INTERNATIONAL STANDARD

ISO 18626

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Information and documentation — Interlibrary loan transactions

Information et documentation — Transactions de prêt interbibliothèques

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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 of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 46, *Information and documentation*, Subcommittee SC 4, *Technical interoperability*.

This third edition cancels and replaces the second edition (ISO 18626:2017), which has been technically revised.

The main changes compared to the previous edition are as follows.

— Several elements have been added to handle identified use cases. As part of this, SentVia has been renamed DeliveryMethod, this element is now used in both the Request and Supplying Agency Messages. This is the only elimination of an element and has been done after consultation with implementers.

— Annex B has been rewritten to clarify the use of open codes.

— Annex D has been changed from including several use cases to one sample use case and a has been linked to additional use cases at the website (see Annex A).

— Annex F has been added with guidelines about the use of profiles with ISO 18626.

— Annex G has been added with guidelines about consortia.

— Annex H has been added with guidelines about handling negotiations using "retry" when the supplier cannot fulfil the first request.

— A RetryInfo section to Supplying Agency Message has been added.

— ServiceInfo/PreferredFormat has been renamed to ServiceInfo/ItemFormat and renamed DeliveryInfo/DeliveredFormat to DeliveryInfo/ItemFormat so that we only need one Open Code list for Formats.

— PhysicalAddress/Region has been changed from StandardCodes to free-text field to bring the PhysicalAddress structure in line with the PhysicalAddress structure used in NCIP (to simplify implementation).

— For requests, the element PreferredEdition has been added. For the purposes of this document, the element AnyEdition has been retained to ensure backward compatibility.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document is intended to succeed the old ISO interlibrary lending protocol (consisting of ISO 10160, ISO 10161-1 and ISO 10161-2). Unlike its predecessors, this document is well suited to the modern, web-based technological environment, which is based on XML and web services. Another important difference between the two standards is that while ISO 10160 is based on an outdated 1980s model of ILL transactions, its successor relies on and supports a modern, much simpler interlibrary loan (ILL) procedure.

This document specifies three simple messages: a Request, a Supplying Library Message and a Requesting Library Message. Implementer experiences gathered from the previous edition of this ILL protocol indicates that it is easier to implement than ISO 10160 and that the functionality provided meets the requirements of libraries' current ILL practices.

This document is the first part of a more general strategic initiative to standardize resource sharing in ISO/TC46/SC4. As part of this intention, the committee has aligned element names, transport and XML schema with similar functions in ANSI/NISO Z39.83[7].

In the next version of this document, AnyEdition will be deprecated in favour of PreferredEdition. It is recommended to upgrade from AnyEdition to PreferredEdition without unnecessary delay.

For additional information about implementation of this document, see Annex A.

Information and documentation — Interlibrary loan transactions

1 Scope

This document specifies the transactions between libraries or libraries and other agencies to handle requests for library items and the following exchange of messages.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 2108, *Information and documentation — International Standard Book Number (ISBN)*

ISO 3166-1, *Codes for the representation of names of countries and their subdivisions — Part 1: Country code*

ISO 3297, *Information and documentation — International standard serial number (ISSN)*

ISO 4217, *Codes for the representation of currencies*

ISO 8601-1, *Date and time — Representations for information interchange — Part 1: Basic rules*

ISO/IEC 10646, *Information technology — Universal coded character set (UCS)*

ISO 10957, *Information and documentation — International standard music number (ISMN)*

ISO 15511, *Information and documentation — International standard identifier for libraries and related organizations (ISIL)*

ISO 20247, *Information and documentation — International library item identifier(ILII)*

ISO 26324, *Information and documentation — Digital object identifier system*

ISO 27729, *Information and documentation — International standard name identifier (ISNI)*

RFC 3629, *UTF-8, a transformation format of ISO 10646*

RFC 7230, *Hypertext Transfer Protocol (HTTP/1.1): Message Syntax and Routing*

RFC 7231, *Hypertext Transfer Protocol (HTTP/1.1): Semantics and Content*

RFC 7540, *Hypertext Transfer Protocol Version 2 (HTTP/2)*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp/

— IEC Electropedia: available at http://www.electropedia.org/

3.1
agency
library (3.2), *library-related organization* (3.5) or other agencies such as an archive or a museum or a commercial document supplier

3.2
library
organization, or part of an organization, the main aim of which is to maintain a collection and to facilitate, by services of a staff, the use of such documents as are required to meet the informational, research, educational or recreational needs of its users

[SOURCE: ISO 2789:2013, 2.1.6]

3.3
library consortium
local, regional, or national cooperative association of *libraries* (3.2) that provides for the systematic and effective coordination of the resources of school, public, academic, or special libraries, information centres and other agencies, for improving services to the clientele of such libraries

3.4
library items
books, journals, articles, music, etc. or copies of these in physical or digital format

3.5
library-related organization
institution, company, consortium or other organization which handles ILL requests and/or receives requested *library items* (3.4) on behalf of one or more *libraries* (3.2)

3.6
requesting agency
agency (3.1), which may send requests for *library items* (3.4) and receive them from the *supplying agency* (3.7)

3.7
supplying agency
agency (3.1), which receives requests for *library items* (3.4) and delivers them to the *requesting agency* (3.6)

3.8
uniform resource identifier
URI
compact sequence of characters that identifies an abstract or physical resource

[SOURCE: ISO/IEC 12785-1:2009, 3.23]

3.9
uniform resource locator
URL
subset of URIs that provide a means of locating a resource by describing its primary access mechanism

[SOURCE: ISO/IEC 12785-1:2009, 3.24]

3.10
uniform resource name
URN
persistent, location-independent, resource identifier used for recognition of, and access to, characteristics of the resource or the resource itself

[SOURCE: RFC 8141]

4 Messages

4.1 General

This document specifies three messages and responses for handling interlibrary loan transactions:

— Request (see Table 1) and Request Confirmation (see Table 2);

— Supplying Agency Message (see Table 3) and Supplying Agency Message Confirmation (see Table 4);

— Requesting Agency Message (see Table 5) and Requesting Agency Message Confirmation (see Table 6).

See additional information on guidelines about the use of this document in Annex D. Annex D is illustrative and does not cover all relevant use cases.

For Request, Supplying Agency Message and Requesting Agency Message, a confirmation message is sent immediately (see 4.3, 4.5 and 4.7). The Request Confirmation message (see Table 2) is not a positive or negative response to the request; it indicates only that the Request message has been received. If the Request message contains problems, the Request Confirmation message shall include Error Data (see 4.10).

Codes used in tables are as follows:

— R: Repeatable;

— M: Mandatory;

— CT: Complex Type;

— OC: Open Code List (i.e. Scheme Value Pair);

— CC: Closed Code List (i.e. the code list is part of the ILL standard);

— SC: Standard Code List.

Open Code Lists are predefined schemes, consisting of an enumerated list of possible values for a given data element that should be supported by applications conformant with this document. The Open Code Lists of values are not comprehensive and implementer groups may develop additional schemes for these enumerated types to cover their implementation requirements. Thus, an application may choose to support additional schemes for one or more Open Code Lists. Core lists of values to be supported by all implementations are defined in Annex B.

