

Information technology — Open Systems Interconnection — International Standardized Profiles: OSI Distributed Transaction Processing —

Part 4: Support of Session, Presentation and ACSE PDUs

The European Standard EN ISP 12061-4:1996 has the status of a British Standard

ICS 35.100.05

Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee IST/21, Open Systems Interconnection, upon which the following bodies were represented:

- British Computer Society
- British Telecommunications plc
- CCTA (the Government Centre for Information Systems)
- Department of Trade and Industry [IT Standards Unit (It6a)]
- Digital Equipment Co. Ltd.
- IBM United Kingdom Ltd.
- International Computers Limited
- Joint Information Systems Committee
- Level 7 Ltd.
- Logica UK Ltd.
- National Computing Centre Ltd.
- National Health Services
- Nine Tiles Computer Systems Ltd.
- PSC International Ltd.
- Rank Xerox Ltd.
- Salford Software Services (3-5)
- SEMA Group Systems Ltd.
- X Open Company Ltd.

This British Standard, having been prepared under the direction of the Information Systems Technology Assembly, was published under the authority of the Standards Board and comes into effect on 15 October 1995

© BSI 03-2000

The following BSI references relate to the work on this standard:
Committee reference IST/21
Draft for comment 93/642198 DC

ISBN 0 580 24828 3

Amendments issued since publication

Amd. No.	Date	Comments
9653	October 1997	Indicated by a sideline in the margin

Contents

	Page
Committees responsible	Inside front cover
National foreword	ii
Foreword	2
Foreword	iv
Text of ISO/IEC ISP 12061-4	1

National foreword

This British Standard has been prepared by Technical Committee IST/21 and is the English language version of EN ISP 12061 *Information technology — Open Systems Interconnection — International Standardized Profiles: OSI Distributed Transaction Processing — Part 4:1997 Support of Session, Presentation and ACSE PDUs*, published, by the European Committee for Standardization (CEN). It is identical with ISO/IEC ISP 12061-4:1995 published by the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC).

This British Standard is published under the direction of the Information Systems Technology Assembly whose Technical Committee IST/21 has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international committee any enquiries on interpretation, or proposals for change, and keep UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

NOTE International and European Standards, as well as overseas standards, are available from Customer Services, BSI, 389 Chiswick High Road, London W4 4AL.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN ISP title page, page 2, the ISO/IEC ISP title page, pages ii to iv, pages 1 to 21 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

ICS 35.100

Descriptors: Data processing, information interchange, network interconnection, open systems interconnection, communication procedure, control procedures, profiles

English version

Information technology — Open Systems
Interconnection — International Standardized Profiles:
OSI Distributed Transaction Processing —
Part 4: Support of Session, Presentation and ACSE PDUs

(ISO/IEC ISP 12061-4:1995)

Technologies de l'information —
Interconnexion de systèmes ouverts (OSI) —
Profils normalisés internationaux: Traitement
transactionnel réparti —
Partie 4: Prise en charge des PDU de session, de
présentation et d'ACSE
(ISO/IEC ISP 12061-4:1995)

Informationstechnik — Kommunikation
Offener Systeme — Internationale
Profilnormen: Verteilte
Transaktionsverarbeitung —
Teil 4: Unterstützung des
Kommunikationssteuerungsprotokolls, des
Darstellungsprotokolls und des
Assoziationssteuerungsprotokolls
(ISO/IEC ISP 12061-4:1995)

This European Standard was approved by CEN on 1996-03-19. CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

© 1996 Copyright reserved to CEN members

Foreword

The text of the International Standard from ISO/IEC JTC 1, Information technology, of the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) has been taken over as a European Standard by the Technical Board of CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 1996, and conflicting national standards shall be withdrawn at the latest by November 1996.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

INTERNATIONAL STANDARDIZED PROFILE

**ISO/IEC
ISP
12061-4**

First edition
1995-06-15

Information technology — Open Systems Interconnection — International Standardized Profiles: OSI Distributed Transaction Processing —

Part 4:

Support of Session, Presentation and ACSE
PDUs

*Technologies de l'information — Interconnexion de systèmes ouverts
(OSI) — Profils normalisés internationaux: Traitement transactionnel
réparti —*

Partie 4: Prise en charge des PDU de session, de présentation et d'ACSE



Reference number
ISO/IEC ISP 12061-4:1995(E)

