## **DRAFT**

ISO Standard: ILL transactions

**Proposal for Title:** 

Information and documentation – Interlibrary Loan Transactions

For discussion at mailing list "interested parties"

23 October 2012 Leif Andresen

### **Foreword**

Standard ISO foreword including:

"ISO XXXXX was prepared by Technical Committee ISO/TC 46, Information and documentation, Subcommittee SC 4, Technical interoperability."

### Introduction

[A general explanation of the goal with the standard including the sentence below]

This first version of ISO XXXXX is intended to succeed ISO 10160, ISO 10161-1 and ISO 10161-2 in a modern technological environment based on XML format and web service and focussed on simple exchange of transactions.

[to be completed]

## 1. Scope

This international standard specifies the transactions between libraries and library related organizations to handle requests for library items and following exchange of messages.

### 2. Normative references

The following referenced documents are indispensable for the application 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 15511

Information and documentation -- International standard identifier for libraries and related organizations (ISIL)

ISO 4217

Codes for the representation of currencies and funds

ISO 8601

Data elements and interchange formats -- Information interchange -- Representation of dates and times

ISO 3166-1

Codes for the representation of names of countries and their subdivisions -- Part 1: Country codes

ISO 3166-2

Codes for the representation of names of countries and their subdivisions -- Part 2: Country subdivision code

## 3 Terms and definitions

#### 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 requires to meet the informational, research, educational or recreational needs of it users.

#### **Requesting Library**

A library or a library related organization, which sends requests for library items and receives this from the supplier library.

### **Supplying Library**

A library or a library related organization, which receives requests for library items and delivers these items to the requesting library.

#### Library related organization

An institution, a company, a consortia or another unit, which handle requests or receiving of library items on behalf of one or more libraries

#### Library items

Books, articles, cd's, copies and other physical documents together with digital documents such as, but not limited to pdf-files.

[to be completed]

## 4. Transactions

[content: The conceptual model – see draft dated 20-10-2012]

[The conceptual model have to be "migrated" into ISO style – just work – no change.

This migration shall also include adding explanations for all elements]

## 5. Format and Transport

#### **Format**

The format of all messages is described in a XML schema. The generic schema is listed in Annex C.

Values from open lists are not controlled during the transport. The control of these values is handled by local applications.

#### **Transport**

The transactions are exchange between local applications at the Requesting library and Supplying library using a web service.

#### **Error handling**

If Supplying Library or Requesting Library can't treat a request or a message, the receiving system reacts with an error:

*Unsupported Action Type*: The Supplying Library can't handle received message because the *Action* in RequestingLibraryMessage is not supported. Value is the *Action*.

*Unsupported ReasonforMessage Type*: The Requesting Library can't handle received message because the *ReasonforMessage* in SupplyingLibraryMessage is not supported. Value is the *ReasonforMessage*.

*Unrecognised Data Element*: The Supplying Library or Requesting Library has received a n element that it doesn't recognise. Value is the Data Element.

*Unrecognised Data Value*: For elements with values form lists, the receiving system can answer with an error if this system doesn't recognise the value. Value is the Data Element and Element Value.

[to be completed]

### 6. Condition to conform the standard

The Supplying library supports to the receipt of Requests and Messages; and the Requesting library supports the receipt of messages as described in section 4 using the format and transport method as described in section 5.

If a Request or a Message includes actions not handled by the local application at the Supplying library, the Supplying library or Requesting library responds with the relevant error code.

A Supplying library must support a least one status, but has no obligation to support a status not part of the business model for the Supplier Library.

A Supplier Library can conform at different levels:

- receiving Requests (only)
- answering Requests with SupplyingLibraryMessage with ReasonForMessage Request

- receiving and answering RequestingLibraryMessage with one or more of Actions *StatusRequest, Renew* and *Cancel*
- receiving RequestingLibraryMessage with one or more of Actions *ShippedReturn, Received* and *Notification*
- sending by own initiative SupplyingLibraryMessage with ReasonForMessage *StatusChange* and/or *Notification*

# Annex A (Informative): Informational web-site

The Danish Agency for Culture is hosting a web site with additional information about ISO XXXXX Information and documentation – Interlibrary Loan Transactions:

http://biblstandard.dk/ill

Danish Agency for Culture H.C. Andersens Boulevard 2 1553 Copenhagen V Denmark

Email: ill@bs.dk

[mail not active yet!]

# Annex B (Informative): Lists of values

For elements listed below is on <a href="http://biblstandard.dk/ill/listofvalues">http://biblstandard.dk/ill/listofvalues</a> an informative list of values, which are recommended to use.