The lists of values may be derived from standard lists of codes or other registries.

Standard Code Lists are based on code lists published in standards.

New schemes may be added to the Open Code List as described in Annex B.

Complex Types are listed and defined in 4.8.

Closed Code Lists (see 4.9) are a normative part of this document and shall be supported by applications conformant with this document. They are similar to Open Code Lists, except that Closed Code Lists of values are expected to be relatively comprehensive and stable. However, new closed code scheme elements and code values may be added to the future versions of this document.

Date and time shall always be provided in the form YYYY-MM-DDThh:mm:ssZ as specified by ISO 8601-1. Local date and time should not be used. When time is not significant, e.g. when a due date is given, use 23:59:59Z to indicate the time, for example, 2013-05-15T23:59:59Z.

Use of the country code referenced in Table 7 shall be as specified in ISO 3166-1. Use of the currency symbols referenced in Table 7 shall be as specified in ISO 4217. Use of the ISNI code referenced in Table 1 shall be as specified in ISO 27729.

Use of the identifiers in Table B.1 shall be according to the referred standards: ISIL according to ISO 15511, ISBN according to ISO 2108, ISSN according to ISO 3297, ISMN according to ISO 10957, ILII according to ISO 20247, and DOI according to ISO 26324.

4.2 Request

The Request contains information about the item and service requested.

The Request is sent from the requesting agency to the supplying agency.

The Request contains some or all of the following groups of data elements as shown in Table 1.

— Header: administrative information

— BibliographicInfo: details of the item being requested

— PublicationInfo: information about the publication

— ServiceInfo: details of the service being requested

— SupplierInfo: list of potential suppliers

— RequestedDeliveryInfo: where and how to send the item

— RequestingAgencyInfo: details about the requesting agency

— PatronInfo: details about the patron

— BillingInfo: how to charge the requesting agency

Table 1 — Request

Element	Definition	Codes
Header	*Administrative information*	M
SupplyingAgencyId	Identification of supplying library (Complex Type AgencyId) SupplyingAgencyId shall be provided except for RequestSub-Type = PatronRequest and TransferRequest	CT
RequestingAgencyId	Identification of requesting library (Complex Type AgencyId)	M CT
ConsortialId	Identification of the consortium with which the request is associated For additional information on consortia, see Annex G (Complex Type AgencyId)	CT
MultipleItemRequestId	Identification of MultipleItemRequest	
Timestamp	Date and time of the transaction Ref. ISO 8601-1 Format: UTC: YYYY-MM-DDThh:mm:ssZ	M
RequestingAgencyRequestId	Requesting library's request identification or number	M
RequestingAgencyAuthentication	Authentication in supplying library system of the requesting library (Complex Type)	CT
BibliographicInfo	*Bibliographic information about the requested item*	M

Table 1 *(continued)*

Element	Definition	Codes
SupplierUniqueRecordId	SupplierUniqueRecordId should be used for the supplying library's internal unique identifier for the requested item, acquired from a preceding automatic holdings request. If this identifier is used, there should be no other identifiers in BibliographicInfo More information can be found in <u>Annex E</u>	
Title	Title of the requested item	
Author	Author of the requested item	
AuthorId	ISNI name identifier of the author Ref.: ISO 27729	
Subtitle	Subtitle of the requested item	
SeriesTitle	Title of the series	
Edition	Number or name of the edition	
TitleOfComponent	Title of the component part (e.g. article)	
AuthorOfComponent	Author of the component part	
Volume	Volume number	R
Issue	Issue number	
PagesRequested	Page from and page to	
EstimatedNoPages	Expected number of pages	
BibliographicItemId	Identification of a physical or electronic object (Complex Type)	R CT
Sponsor	Person or organization sponsoring the publication	
InformationSource	Description of where bibliographic information was found	
BibliographicRecordId	Identification of a bibliographic record (Complex Type)	CT R
PublicationInfo	*Information about the publication*	
Publisher	Name of the publisher	
PublisherId	ISNI name identifier of the publisher Ref.: ISO 27729	
PublicationType	Type of publication	OC
PublicationDate	Date of publication For serials and serial articles, this should be the publication date of the component part such as issue, not the date when the serial was first issued	
PlaceOfPublication	Place of publication, e.g. a city	
ServiceInfo	*Information about the requested service*	M
RequestType	Type of request (New, Retry or Reminder) If no request type is specified, the default is "New" For additional information on the use of Retry, see <u>Annex H</u>	CC
RequestSubType	Sub type to qualify the request	R CC
RequestingAgencyPrevious-RequestId	Requesting agency's previous request number when a retry is sent. The Retry request may include updated data based on ReasonRetry	

Table 1 *(continued)*

Element	Definition	Codes
ServiceType	Type of service. Values: Copy, Loan or CopyOrLoan. If Copy is requested, then the requesting library is interested only in a copy. If Loan is requested, then the requesting library is interested only in a loan. If CopyOrLoan is requested, then the requesting library is willing to accept either a copy or a loan	M CC
ServiceLevel	Level of service If the requesting library is willing and is able to accept any service level, then the requesting library shall not include this element in the message	OC
ItemFormat	Format of medium requested If the requesting library is willing and is able to accept any format, then the requesting library shall not include this element in the message	OC
NeedBeforeDate	The request is not relevant after the stated date/time Ref. ISO 8601-1 Format: UTC: YYYY-MM-DDThh:mm:ssZ If the requesting library is willing and is able to accept the requested item at any time, then the requesting library shall not include this element in the message	
CopyrightCompliance	The requesting library's copyright compliance	OC
AnyEdition	Values Y or N. Yes for yes to any edition. No if only the specified edition is acceptable	
PreferredEdition	The edition the borrower would prefer to receive. Values are ThisEdition, AnyEdition, or the MostRecentEdition	CC
LoanCondition	Conditions for use of the item Used when submitting a Request Retry, after the supplying library indicates there is a loan condition that shall be met	OC R
StartDate	Start date for a Booking (RequestSubType) Ref: ISO 8601-1 Format: UTC: YYYY-MM-DDThh:mm:ssZ	
EndDate	End date for a Booking (RequestSubType) Ref: ISO 8601-1 Format: UTC: YYYY-MM-DDThh:mm:ssZ	
Note	Human readable note	
SupplierInfo	*When a request is sent to a brokering institution, the requesting library may provide a list of potential suppliers (in preference order) intended primarily for requests sent to brokers but may be used in other circumstances as well*	R
SortOrder	Value from 1 to 99 defining the order of preference of use	
SupplierCode	Code defining a potential supplier (Complex Type AgencyId)	CT
SupplierDescription	Textual information about supplier	
BibliographicRecordId	Identification of a bibliographic record used (Complex Type)	CT
CallNumber	Indication of the shelf position of the resource	
SummaryHoldings	Textual description of summary level holdings	
AvailabilityNote	Information about availability	