AVA Documents
Document Sharing Hub

Contents

	Page
Foreword	iv
Introduction	1
1 Scope	1
2 Normative references	1
3 Definitions and abbreviations	2
4 Notation	2
5 Support of Session spdus	2
6 Support of Presentation ppdus	2
7 Support of ACSE apdus	2
8 Conformance	2
Annex A (normative) Session PDU support	3
Table 1 — Supported functions	3
Table 2 — ISO 8327 protocol versions implemented	3
Table 3 — Protocol mechanisms	4
Table 4 — Initiator/Responder capabilities	4
Table 5 — Kernel functional unit procedures usage by profile	4
Table 6 — Negotiated release functional unit procedures usage by profile	5
Table 7 — Half duplex functional unit procedures usage by profile	5
Table 8 — Expedited data functional unit procedures usage by profile	5
Table 9 — Typed data functional unit procedures usage by profile	5
Table 10 — Capability data functional unit procedures usage by profile	5
Table 11 — Minor synchronize functional unit procedures usage by profile	5
Table 12 — Symmetric synchronize functional unit procedures usage by profile	6
Table 13 — Major synchronize functional unit procedures usage by profile	6
Table 14 — Resynchronize functional unit procedures usage by profile	6
Table 15 — Exceptions functional unit procedures usage by profile	6
Table 16 — Activity management functional unit procedures usage by profile	7
Table 17 — Connect (CN) SPDU	7
Table 18 — Accept (AC) SPDU	8
Table 19 — Refuse (RF) SPDU	9
Table 20 — Finish (FN) SPDU	9
Table 21 — Disconnect (DN) SPDU	9
Table 22 — Abort (AB) SPDU	10
Table 23 — Data transfer (DT) SPDU	10
Table 24 — Typed data (TD) SPDU	10
Table 25 — Give tokens (GT) SPDU	10
Table 26 — Please tokens (PT) SPDU	11
Table 27 — Minor sync point (MIP) SPDU	11
Table 28 — Minor sync point ack (MIA) SPDU	11
Table 29 — Resynchronize (RS) SPDU	11
Table 30 — Resynchronize ack (RA) SPDU	12
Table 31 — Prepare (PR) SPDU	12
Annex B (normative) Presentation PDU support	13
Table 1 — Connection initiator or responder capabilities	13
Table 2 — Protocol mechanisms	13
Table 3 — Functional units	13
Table 4 — Kernel PDU usage by profile	14
Table 5 — Presentation context management PDU usage by profile	14

	Page
Table 6 — Other presentation PDU usage by profile	14
Table 7 — Connect presentation (CP) PPDU	15
Table 8 — Connect presentation accept (CPA) PPDU	15
Table 9 — Connect presentation reject (CPR) PPDU	15
Table 10 — Abnormal release user (ARU) PPDU	16
Table 11 — Abnormal release provider (ARP) PPDU	16
Table 12 — Presentation data (TD) PPDU	16
Table 13 — Presentation typed data (TTD) PPDU	16
Table 14 — Resynchronize (RS) PPDU	16
Table 15 — Resynchronize acknowledge (RSA) PPDU	17
Table 16 — Session service primitives not carrying presentation PCI	17
Table 17 — Transfer syntaxes supported	17
Table 18 — Abstract syntaxes	17
Annex C (normative) ACSE APDU support	18
Table 1 — Supported functions	18
Table 2 — Initiator/Responder capabilities	18
Table 3 — Functional units	18
Table 4 — ACSE PDU usage by profile	19
Table 5 — A-Associate-Request (AARQ)	19
Table 6 — A-Associate-Response (AARE)	20
Table 7 — A-Release-Request (RLRQ)	20
Table 8 — A-Release-Response (RLRE)	20
Table 9 — A-Abort (ABRT)	21
Table 10 — AE title name forms	21
Table 11 — Authentication value form	21

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. In addition to developing International Standards, ISO/IEC JTC 1 has created a Special Group on Functional Standardization for the elaboration of International Standardized Profiles.

An International Standardized Profile is an internationally agreed, harmonized document which identifies a standard or group of standards, together with options and parameters, necessary to accomplish a function or set of functions.

Draft International Standardized Profiles are circulated to national bodies for voting. Publication as an International Standardized Profile requires approval by at least 75 % of the national bodies casting a vote.

International Standardized Profile ISO/IEC ISP 12061-4 was prepared with the collaboration of

- Asia-Oceania Workshop (AOW);
- European Workshop for Open Systems (EWOS);
- Open Systems Environment Implementors' Workshop (OIW).

ISO/IEC ISP 12061 consists of the following parts, under the general title *Information technology — Open Systems Interconnection — International Standardized Profiles: OSI Distributed Transaction Processing*.

- *Part 1: Introduction to the Transaction Processing Profiles;*
- *Part 2: Support of OSI TP APDUs;*
- *Part 3: Support of CCR APDUs;*
- *Part 4: Support of Session, Presentation and ACSE PDUs;*
- *Part 5: Application supported transactions — Polarized control (ATP11);*
- *Part 6: Application supported transactions — Shared control (ATP12);*
- *Part 7: Provider supported unchained transactions — Polarized control (ATP21);*
- *Part 8: Provider supported unchained transactions — Shared control (ATP22);*
- *Part 9: Provider supported chained transactions — Polarized control (ATP31);*
- *Part 10: Provider supported chained transactions — Shared control (ATP32).*

Annex A to Annex C form an integral part of this part of ISO/IEC ISP 12061.