I.112 (1993), Vocabulary of terms for ISDNs.

CCITT Rec. I.330 (1984), ISDN numbering and addressing principles.

CCITT Rec. T.50 (1993), International Reference Alphabet (IRA).

ITU-T Rec. Q.931 (1994), Digital Subscriber Signalling System No. 1 (DSS1) - ISDN user-network interface layer 3 specification for basic call control.

4 Definitions

For the purposes of this International Standard, the following definitions apply.

4.1 Private Integrated Services Network (PISN)

An ISDN providing services to a specific set of users (contrary to a public ISDN which provides services to the general public).

^{1.} Currently under revision.