Table 1 *(continued)*

Element	Definition	Codes
RequestedDeliveryInfo	*A prioritized list of suggested delivery methods, each with its own delivery address*	R
SortOrder	Value from 1 to 99 according to the order	
Address	Description of the delivery address (Complex Type ElectronicAddress or PhysicalAddress)	CT
DeliveryMethod	The service via which the requested item should be sent If the requesting library is willing and is able to accept any delivery method, then the requesting library shall not include this element in the message	OC
CourierName	An identified courier to be used if DeliveryMethod value = "Courier" If the requesting library is willing and is able to accept any courier, then the requesting library shall not include this element in the message	OC
RequestingAgencyInfo	*Details of the requesting agency*	
Name	Name of the requesting agency	
ContactName	Name of contact. For example, ILL staff member	
Address	Description of how to contact the requesting agency (Complex Type ElectronicAddress or PhysicalAddress)	CT R
PatronInfo	*Details of the patron for whom the request is being made* *Only used according to 5.2.5.*	
PatronId	Identification of the patron	
Surname	Surname of the patron	
GivenName	First name of the patron	
PatronType	Type of patron	OC
SendToPatron	Only used with value "Y" if requesting library asks the supplying library to send the requested resource directly to the patron	
Address	Description of how to contact the patron. (Complex Type ElectronicAddress or PhysicalAddress)	CT R
BillingInfo	*Information about how the requesting agency expects to be billed for and pay for the item*	
PaymentMethod	The preferred payment method If the requesting library is willing and is able to accept any payment method, then the requesting library shall not include this element in the message	OC
MaximumCosts	The highest amount the requesting agency is prepared to pay for the service (Complex Type Costs) If the requesting library has no maximum costs, then the requesting library shall not include this element in the message.	CT
BillingMethod	Preferred billing method	OC
BillingName	Name of the contact person in finance department, etc.	
Address	Description of the billing address (Complex Type ElectronicAddress or PhysicalAddress)	CT

4.3   Request Confirmation

Table 2 — Request Confirmation

Element	Definition	Codes
Header	*Administrative information*	M
SupplyingAgencyId	Identification of the supplying library (Complex Type AgencyId)	CT
RequestingAgencyId	Identification of the requesting library (Complex Type AgencyId)	CT
Timestamp	Date and time of the confirmation transaction Ref. ISO 8601-1 Format: UTC: YYYY-MM-DDThh:mm:ssZ	M
RequestingAgencyRequestId	Requesting library's request identification	
TimestampReceived	Date and time of the confirmed request transaction Ref. ISO 8601-1 Format: UTC: YYYY-MM-DDThh:mm:ssZ	M
MessageStatus	Value "OK" or "ERROR"	M
ErrorData	If there are any errors, an error message is included; refer to 4.10.	R

4.4   Supplying Agency Message

Supplying Agency Message is a message sent from the supplying library to the requesting library. The message may be in response to a request or a message from the requesting library or a message initiated by the supplying library. In all these cases, the same message is used.

The message contains the following groups of data elements as shown in Table 3.

— Header: administrative information

— MessageInfo: responses and notes

— StatusInfo: current status; i.e. status after any changes because of the message being sent

— RetryInfo: information when Status = RetryPossible

— DeliveryInfo: information about the shipped item

— ShippingInfo: information about the shipment

— ReturnInfo: if the supplier asks the requesting library to return the item to another address

Table 3 — Supplying Agency Message

Element	Definition	Codes
Header	*Administrative information*	M
SupplyingAgencyId	Identification of the supplying library (Complex Type AgencyId)	M CT
RequestingAgencyId	Identification of the requesting library (Complex Type AgencyId)	M CT
Timestamp	Date and time of the transaction Ref. ISO 8601-1 Format: UTC: YYYY-MM-DDThh:mm:ssZ	M
RequestingAgencyRequestId	Requesting library's request identification or number	M
SupplyingAgencyRequestId	Supplying library's request identification or number	

Table 3 *(continued)*

Element	Definition	Codes
MessageInfo	*Message from the supplying library to the requesting agency*	M
ReasonForMessage	A code defining the reason for the message	M CC
AnswerYesNo	Values Y or N – for Yes or No to respond Mandatory when ReasonForMessage is RenewResponse or CancelResponse	
Note	Human readable note	
ReasonUnfilled	The reason why the request cannot be filled	OC
ReasonRetry	The reason why the request cannot be filled unless it is modified or repeated at a future date For additional information on the use of Retry, see Annex H	OC
StatusInfo	*Status information*	M
Status	Actual status of the request in the supplying library	M CC
ExpectedDeliveryDate	Date and time the supplying library expects to deliver the item. Ref. ISO 8601-1 Format: UTC: YYYY-MM-DDThh:mm:ssZ	
DueDate	Date and time the item is expected to be back at the supplying library. Ref. ISO 8601-1 Format: UTC: YYYY-MM-DDThh:mm:ssZ	
LastChange	Date and time of the last status change Ref. ISO 8601-1 Format: UTC: YYYY-MM-DDThh:mm:ssZ	M
RetryInfo	*To be used when supplier status = RetryPossible*	
LoanCondition	Applied when ReasonRetry, MustMeetLoanCondition is used because the supplying library requires that conditions of use be met once the requested item is delivered	OC R
Edition	Applied when ReasonRetry, ReqEditionNotPoss is used, because the edition specified by the requesting library cannot be provided. The supplying library indicates which edition(s) can be provided	R
ItemFormat	Applied when ReasonRetry, ReqFormatNotPossible is used because the requested format cannot be supplied. The supplying library indicates which format(s) can be supplied	OC R
Volume	Applied when ReasonRetry, MultiVolAvail is used, because these are the volumes that can be supplied. The supplying library indicates the volume or volumes available	R
ServiceType	Applied when ReasonRetry, ReqServTypeNotPossible, is used because the requested service type cannot be supplied. The supplying library indicates which service type can be supplied	CC
ServiceLevel	Applied when Reason Retry, ReqServLevelNotSupp is used, because the requested service level is not supported. The supplying library indicates which service level(s) are supported	OC R
DeliveryMethod	Applied when ReasonRetry, ReqDelMethodNotSupp is used, because the requested delivery method(s) are not supported. The supplying library indicates which delivery methods are supported	OC R
CourierName	Applied when Reason Retry, CourierNotSupp is used because the courier specified by the requesting library is not supported. The supplying library indicates which courier(s) are supported	OC R

