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Information and documentation — Open Systems Interconnection — Interlibrary Loan Application Protocol Specification —

Part 1: Protocol specification

*Information et documentation — Interconnexion de systèmes ouverts
(OSI) — Spécification du protocole d'application pour les prêts entre
bibliothèques —*

Partie 1: Spécification du protocole



Reference number
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Contents

| | Page |
|--|------------|
| Foreword | iv |
| Introduction | v |
| 1 Scope | 1 |
| 2 Normative references | 1 |
| 3 Terms and definitions | 2 |
| 3.1 Reference Model definitions..... | 2 |
| 3.2 Abstract Syntax Notation One definitions..... | 3 |
| 3.3 Presentation Service definitions..... | 3 |
| 3.4 Application Layer Structure Definitions..... | 3 |
| 3.5 Service convention definitions..... | 4 |
| 3.6 ILL definitions..... | 5 |
| 4 Abbreviations | 19 |
| 5 Overview of the Protocol | 19 |
| 5.1 Service provision..... | 19 |
| 5.2 Supporting services assumed..... | 20 |
| 5.3 Model..... | 20 |
| 6 ILL APDUs | 20 |
| 7 Transaction information | 21 |
| 7.1 Transaction identification..... | 22 |
| 7.2 Protocol states..... | 23 |
| 7.3 Protocol variables..... | 26 |
| 7.4 Expiry timer..... | 26 |
| 7.5 Request information..... | 26 |
| 7.6 History information..... | 27 |
| 8 Elements of procedure | 28 |
| 8.1 Events and actions..... | 28 |
| 8.2 Procedural rules for all parties..... | 33 |
| 8.3 Procedural rules for intermediaries..... | 40 |
| 9 Abstract syntax | 44 |
| 9.1 ASN.1 Specification of ILL APDUs..... | 44 |
| 10 Conformance | 60 |
| 10.1 Static conformance..... | 60 |
| 10.2 Dynamic conformance..... | 61 |
| 10.3 Protocol Implementation Conformance Statement Requirements..... | 61 |
| Annex A (normative) ILL state tables | 62 |
| Annex B (normative) Transfer syntax | 90 |
| Annex C (normative) Object Identifiers assigned in this part of ISO 10161 and registration requirements | 118 |
| Annex D (normative) Registration procedures for ILL EXTERNAL data type definitions | 119 |
| Annex E (informative) Example of ILL external data type definition register entry | 121 |
| Annex F (informative) Use of supporting services | 122 |
| Annex G (informative) Invocation of external document delivery services | 124 |
| Bibliography | 125 |

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 46, *Information and documentation*, Subcommittee SC 4, *Technical Interoperability*.

This third edition cancels and replaces the second edition (ISO 10161-1:1997) of which it constitutes a minor revision.

It also incorporates the Amendments ISO 10161-1:1997/Amd 1:2002 and ISO 10161-1:1997/Amd 2:2002.

ISO 10161 consists of the following parts, under the general title *Information and documentation — Open Systems Interconnection — Interlibrary Loan Application Protocol Specification*:

- *Part 1: Protocol specification*
- *Part 2: Protocol implementation conformance statement (PICS) proforma*

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Introduction

This part of ISO 10161 is one of a set of International Standards produced to facilitate the interconnection of computer systems. It is related to other international standards in the set as defined by the Reference Model for Open Systems Interconnection (ISO/IEC 7498). The Reference Model subdivides the area of standardization for interconnection into a series of layers of specification, each of manageable size.

The aim of Open Systems Interconnection is to allow, with a minimum of technical agreement outside the interconnection standards, the interconnection of computer systems

- a) from different manufacturers,
- b) under different managements,
- c) of different levels of complexity, and
- d) of different ages.

This part of ISO 10161 provides a protocol specification for Interlibrary Loan (ILL) communication. The ILL Protocol operates in the Application Layer and allows the parties involved in an ILL-transaction to progress through the ILL-transaction in an orderly and defined way.

The ILL Protocol has been designed to support the ILL services defined in ISO 10160, the ILL Application Service Definition, which generally requires invocation of external delivery services to fulfill an ILL request. The ILL Protocol carries information that permits both automatic and operator-mediated invocation of external delivery services.

This part of ISO 10161 is one of a number of related standards supporting the interconnection of library systems. These standards can be used by themselves or in a cooperative manner to support library applications requiring a mixture of communications services. For example, ISO 23950, which supports remote access to bibliographic databases, could be used in conjunction with the ILL Protocol to obtain item identification information. The control and management of interactions among such bibliographic applications are local matters that are outside the scope of this International Standard.

Security and accounting issues as they relate to ILL operations are for further study.

The specification technique used in this part of ISO 10161 is consistent with techniques used in defining other OSI Protocols. Within most of this document, the technique is self-explanatory. The Abstract Syntax of the ILL Application Protocol Data Units (APDUs) is defined by means of the ASN.1 specification technique specified in ISO 8824.

This part of ISO 10161 contains seven annexes. [Annexes A to D](#) are normative. [Annex A](#) specifies the state tables for the ILL Protocol. [Annex B](#) specifies the encoding rules for generating a transfer syntax compatible with EDIFACT as defined in ISO 9735. [Annex C](#) specifies the object identifiers assigned in this standard and registration requirements. [Annex D](#) defines the registration procedures for ILL EXTERNAL data type definitions. [Annex E](#) is an example of an ILL EXTERNAL data type registry entry. [Annex F](#) describes the possible mappings of this protocol onto supporting services. [Annex G](#) describes possible methods of using a document delivery protocol in conjunction with the ILL Protocol.