

INTERNATIONAL
STANDARD

ISO/IEC
8073

Fourth edition
1997-08-15

**Information technology — Open Systems
Interconnection — Protocol for providing
the connection-mode transport service**

*Technologies de l'information — Interconnexion de systèmes ouverts
(OSI) — Protocole pour fourniture du service de transport en mode
connexion*



Reference number
ISO/IEC 8073:1997(E)

Contents

	<i>Page</i>	
1	Scope.....	1
2	References.....	1
	2.1 Identical Recommendations International Standards.....	2
	2.2 Paired Recommendations International Standards equivalent in technical content.....	2
3	Definitions.....	2
4	Abbreviations.....	4
	4.1 Data units.....	4
	4.2 Types of Transport Protocol data units.....	4
	4.3 TPDU fields.....	4
	4.4 Times and associated variables.....	4
	4.5 Miscellaneous.....	5
5	Overview of the Transport Protocol.....	5
	5.1 Service provided by the Transport Layer.....	5
	5.2 Service assumed from the Network Layer.....	5
	5.3 Functions of the Transport Layer.....	6
	5.4 Classes and options when operating over CONS.....	8
	5.5 Characteristics of class 4 transport protocol when operating over CLNS.....	10
	5.6 Model of the Transport Layer.....	10
6	Elements of procedure.....	10
	6.1 Use of the network service.....	11
	6.2 Transport Protocol Data Unit (TPDU) transfer.....	12
	6.3 Segmenting and reassembling.....	13
	6.4 Concatenation and separation.....	13
	6.5 Connection establishment.....	13
	6.6 Connection refusal.....	19
	6.7 Normal release.....	20
	6.8 Error release when operating over CONS.....	22
	6.9 Association of TPDU with transport connections.....	22
	6.10 Data TPDU numbering.....	25
	6.11 Expedited data transfer.....	26
	6.12 Reassignment after failure when operating over CONS.....	27
	6.13 Retention and acknowledgement of TPDU.....	28
	6.14 Resynchronization.....	30
	6.15 Multiplexing and demultiplexing when operating over CONS.....	32
	6.16 Explicit flow control.....	32
	6.17 Checksum.....	33

© 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

6.18	Frozen references	34
6.19	Retransmission on time-out	34
6.20	Resequencing	35
6.21	Inactivity control	35
6.22	Treatment of protocol errors	35
6.23	Splitting and recombining when operating over CONS	36
7	Protocol classes	37
8	Specification for class 0 – Simple class	37
8.1	Functions of class 0	37
8.2	Procedures for class 0	37
9	Specification for class 1 – Basic error recovery class	39
10	Specification for class 2 – Multiplexing class	40
11	Specification for class 3 – Error recovery and multiplexing class	42
12	Specification for class 4 – Error detection and recovery class	43
13	Structure and encoding of TPDU's	55
13.1	Validity	55
13.2	Structure	55
13.3	Connection Request (CR) TPDU	57
13.4	Connection Confirm (CC) TPDU	62
13.5	Disconnect Request (DR) TPDU	62
13.6	Disconnect Confirm (DC) TPDU	63
13.7	Data (DT) TPDU	64
13.8	Expedited Data (ED) TPDU	65
13.9	Data Acknowledgement (AK) TPDU	66
13.10	Expedited Data Acknowledgement (EA) TPDU	68
13.11	Reject (RJ) TPDU	68
13.12	TPDU Error (ER) TPDU	69
14	Conformance	70
14.5	Claims of conformance shall state	71
Annex A	– State tables	72
A.1	General	72
A.2	Conventions	72
A.3	Tables	73
A.4	State tables for classes 0 and 2	75
A.5	State tables for classes 1 and 3	78
A.6	State tables for class 4 over CONS	80
A.7	State tables for class 4 over CLNS	89
Annex B	– Network connection management subprotocol	92
B.1	Introduction	92
B.2	Scope	92
B.3	Definitions	92
B.4	Abbreviations	93
B.5	Overview of the protocol	93
B.6	Elements of procedure	94
B.7	Protocol operation	98
B.8	Structure and encoding of TPDU's	102
B.9	Conformance	104
B.10	State table	105
B.11	Diagram for NCMS protocol operation	107