Table 3 *(continued)*

Element	Definition	Codes
OfferedCosts	Applied when ReasonRetry, MaximumCosts, is used because actual costs exceed those specified by the requesting library. The supplying library indicates what the actual cost shall be (consists of Complex Type Costs)	CT R
PaymentMethod	Applied when ReasonRetry, ReqPayMethodNotSupp is used, because the requested payment method is not supported. The supplying library indicates which payment method(s) are supported	OC R
RetryBefore	Date and time before which to send the retry request Ref. ISO 8601-1 Format: UTC: YYYY-MM-DDThh:mm:ssZ	
RetryAfter	The date and time after which the retry request may be sent Ref. ISO 8601-1 Format: UTC: YYYY-MM-DDThh:mm:ssZ	
DeliveryInfo	*Information about the delivery*	
DateSent	Date and time when the item was sent Ref. ISO 8601-1 Format: UTC: YYYY-MM-DDThh:mm:ssZ	M
ItemId	Value of Barcode(s) or RFID-tag Id of the item(s) being delivered	R
URL	URL from which to download or access the requested item	
DeliveryMethod	The service via which the requested item was sent	OC
Address	The actual address to which the requested item was sent (Complex Type ElectronicAddress or PhysicalAddress)	CT
SentToPatron	Value "Y" if the supplying library has sent the item directly to the patron and value "N" if the supplying library has not sent the item directly to the patron despite the fact that the requesting library asked for this service. (see Request/PatronInfo/SendToPatron)	
LoanCondition	Conditions for use of the item	OC R
ItemFormat	Format of the delivered item	OC
ServiceType	Service type of the delivered item	CC
DeliveryCosts	Amount the supplying library is charging the requesting library for the item and related service (Complex Type Costs)	CT R
PaymentMethod	The payment method preferred by the supplying library	OC
ShippingInfo	*Information about the shipment*	
CourierName	Name of courier to be used if DeliveryMethod = "Courier"	OC
TrackingId	The tracking number(s) assigned by the courier to the package(s) containing the item(s) to be shipped	R
Insurance	Value = Y if the package is ensured. Value = N if the package is not ensured	
InsuranceThirdParty	Value = Y if a third party is providing insurance. Value = N if insurance is not provided by a third party	
ThirdPartyName	The company providing insurance for the package containing the item to be shipped	
InsuranceCosts	Costs associated with insurance, both the cost to ensure and the amount of coverage (Complex Type Costs)	CT R

Table 3 *(continued)*

Element	Definition	Codes
ReturnInfo	*If the supplier asks the requester to return the item to s specific address*	
ReturnAgencyId	Identification of the library to which the item should be returned (on request of the supplying library) (Complex Type AgencyId)	CT
Name	Name of the library to which the item should be returned	
PhysicalAddress	Address to which the item is to be returned (Consists of Complex Type PhysicalAddress)	CT

4.5 Supplying Agency Message Confirmation

Table 4 — Supplying Agency Message Confirmation

Element	Definition	Codes
Header	*Administrative information*	M
SupplyingAgencyId	Identification of the supplying library (Complex Type AgencyId)	CT
RequestingAgencyId	Identification of the requesting library (Complex Type AgencyId)	CT
Timestamp	Date and time of the confirmation transaction Ref. ISO 8601-1 Format: UTC: YYYY-MM-DDThh:mm:ssZ	M
RequestingAgencyRequestId	Requesting library's request identification	
TimestampReceived	Date and time of the confirmed Supplying Agency Message transaction Ref. ISO 8601-1 Format: UTC: YYYY-MM-DDThh:mm:ssZ	M
MessageStatus	Value "OK" or "ERROR"	M
ReasonForMessage	ReasonForMessage in confirmed Supplying Agency Message	CC
ErrorData	If there are any errors, an error message is included; refer to 4.10.	R

4.6 Requesting Agency Message

Requesting Agency Message is a message from the requesting library to the supplying library.

The message contains the following groups of data elements as shown in Table 5.

— Header: administrative information

— ActiveSection: elements describing what to do

Table 5 — Requesting Agency Message

Element	Definition	Codes
Header	*Administrative information*	M
SupplyingAgencyId	Identification of the supplying library (Complex Type AgencyId)	M CT
RequestingAgencyId	Identification of the requesting library (Complex Type AgencyId)	M CT

Table 5 *(continued)*

Element	Definition	Codes
ConsortialId	Identification of the consortium with which the request is associated For additional information on consortia, see Annex G (Complex Type AgencyId)	CT
Timestamp	Date and time of the transaction Ref. ISO 8601-1 Format: UTC: YYYY-MM-DDThh:mm:ssZ	M
RequestingAgencyRequestId	Requesting library's request identification or number	M
SupplyingAgencyRequestId	Supplying library's request identification or number	
RequestingAgencyAuthentication	Authentication in supplying library system of the requesting library (Complex Type)	CT
ActiveSection	*Elements describing actions*	M
Action	An action for the request	M CC
Note	Human readable note	

4.7 Requesting Agency Message Confirmation

Table 6 — Requesting Agency Message Confirmation

Element	Definition	Codes
Header	*Administrative information*	M
SupplyingAgencyId	Identification of supplying library (Complex Type AgencyId)	CT
RequestingAgencyId	Identification of requesting library (Complex Type AgencyId)	CT
Timestamp	Date and time of the confirmation transaction Ref. ISO 8601-1 Format: UTC: YYYY-MM-DDThh:mm:ssZ	M
RequestingAgencyRequestId	Requesting library's request identification	
TimestampReceived	Date and time of the confirmed Requesting Agency Message transaction Ref. ISO 8601-1 Format: UTC: YYYY-MM-DDThh:mm:ssZ	M
MessageStatus	Value "OK" or "ERROR"	M
Action	Action in confirmed Receiving Agency Message	CC
ErrorData	If there are any errors, an error message is included; refer to 4.10.	R

4.8 Complex Types

A Complex Type is a set of information linked together describing, for example, identification with type and value, as shown in Table 7.

Table 7 — Complex Types

Element	Definition	Codes
AgencyId	*Identification of the supplying library or the requesting library*	
AgencyIdType	Type of identifier for the library	OC
AgencyIdValue	Value of the identifier for the library	

Table 7 *(continued)*

Element	Definition	Codes
BibliographicItemId	*One or more unique standard identifiers (from different identifier systems) for the requested resource*	
BibliographicItemIdentifierCode	Type of bibliographic item identifier	OC
BibliographicItemIdentifier	A unique identifier for the item (e.g. the ISBN)	
BibliographicRecordId	*One or more unique identifiers (from different identifier systems) for the record related to the requested resource*	
BibliographicRecordIdentifierCode	Type of bibliographic record identifier	OC
BibliographicRecordIdentifier	A unique identifier for the record (e.g. the OCLC record number or LC control number)	
Costs	*The cost for the request*	
CurrencyCode	Currency symbol as specified in ISO 4217	SC
MonetaryValue	Amount of money	
CostType	Type of cost	OC
ElectronicAddress	*Electronic address*	
ElectronicAddressType	Type of electronic address	OC
ElectronicAddressData	Value of the electronic address	
RequestingAgencyAuthentication	*Authentication in supplying library system of the requesting library*	
AccountId	The customer number in supplying library database of other libraries	
SecurityCode	Password, PIN code or similar function	
PhysicalAddress	*Mailing address*	
Line1	Address – first line	
Line2	Address – second line	
Locality	Locality of the library/agency or the contact person	
PostalCode	Postal code according to the rules of the country	
Region	Word or phrase identifying a large area within a country including province, state and department	
Country	Country code as specified in ISO 3166-1	SC

4.9 Closed Codes

Closed code elements and code values, as shown in Table 8, are vitally important to the Interlibrary Loan protocol. All of them shall be supported by applications conformant to this document.

