

INTERNATIONAL STANDARD

**ISO/IEC
15899**

First edition
1998-11-01

Information technology — Telecommunications and information exchange between systems — Broadband Private Integrated Services Network — Service description — Broadband connection oriented bearer services

*Technologies de l'information — Télécommunications et échange
d'information entre systèmes — Réseaux privés à intégration de services
à large bande — Description des services — Services à large bande de
supports orientés connexion*



Contents	<i>Page</i>
Foreword	iii
Introduction	iv
1 Scope	1
2 Conformance	1
3 Normative references	1
4 Definitions	1
4.1 External definitions	1
4.2 Call	2
4.3 Call/connection	2
5 List of acronyms	2
6 Broadband connection oriented bearer services	2
6.1 Description	2
6.2 Static Description: Service Attributes	3
6.2.1 Bearer service using a constant bit rate	3
6.2.2 Bearer service with real time requirements using a variable bit rate	4
6.2.3 Bearer service without real time requirements using a variable bit rate	4
6.2.4 Bearer service using the available bit rate	5
6.2.5 Bearer service using the unspecified bit rate	6
6.3 Procedures	7
6.3.1 Provision	7
6.3.2 Normal procedures	7
6.3.3 Exceptional procedures	7
6.4 Interworking considerations	8
6.4.1 Interworking with a public B-ISDN	8
6.4.2 Interworking with a narrowband private integrated services network (N-PISN)	8
Annex A - Glossary of terms	9

© ISO/IEC 1998

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 15899 was prepared by ECMA (as ECMA-261) 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 is for information only.

Introduction

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

This International Standard specifies the broadband connection oriented bearer services.

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.

The services specified in this International Standard are compatible with the equivalent services specified by the ATM Forum for private ATM networks and by ITU-T or ETSI for public B-ISDN.

Information technology - Telecommunications and information exchange between systems - Broadband Private Integrated Services Network - Service description - Broadband connection oriented bearer services

1 Scope

This International Standard specifies service description and control aspects of the broadband connection oriented bearer services which may be provided by Broadband Private Integrated Services Networks (B-PISNs).

One of the purposes of the service specification for broadband connection oriented bearer services is to guide and constrain the work on signalling protocols. Therefore, this International Standard is concerned mainly with the control aspects of services.

Change of traffic characteristics during a call is outside the scope of this International Standard.

Charging considerations are outside the scope of this International Standard.

2 Conformance

In order to conform to this International Standard, a protocol standard shall specify signalling protocols and equipment behaviour that are capable of being used in a B-PISN which supports the bearer service specified in this International Standard. This means that, to claim conformance, a protocol standard is required to be adequate for the support of those aspects of clause 6 which are relevant to the interface or equipment to which the protocol standard applies.

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 Standard.

ISO/IEC 11574:1994,	<i>Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Circuit-mode 64 kbit/s bearer services - Service description, functional capabilities and information flows.</i>
ISO/IEC 11579-1:1994,	<i>Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Part 1: Reference configuration for PISN Exchanges (PINX).</i>
ITU-T Rec. I.112:1993,	<i>Vocabulary of terms for ISDNs.</i>
ITU-T Rec. I.113:1993,	<i>Vocabulary of terms for broadband aspects of ISDN.</i>
ITU-T Rec. I.210:1993,	<i>Principles of telecommunication services supported by an ISDN and the means to describe them.</i>
ITU-T Rec. I.361	<i>B-ISDN ATM layer specification.</i>
ITU-T Rec. I.363	<i>B-ISDN ATM adaptation layer (AAL) specification.</i>
ATM Forum	<i>User Network Interface Specification, Version 4.0 (UNI 4.0).</i>
ATM Forum	<i>Traffic Management Specification, Version 4.0 (TM 4.0).</i>