BibliographicNumberType
BillingMethod
ContactMethod
CopyrightCompliance
LoanCondition
MediumType
PaymentMethod
Protocol
PublicationType
ReasonUnfilled
ServiceLevel
ShippedMethod

For Currency is values defined in ISO 4217 Codes for the representation of currencies and funds.

For Country is values defined in ISO 3166-1 Codes for the representation of names of countries and their subdivisions -- Part 1: Country codes

For Region is values defined in ISO 3166-2 Codes for the representation of names of countries and their subdivisions -- Part 2: Country subdivision code

# Annex C (Informative). XML schema

## C.1 Applications of the generic ILL schema

Applications of the generic ILL schema may be obtained from:

Danish Agency for Culture H.C. Andersens Boulevard 2 1553 Copenhagen V Denmark

Email: ill@bs.dk

Danish Agency for Culture is hosting an application of the schema at the website:

http://biblstandard.dk/ill/xxxxxxxxxxx

The schema may be updated to correct possible errors and/or to conform to future versions of the XML schema standards. The web site will contain a link to the most current version.

## C.2 The generic ILL schema

[A version of the ILL XML schema.

Will not be part of the version attached to the NWIP]

[web-site not active yet!]

# Annex D (Informative): Guidelines – use cases

The informational website (see Annex A) will include a set of guidelines at: http://biblstandard.dk/ill/guidelines

[web-site not active yet!]

Some examples of this kind of guidelines.

#### Level of fee

A Requesting Library send a request to a Supplier Library with MaximumCost = 50 \$. The fee is 60 \$. So the Supplier Library refuses the request with a SupplierLibraryMessage with ReasonUnfilled "CostIs 100" and status Unfilled.

The Requesting Library decide (this can be driven by application or human handling – depends on Requesting Library) to pay the fee.

The Requesting Library send a new request to a Supplier Library with MaximumCost = 60 \$. A librarian at the Supplier Library places the book in container for mailing and active a SupplierLibraryMessage with status WillSupply. The check-out is later in the process.

#### Handling when receiving requests:

The Supplier Library has to decide how to handle answers of requests.

Some examples:

- A) If the database indicates the book is in the shelf, the Supplier Library ILL application sends a SupplierLibraryMessage with status ExpectToSupply and ExpectedDeliverDate to three days after (normal time for handling in this library). When the book is checked-out, the status changes to OnLoan. If the Requesting Library receives messages initiated by the Supplier Library, a SupplierLibraryMessage with status OnLoan is sent with detailed information in DeliveryInfo.
- B) The Supplier Library handles incoming request in a non-automated process. So Supplier Library ILL application sends a SupplierLibraryMessage with status RequestReceived. The librarian gets the book and checks it out, the status changes to OnLoan. If the Requesting Library receives messages initiated by the Supplier Library, a SupplierLibraryMessage with status OnLoan is sent with detailed information in DeliveryInfo.
- C) The database tells that the book is out for loan, the Supplier Library ILL application sends a SupplierLibraryMessage with status ExpectToSupply and ExpectedDeliverDate to two months after (calculation based on e.g. : 3 weeks more actual borrower, 4 weeks for next in queue and 1 week for handling). When the book is checked-out, the status changes to OnLoan. If the Requesting Library receives

messages initiated by the Supplier Library, a SupplierLibraryMessage with status OnLoan is sent with detailed information in DeliveryInfo.

### Damaged book

The Requesting Library sends a SupplierLibraryMessage with action Message and HumanReadableNote "The cover is totally destroyed by accident. Shall we send to bookbinder?".

The Supplier Library decide (human work) what to do. The result can e.g. be: Supplier Library sends a Supplier Library Message with HumanReadableNote "A cheap book. Throw it out and forget it" and with status Completed Without Return.

# Annex E (Informative): Unique Id Supplying Library

UniqueIdSupplyingLibrary is the Supplying library's s unique identifier for the requested title, e.g., as held in their catalogue.

This ID can be used as the only information in **BibliographicInfo**.

The starting point is a unique bibliographic identification submitted by the library system or other resource data base target of the ILL request. The unique bibliographic ID can be part of a presentation format as answer of a bibliographic search or a specific holdings format.

### E.1 Z39.50 Holdings Schema

One method is Z39.50 Holdings Schema as present format to a Z39.50 search.

Z39.50 Holdings Schema. Version 1.4. November 2002 http://www.loc.gov/z3950/agency/defns/holdings1-4.html

The requested item is identified by the following elements in the Z39.50 Holdings Schema:

Bibliographic record: TargetLocationId

Sub-record in multi-volume and Serial issue number: TargetBibPartId

Copy of periodical: TargetPieceId

ISO 23950 Information and documentation -- Information retrieval (Z39.50) -- Application service definition and protocol specification

# E.2 [Other methods]

[to be fulfilled]