Table 8 — Closed Codes

Elements	Code values	Description
RequestType	New	The requesting library sends a new request

Table 8 (continued)

Elements	Code values	Description
	Retry	The requesting library sends the request again. The Retry request may include updated or additional information based on status RetryPossible and RetryInfo
	Reminder	The requesting library sends the request again with the intention to remind the supplying library about the request
RequestSubType	BookingRequest	Request for a specific period. Used together with *StartDate* and if relevant, an *EndDate*
	MultipleItemRequest	Bundle up more than one request for same bibliographic item
	PatronRequest	Insertion of a patron initiated request from a patron OPAC or search portal to the patron's local ILL system
	TransferRequest	Intermediary service: handover of management of an ILL request from one ILL system to another
	SupplyingLibrarysChoice	A service defined by the supplying library, which the requesting library can select
ServiceType	Copy	The requesting library asks for a copy of the requested item
	Loan	The requesting library asks for a loan
	CopyOrLoan	The requesting library accepts both a copy and loan of the requested item
PreferredEdition	MostRecentEdition	The requesting library asks for the newest published edition
	ThisEdition	The requesting library asks only for the edition as specified in the *Edition* element
	AnyEdition	The requesting library will accept any edition
ReasonForMessage	RequestResponse	Supplying library answers a request
		Only the first message that the supplier sends in response to an incoming request can be flagged as being a RequestResponse. All subsequent messages shall use an alternate ReasonForMessage, e.g. StatusChange or Notification
	StatusRequestResponse	Answer to the action *StatusRequest* from the requesting agency
	RenewResponse	Answer to the action *Renew* from the requesting agency
	CancelResponse	Answer to the action *Cancel* from the requesting library
	StatusChange	The supplying library indicates a change of status without receiving a request to do so from the requesting library. The new status shall be selected from the status element list of values
	Notification	The supplying library is sending a message to the requesting library
Action	StatusRequest	The requesting library asks the supplying library to provide the current status for the request
	Received	The requesting library notifies the supplying library the requested item has been received

Table 8 *(continued)*

Elements	Code values	Description
	Cancel	The requesting library asks the supplying library if the request may be cancelled The supplying library returns a SupplyingAgencyMessage with ReasonForMessage = CancelResponse Yes or No.
	Renew	The requesting library asks the supplying library if the item currently on loan may be renewed. The supplying library returns a SupplyingAgencyMessage with ReasonForMessage = RenewResponse Yes or No (and DueDate if applicable)
	HoldReturn	The requesting library notifies the supplying library that an item currently on loan cannot be returned for the time being (due to temporary issues that prevent processing of returns at the requesting library)
	ShippedReturn	The requesting library notifies the supplying library that the borrowed item has been sent back
	ShippedForward	The requesting library notifies the supplying library that the borrowed item has been returned and sent to the library specified in ReturnInfo
	Notification	The requesting library sends a message to the supplying library
	Lost	The requesting library notifies the supplying library the item has been lost
Status	RequestReceived	Supplying library has received the request
	ExpectToSupply	Supplying library expects to fill the request, based on e.g. information in the local OPAC The message may include the ExpectedDeliveryDate
	WillSupply	Supplying library has located the item but has not sent it yet
	Loaned	The item is currently on loan to the requesting library for this request
	Overdue	The item currently on loan to the requesting library for this request is now overdue
	Recalled	The item currently on loan to the requesting library for this request has been recalled
	RetryPossible	The supplying library cannot fill the request based on information provided or may be able to supply at a later date. Additional information is provided in the RetryInfo section. The requesting library may submit a Retry request which may include updated information
	Unfilled	The supplying library cannot fill the request. The explanation may be provided in the ReasonUnfilled data element
	HoldReturn	The supplying library notifies the requesting library that an item currently on loan not be returned (due to issues at the supplying library that prevent the processing of returns). At a later date, once processing of returns is possible, the supplying library will send a Status of ReleaseHoldReturn
	ReleaseHoldReturn	The supplying library asks the requesting library to return loans that were previously being held (due to the inability to process)

Table 8 *(continued)*

Elements	Code values	Description
	CopyCompleted	The supplying library has sent the requested item (this status is used when there is no need to return the item supplied)
	LoanCompleted	The supplying library has received the borrowed item from the requesting agency (this status is used for requests when the item supplied shall be returned by the requesting library, i.e. a loan)
	CompletedWithoutReturn	The supplying library has closed the request without the return of supplied item, e.g. because of loss or damage
	Cancelled	The supplying library has cancelled the request (as indicated by the requesting library)

4.10 Error Data

If the supplying library, the requesting library or the ILL applications used by them are not able to process a request or a message, the receiving ILL application should respond with Error Data, as shown in Table 9, incorporated in the Confirmation Message.

Table 9 — Error Data

Element	Definition	Codes
ErrorData	*One of following errors*	M
		R
UnsupportedActionType	The supplying library cannot handle the received message because the *Action* in Requesting Agency Message is not supported Value: Action type which is not supported by the application	
UnsupportedReasonforMessageType	The requesting library cannot handle the received message because the *ReasonforMessage* in the Supplying Agency Message is not supported Value: ReasonforMessage type which is not supported by the application	
UnrecognizedDataElement	The supplying library or requesting library has received a data element it does not recognize Values: data element which is not recognized by the application	
UnrecognizedDataValue	The receiving system may respond with an error message if the content of a data element is not understandable or if the code or combination of codes is not recognized Value: The combination of the name of the data element and the element values or combination of elements values which is not recognized by the application	
BadlyFormedMessage	The structure of the incoming message did not conform to the protocol schema definition and could not be interpreted by the receiving system No value	

5 Format and transport

5.1 Format

The format of all messages is described in an XML schema. The schema is described in Annex C.

5.2 Transport

5.2.1 General

Implementations that conform to this document shall behave in the following manner regarding the selection and use of transport protocols.

The requesting agency acts as initiator sending the Request or Requesting Agency Message. In these cases, the Supplying Agency acts as responder sending the appropriate Confirmation Message.

The supplying agency acts as initiator sending the Supplying Agency Message. In these cases, the requesting agency acts as responder sending a Confirmation message.

NOTE   The transport of messages is inspired by NCIP (see Bibliography [7]) which uses the transport method described in RFC 7231.

5.2.2 Applications acting as initiators

Applications acting as initiators shall support at least one of the following transport protocols:

— HTTP;

— HTTPS.

The version of HTTP/HTTPS is not mandated in this document, but applications acting as iniators shall support HTTP/1.1 (RFC 7230) and/or HTTP/2. (RFC7540)

5.2.3   Applications acting as responders

Applications acting as responders shall support all of the following transport protocols:

— HTTP;

— HTTPS.

The selection of the transport protocol by the initiator of a message dictates the transport protocol used by the responder. The responder shall respond using the same connection and therefore the same transport protocol that was used by the initiator.

The version of HTTP/HTTPS is not mandated in this document, but applications acting as responders shall support HTTP/1.1 and HTTP/2." Applications can negotiate whatever version they want to use when communicating.

All ISO 18626 messages sent via HTTP or HTTPS shall use the POST method as specified in the version 1.1. of the Hypertext Transfer (HTTP) protocol (RFC 7231), thus (for example):

```
POST http://illtransactions.org HTTP/1.1 CRLF
```

5.2.4   HTTP/HTTPS message headers

For both optional ISO 18626 initiation and response messages, the HTTP/HTTPS Content-Type and Content-Length headers shall be included and coded as follows:

```
Content-Type: application/xml; charset = "utf-8" CRLF
Content-Length: nnnn CRLF
```

Where nnnn is the length of the data being sent (not including the length of the message headers).

The entity transferred via the HTTP message shall contain the entire text of the message following a carriage return/line feed (CRLF) with no preceding text, thus:

```
CRLF
< initiation message > | < response message >
```

Where < initiation message > or < response message > contains the XML formatted data (see 5.1) for the message being sent.

5.2.5   Data privacy protection

The Request message provides an option to include information about the patron for whom the item is being requested.

Both the requesting and supplying agencies shall be aware of appropriate regulations (whether they are international, national, regional or local in scope) regarding the privacy and protection of patron data when PatronInfo is transferred or stored.

5.2.6   Character Representation

Conformant messages shall employ the RFC 3629 UTF-8 encoding of ISO/IEC 10646 Unicode (UCS-2) as the encoding for all data. Applications are not required to display, edit or process all Unicode characters - each application may choose any subset of Unicode character it will support in sending and receiving messages.

The adoption of UTF-8 as the encoding scheme is consistent with the Internet Engineering Task Force (IETF) mandate for the use of Unicode in Internet standards. UTF-8 will allow applications that only require the support provided by ASCII encoding to use ASCII and remain compliant with this document.

6 Conformance requirements

A local application in the supplying agency is conformant to this document if it supports the receipt of Requests and messages as described in 4.5 and 4.6. A local application in the requesting agency is conformant if it supports the receipt of messages as described in 4.2, 4.3 and 4.4 using the format and transport method as described in 5.1 and 5.2.

If a Request, Supplying Agency Message or Requesting Agency Message is received with elements or values which cannot be processed by the local application, then the local application at the supplying agency or the requesting agency shall respond with the relevant Error code in the appropriate Confirmation message.

A local application in the supplying agency shall support at least two statuses.

Profiles may also be used to define alternate subsets of the messages, for example, which elements are mandatory, for profile conformance, and for additional open codes. See Annex F on use of profiles.

Annex A
(informative)

Information website

A website, managed by the Centre for Interlibrary Loan Transactions (CILLT), with additional information about this document is available at:

http://illtransactions.org.

Annex B
(informative)

Open Codes

B.1 General

This document provides a data structure that permits the definition of lists of values for Open Code Lists that have not already been defined in this document. The data structure consists of a pair of data elements: scheme and value, for each enumerated type. Scheme is a URI used to uniquely identify the authority of the list of values for the enumerated type, and value is a number, code, word, or phrase from that authoritative list. The only relationship between or among the values of a list is that implied by their membership in the list.

In addition, in order to support operational areas for which no standard authoritative list exists, groups of implementers may establish their own lists of values based on common business rules or operational requirements.

An application may have knowledge of zero or more named schemes and their associated values. If an application receives an ISO 18626 message that identifies a scheme of which the application has no knowledge, a messaging error response is sent to the initiating application.

EXAMPLE 1   To report an unrecognized open code scheme:

UnrecognizedDataValue: 'ReasonForNo - Scheme = "ThirdPartyReasonsForNo-V3.1"'

EXAMPLE 2   To report an unrecognized value within a recognized scheme:

UnrecognizedDataValue: 'ReasonForNo - Value = "RequestTimedOut"'

Implementers are free to substitute default Open Code schemes with locally defined schemes if they need to use values not defined in the default set.

Implementers are not free to add locally defined values to the default lists.

Implementers can either define a new scheme that contains all the values from the default scheme plus their own locally required values, or they can define a scheme that simply contains the values they feel are "missing" from the default scheme.

Implementers are encouraged to register with the CILLT any locally defined Open Code schemes for publication on the ILLtransactions.org website.

It is possible that widely used locally defined values can be incorporated into future revisions of the default Open Code schemes.

B.2 Open code data elements and their URIs

Note that the URIs in this paragraph cannot be used as URLs because they do not link to documents – they are identifiers.

AgencyIdType

URI: http://illtransactions.org/ISO18626/OpenCodeList/AgencyIdTypeList-V2.0

BibliographicItemIdentifierCode

URI: http://illtransactions.org/ISO18626/OpenCodeList/BibliographicItemIdentifierCodeList-V2.0

BibliographicRecordIdentifierCode

URI: http://illtransactions.org/ISO18626/OpenCodeList/BibliographicRecordIdentifierCodeList-V1.0

BillingMethod

URI: http://illtransactions.org/ISO18626/OpenCodeList/BillingMethodList-V1.0

CopyrightCompliance

URI: http://illtransactions.org/ISO18626/OpenCodeList/CopyrightComplianceList-V1.0

CostType

URI: http://illtransactions.org/ISO18626/OpenCodeList/CostTypeList-V1.0

CourierName

URI: http://illtransactions.org/ISO18626/OpenCodeList/CourierNameList-V1.0

DeliveryMethod

URI: http://illtransactions.org/ISO18626/OpenCodeList/DeliveryMethodList-V1.0

ElectronicAddressType

URI: http://illtransactions.org/ISO18626/OpenCodeList/ElectronicAddressType-V1.0

ItemFormat

URI: http://illtransactions.org/ISO18626/OpenCodeList/ItemFormatList-V1.0

LoanCondition

URI: http://illtransactions.org/ISO18626/OpenCodeList/LoanConditionList-V1.0

PatronType

URI: http://illtransactions.org/ISO18626/OpenCodeList/PatronTypeList-V1.0

PaymentMethod

URI: http://illtransactions.org/ISO18626/OpenCodeList/PaymentMethodList-V1.0

PublicationType

URI: http://illtransactions.org/ISO18626/OpenCodeList/PublicationTypeList-V1.0

ReasonRetry

URI: http://illtransactions.org/ISO18626/OpenCodeList/ReasonRetryList-V2.0

ReasonUnfilled

URI: http://illtransactions.org/ISO18626/OpenCodeList/ReasonUnfilledList-V1.0

ServiceLevel

URI: http://illtransactions.org/ISO18626/OpenCodeList/ServiceLevelList-V1.0

B.3   Data element values

Table B.1 — Data element values

Elements	Values	Source/definition
AgencyIdType	DNUCNI	Danish National Union Catalogue Non-ISIL Identifier
	ICOLC	https://icolc.net/consortia
	ISIL	ISO 15511
BibliographicItemIdentifierCode	DOI	ISO 26324
	Handle	RFC 3650
	ISBN	ISO 2108
	ILII	ISO 20247
	ISSN	ISO 3297
	ISMN	ISO 10957
	NBN	RFC 8458
	URN	RFC 8141
BibliographicRecordIdentifierCode	AMICUS	Canadian National Catalogue code
	BL	British Library
	FAUST	FAUST number (Denmark)
	JNB	Japanese National Bibliography
	LA	Libraries Australia
	LCCN	Library of Congress Cataloging Number (US)
	Medline	Medline
	NCID	NACSIS-CAT bibliographic record identifier (Japan)
	OCLC	OCLC
	PID	Danish National Union Catalogue Record Identifier
	PMID	PubMed Id
	TP	Te Puna (New Zealand)
BillingMethod	Account	Account
	FreeOfCharge	There are no payments involved in the ILL transaction
	Invoice	Invoice
	Other	Some other payment method, not included here, is used
	ReciprocityAgreement	Requesting and supplying agencies have an agreement on how payment shall be taken care of
CopyrightCompliance	AU-CopyRCatS183ComW	Copyright Cat Section 183(C) – Commonwealth (Australia)
	AU-CopyRCatS183State	Copyright Act Section 183(S) – State (Australia)
	AU-CopyrightActS49	Copyright Act Section 49 (Australia)
	AU-CopyrightActS50–1	Copyright Act Section 50 (1) (Australia)
	AU-CopyrightActS50–7A	Copyright Act Section 50 7(A) Australia)
	AU-CopyrightCleared	Copyright Cleared (Australia)

Table B.1 *(continued)*

Elements	Values	Source/definition
	AU-GenBus	General Business (Australia)
	EU-DirectiveOrphanWorks	Directive 2012/28/EU, European Union Orphan works directive
	EU-DirectiveRightsDigitalSingle-Market	Directive 2019/790 on copyright and related rights in the Digital Single Market
	NZ-CopyrightActS54	Copyright Act S54 (New Zealand)
	NZ-CopyrightActS55	Copyright Act S55 (New Zealand)
	Other	Other types of copyright compliance. Use Note in ServiceInfo for details.
	UK-CopyRFeePaid	Copyright Fee Paid (UK)
	UK-FairDealing	Fair Dealing (UK)
	US-CCG	CCG (US)
	US-CCL	CCL (US code)
CostType	Insurance	The cost to insurance the package in which the requested item is shipped
	InsuranceCoverage	The insurance amount covering the package in which the requested item is shipped
	Packaging	The cost of 'special' or 'extra' packaging when shipping the requested item
	Service	The cost of the service when delivering the requested item. This cost is calculated using the library's local charging policies
	Shipping	The cost to ship the requested item
	Tax	The amount of tax associated with the cost.
CourierName	DB Schenker	DB Schenker
	DHL	Dalsey Hillblom Lynn
	Fedex	Federal Express
	PostNord AB	PostNord AB
	UPS	Universal Parcel Service
DeliveryMethod	ArticleExchange	Article Exchange
	Courier	Courier – use CourierName to identify a specific courier
	Email	Email
	FTP	FTP – File Transfer Protocol
	Mail	Mail
	Odyssey	Odyssey
	URL	Website to download from
ElectronicAddressType	Chat	Chat
	Email	Email
	FTP	FTP – File Transfer Protocol
	Skype	Skype
ItemFormat	Blu-ray	Blu-ray
	Braille	Braille

Table B.1 *(continued)*

Elements	Values	Source/definition
	CassetteTape	Compact cassette tape
	CD	Compact Disk
	CD-ROM	CD-ROM
	Daisy-ROM	Daisy-ROM
	DVD	DVD disk
	EPUB	EPUB 2 or EPUB 3 e-book file format
	EPUB2	EPUB2 file format
	EPUB3	EPUB3 file format
	JPEG	JPEG image file
	LargePrint	Large print
	LP	Long play vinyl record
	Microform	Microform
	MP3	MPEG-1 or MPEG-2 Audio Layer III file
	Multimedia	Combined media
	PaperCopy	Photocopy or print on pieces of paper
	PDF	PDF or PDF/A file
	Printed	Printed book, journal, etc.
	Tape	Tape
	TIFF	TIFF file
	UltraHD	Ultra high definition
	VHS	VHS
LoanCondition	LibraryUseOnly	Use in library only
	WatchLibraryUseOnly	Supervised use in library only
	NoReproduction	No reproduction
	SignatureRequired	Signature required
	SpecCollSupervReq	Special collections supervision required
PatronType	Adult	Adult
	Child	Child
	DoctoralStudent	Doctoral student
	Faculty	Faculty
	GraduateStudent	Graduate student
	PostdoctoralResearcher	Postdoctoral researcher
	PostgraduateStudent	Postgraduate student
	Researcher	Researcher
	Staff	Staff
	Student	Student
	UnderGraduateStudent	Under graduate student
PaymentMethod	BankTransfer	Bank transfer
	CreditCard	Credit card
	DebitCard	Debit card
	EFTS	Electronic Fund Transfer System
	IBS	Interloan Billing System (New Zealand)

Table B.1 *(continued)*

Elements	Values	Source/definition
	IIBS	International Interloan Billing System (New Zealand)
	IFLAVoucher	IFLA Voucher
	IFM	OCLC fee management system
	LAPS	Libraries Australia Payment Service
	Paypal	Paypal
PublicationType	ArchiveMaterial	Archive material
	Article	Article
	AudioBook	Audio book
	Book	Book
	Chapter	Chapter
	ConferenceProc	Conference proceedings
	Game	Game
	GovernmentPubl	Government publication
	Image	Image
	Journal	Journal
	Manuscript	Manuscript
	Map	Map
	Movie	Movie
	MusicRecording	Music recording
	MusicScore	Music score
	Newspaper	Newspaper
	Patent	Patent
	Report	Report
	SoundRecording	Sound recording
	Thesis	Thesis
ReasonRetry	AtBindery	At bindery
	CostExceedsMaxCost	The highest amount the requesting library is prepared to pay is lower than the cost to supply
	CourierNotSupp	Courier not supported
	MultiVolAvail	More than one volume fulfil the request
	MustMeetLoanCondition	Loan condition shall be met
	NotCurrentAvailableForILL	Not currently available for ILL
	NotFoundAsCited	Not found as cited
	OnLoan	On loan
	OnOrder	On order
	ReqDelDateNotPossible	Requested delivery date not possible
	ReqDelMethodNotSupp	Requested delivery method not supported
	ReqEditionNotPossible	Requested edition cannot be provided
	ReqFormatNotPossible	Requested format not possible
	ReqPayMethodNotSupported	Requested payment method not supported
	ReqServLevelNotSupp	Requested service level not supported

Table B.1 *(continued)*

Elements	Values	Source/definition
	ReqServTypeNotPossible	Requested service type not possible
ReasonUnfilled	NonCirculating	Non-circulating (e.g. handbook)
	NotAvailableForILL	Not available for ILL
	NotHeld	Not held
	NotOnShelf	Not on shelf
	PolicyProblem	Policy problem
	PoorCondition	Poor condition
ServiceLevel	Express	Express (Australia)
	Normal	Normal (Prioritaire A)
	Rush	Rush (Australia)
	SecondaryMail	Secondary mail (Prioritaire B)
	Standard	Standard (Australia)
	Urgent	Urgent

Annex C
(informative)

XML schemas

C.1 The XML schemas for ISO 18626

The XML schemas for the current and previous versions of ISO 18626 are hosted at the website:

http://illtransactions.org/schemas.

Annex D
(informative)

Guidelines — Use cases

D.1   General

The informational website (see <u>Annex A</u>) includes a sample set of use cases and other guidelines at:

<u>http://illtransactions.org/guidelinesusecases/</u>

D.2   Sample use case

The following use case is provided as a baseline for the creation of additional use cases.

The requesting library asks for a loan. The supplying library lends the requested item. Once the requesting library is finished with the loan, it is returned to the supplying library.

	Action		Requesting library (XYZ)	Supplying library (ABC)

1	Requesting library (XYZ) sends a request for a loan to supplying library (ABC).
	
	Requesting library XYZ, is known to supplying library ABC and so no address or contact information is provided in the request.
	
	Library XYZ
	
	— Asks for the loan to be sent by Courier, or if that is not possible, by Mail.
	
	— Indicates they are willing to pay no more than $50 US
		1a	Sends **Request Message** with:
			Header
			  SupplyingAgencyId
			    AgencyIdType = "ISIL"
			    AgencyIdValue = "CA-ABC"
			  RequestingAgencyId
			    AgencyIdType = "ISIL"
			    AgencyIdValue = "oclc-XYZ"
			    Timestamp = "2020–04–24T09:06:32Z"
			    RequestingAgencyRequestId = "5333890654"
			BibliographicInfo
			  Title = "The salt path"
			  Author = "Raynor Winn"
			    BibliographicItemId
			      BibliographicItemIdentifierCode = "ISBN"
			      BibliographicItemIdentifier = "9780241349649"
			    BibliographicRecordId
			      BibliographicRecordIdentifierCode = "OCLC"
			      BibliographicRecordIdentifier = "1020281909"	

	Action		Requesting library (XYZ)	Supplying library (ABC)
			PublicationInfo	
			Publisher = "Michael Joseph (Penguin Books)"	
			PublicationType = "Book"	
			PublicationDate = "2018"	
			PlaceOfPublication = "London"	
			ServiceInfo	
			RequestType = "New"	
			ServiceType = "Loan"	
			ItemFormat = "Printed"	
			PreferredEdition = "AnyEdition"	
			RequestedDeliveryInfo	
			SortOrder = "1"	
			Address	
			PhysicalAddress	
			Line1 = "123 Main Street"	
			Locality = "Chicago"	
			PostalCode = "60616"	
			Region = "IL"	
			Country = "USA"	
			DeliveryMethod = "Courier"	
			CourierName = "FedEx"	
			SortOrder = "2"	
			Address	
			PhysicalAddress	
			Line1 = "123 Main Street"	
			Locality = "Chicago"	
			PostalCode = "60616"	
			Region = "IL"	
			Country = "USA"	
			DeliveryMethod = "Mail"	
			RequestingAgencyInfo	
			Name = "Library XYZ"	
			ContactName = "Mary Smith"	
			Address	
			ElectronicAddress	
			ElectronicAddressType = "Email"	
			ElectronicAddressData = "mary.smith@xyz.edu"	
			BillingInfo	
			MaximumCosts	
			CurrencyCode = "USD"	
			MonetaryValue = "50"	

	Action		Requesting library (XYZ)	Supplying library (ABC)
		1b		Sends **Request Confirmation Message** with:
				Header
				SupplyingAgencyId
				AgencyIdType = "ISIL"
				AgencyIdValue = "CA-ABC"
				RequestingAgencyId
				AgencyIdType = "ISIL"
				AgencyIdValue = "oclc-XYZ"
				Timestamp = "2020–04–24T09:06:48Z"
				RequestingAgencyRequestId = "5333890654"
				TimestampReceived = "2020–04–24T09:06:32Z"
				MessageStatus = "OK"

	Action		Requesting library (XYZ)	Supplying library (ABC)

2	The supplying library (ABC) lends the item.
	
	Library ABC indicates
	
	— A due date of June 22, 2020
	
	— The loan has been sent by mail
	
	— The price of the loan is $35 US
		2a		Sends **Supplying Agency Message** with:
				
				Header
				
				  SupplyingAgencyId
				
				    AgencyIdType = "ISIL"
				
				    AgencyIdValue = "CA-ABC"
				
				  RequestingAgencyId
				
				    AgencyIdType = "ISIL"
				
				    AgencyIdValue = "oclc-XYZ"
				
				  Timestamp = "2020–04–27T10:32:21Z"
				
				  RequestingAgencyRequestId = "5333890654
				
				  SupplyingAgencyRequestId = "14329018YT
				
				MessageInfo
				
				  ReasonForMessage = "RequestResponse"
				
				StatusInfo
				
				  Status = " Loaned"
				
				  DueDate = "2020–06-22T23:59:59Z"
				
				  LastChange = "2020–04–24T09:06:32Z"
				
				DeliveryInfo
				
				  DateSent = "2020–04–27T10:32:21Z"
				
				  ItemId = 5784678448198"
				
				  DeliveryMethod = "Mail"
				
				  ItemFormat = "Printed"
				
				  DeliveryCosts
				
				    CurrencyCode = "USD"
				
				    MonetaryValue = "35"
				
				    CostType = "Service"

	Action		Requesting library (XYZ)	Supplying library (ABC)

		2b	Sends **Supplying Agency Confirmation Message** with:
			
			Header
			
			  SupplyingAgencyId
			
			    AgencyIdType = "ISIL"
			
			    AgencyIdValue = "CA-ABC"
			
			  RequestingAgencyId
			
			    AgencyIdType = "ISIL"
			
			    AgencyIdValue = "oclc-XYZ"
			
			  Timestamp = "2020–04–27T10:32:49Z"
			
			  RequestingAgencyRequestId = "5333890654"
			
			  TimestampReceived = "2020–04–27T10:32:21Z"
			
			  MessageStatus = "OK"
			
			  ReasonForMessage = "RequestResponse"	

3	The requesting library (XYZ) receives the item.	3a	Sends **Requesting Agency Message** with:
			
			Header
			
			  SupplyingAgencyId
			
			    AgencyIdType = "ISIL"
			
			    AgencyIdValue = "CA-ABC"
			
			  RequestingAgencyId
			
			    AgencyIdType = "ISIL"
			
			    AgencyIdValue = "oclc-XYZ"
			
			  Timestamp = "2020–05–04T13:29:53Z"
			
			  RequestingAgencyRequestId = "5333890654"
			
			  SupplyingAgencyRequestId = "14329018YT"
			
			ActiveSection
			
			  Action = "Received"	

	Action		Requesting library (XYZ)	Supplying library (ABC)
		3b		Sends **Requesting Agency Confirmation Message** with:
				Header
				SupplyingAgencyId
				AgencyIdType = "ISIL"
				AgencyIdValue = "CA-ABC"
				RequestingAgencyId
				AgencyIdType = "ISIL"
				AgencyIdValue = "oclc-XYZ"
				Timestamp = "2020–05–04T13:30:02Z"
				RequestingAgencyRequestId = "5333890654"
				TimestampReceived = "2020–05–04T13:29:53Z"
				MessageStatus = "OK"
				Action = "Received"
4	The requesting library (XYZ) returns the item.	4a	Sends **Requesting Agency Message** with:	
			Header	
			SupplyingAgencyId	
			AgencyIdType = "ISIL"	
			AgencyIdValue = "CA-ABC"	
			RequestingAgencyId	
			AgencyIdType = "ISIL"	
			AgencyIdValue = "oclc-XYZ"	
			Timestamp = "2020–05–28T11:42:04Z"	
			RequestingAgencyRequestId = "5333890654"	
			SupplyingAgencyRequestId = "14329018YT"	
			ActiveSection	
			Action = ShippedReturn"	