

Title: Documentation - Interlibrary Loan Application Service Definition - Amendment 1: ILL Support for Electronic Document Delivery

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ISO 10160:1993/AM 1 Documentation - Interlibrary Loan Application Service Definition - Amendment 1: ILL Support for Electronic Document Delivery

Forward - Replace the final two lines of the Forward with:

It contains the following annexes:

- Annex A (informative): Time Sequence Diagrams;
- Annex B (informative): ILL Service and Electronic Document Delivery.

Clause 2 - Replace the reference to ISO 9549:1989 with:

ISO 9545:1993 Information Technology - Open Systems Interconnection - Application Layer Structure

Clause 4 - Add the following abbreviation:

ASO - Application Service Object

Clause 3.4.1 - Replace with:

3.4.1 bibliographic item; item: A monograph, serial, microform, video recording or other item of information held by a library or some organization. A bibliographic item may assume different forms, e.g. a book may be printed on paper or represented electronically.

Clause 3.4.3 - Insert a new Clause 3.4.3 and renumber the remaining clauses:

3.4.3 electronic delivery: Delivery of an electronic representation of a requested item via a telecommunication-based service.

Clause 7.1.2 - Add to "ILL Request":

The service also permits the requester to request the delivery of the item by electronic means.

Clause 7.1.5 - Add to "Shipped":

This service optionally allows the responder to indicate that a requested item has been shipped. The service optionally allows the responder to indicate that an electronic version of the item has been shipped via the same or a different communications service.

Clause 7.1.6 - Change "ILL Answer" to:

CONDITIONAL: the desired item is available but the request can only be satisfied if the requester agrees to certain lending, delivery or intellectual property conditions stated in the response.

UNFILLED: the desired item is unavailable or cannot be shipped via the delivery service and/or at the time required by the requester.

WILL-SUPPLY: the requested item is available and will be shipped when possible. A delivery service and/or an approximate time when the item will be supplied is optionally specified.

Clause 7.3.1.1 - Replace the 1st sentence with:

This service is used by the requester in all ILL-transactions to request the loan or supply of a non-returnable copy of an item or component part of an item from an institution. A copy may be represented on a physical medium or it may be transmitted in an electronic format.

Clause 7.3.1.2.7 - Replace "Delivery Service" with:

Identification of the delivery service or method to be used in transporting a requested item. If electronic delivery of the item is required or desired this parameter may be a list of the electronic delivery services supported, in order of preference. Any document type and telecommunication service may be included in this list and subsequently used to deliver a document electronically.

For electronic delivery, the parameter contains a machine-processable identification of the required delivery service and document type and/or a human-readable name or description of the required delivery service and document type. The parameter may also contain a name or code for the delivered document to allow it to be correlated with the ILL-transaction.

Clause 7.3.17.2 - Insert a parameter before "note" in the table:

damage details	U	U
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Clause 7.3.17.2.5 - Renumber as 7.3.17.2.6 and insert:

7.3.17.2.5 Damage Details

Information giving machine processable and/or human readable details about damage to the whole or parts of the item whether received in physical or electronic form.

Annex B - Add a new Annex B:

Annex B (informative)

ILL Service and Document Delivery

Delivery of a requested item is not within the scope of the ILL service. It relies for this function on the operation of an appropriate delivery service that may be invoked automatically or through human operator intervention. This applies to items in any format and medium, and the ILL service may be operated in conjunction with a variety of delivery services--both physical and electronic. Version 2 of the protocol specification (ISO 10161) provides features to support the request of documents in electronic form and specification of an appropriate delivery service.

B.1 Electronic Documents

The ILL Service provides for requesting both returnable and non-returnable items. A non-returnable item may be a copy of an electronic document in any format such as the following:

- Structured & unstructured IA5 text (ISO 646)
- SGML structured text (ISO 8879, ISO 12083)
- ODA structured text (ISO 8613)
- Page images in CCITT Group 3 or Group 4 Facsimile encoding
- Non-standard PostScript files encoded as IA5 text
- Multi-media documents containing both text and non-text components (e.g. graphics, image, voice)

A requested electronic document may only be available in a specific format; to ensure that the requester is delivered a document in a format that the requester's system can handle, format information in a human readable form may be exchanged between the requester and the responder through use of the parameters **requester note**, **responder note** and **forward note**.

A request for an electronic document may be fulfilled by supplying the document on a transportable mass-storage medium such as a magnetic diskette or an optical CD-ROM. The requested document may also be transmitted electronically via some telecommunication-based transfer facility. The ILL service provides for exchange of supply-medium information between the service users.

An electronic document may be subject to copyright protection and the supplier of copies of such documents may require payment of fees. The ILL Service permits the exchange of information pertinent to these aspects of document supply.

B.2 Electronic Delivery

The ILL Service allows the identification of a variety of services--both physical and electronic--for delivering a requested item. Delivery services that may be used in conjunction with the ILL service include, but are not limited to:

- Public or private postal and courier services
- Fax service

- OSI data transfer services (e.g. ISO FTAM, CCITT X.400 Interpersonal messaging)
- Internet data transfer services (e.g. ftp, smtp)

Hard-copy items like books and photocopies are normally delivered via physical delivery services, as are electronic documents on tangible media. Use of a physical delivery service generally requires human intervention between receipt of the ILL-request and despatch of the requested item, and implies no machine-processable link between the ILL-transaction and the delivery service.

Electronic delivery means delivering an electronic item through the operation of a telecommunication-based data transfer service; it does not mean that the electronic item is delivered as user data encapsulated in an ILL APDU. However, delivery of an electronic document can be closely synchronized with the delivery of an ILL APDU, as, for example, when both are carried in the same APDU of a bulk data transfer protocol. A bulk data transfer protocol can be invoked from within an application that uses the ILL service with or without human intervention.

When used with human intervention, the operator simply invokes an appropriate electronic delivery service such as the Fax service or a bulk data transfer service such as FTAM or FTP. When the delivery mechanism is required to be invoked automatically without human operator intervention, then a machine-processable link between the ILL-transaction and the delivery service must be provided. By carrying the necessary information in machine-processable form, the ILL Service permits the operation of such machine-processable links.

Each electronic delivery service has its unique method of handling the structure and encoding of the bulk user data (e.g. electronic document) it carries. Specification and registration of FTAM Document Types, X.400 IPM Body-Part Types, etc. is a reflection of this manner of handling user data by the bulk carriers. However, such document type definitions, their registration and the assignment of unique identifiers to them are outside the scope of the ILL standard.

To fulfill ILL requests for electronic documents in a fully automated environment, the coordinated operation of the ILL Service and the electronic document delivery services may be specified in some appropriate ASO (Application Service Object) specification outside the ILL standard.

B.3 Error And Damage Reporting

When an ILL request for an item remains unfulfilled because of a failure condition in the invoked delivery service, error reporting will depend on the way the delivery service is invoked. If the delivery service is invoked through operator intervention, the error condition of the delivery service could be conveyed to the ILL-requester by the operator, possibly by invoking the ILL STATUS-OR-ERROR-REPORT service.

In case the delivery service is electronic and invoked automatically, the error report of the delivery service may be mapped to the error reporting mechanism of the ILL service. This mapping could in principle be defined in an ASO (Application Service Object) specification for the coordinated use of the ILL and the delivery service in question.

The process of electronic delivery may cause the delivered document to be damaged or corrupted. The invocation of the DAMAGED service by the requester informs the responder of the nature of the damage and, if so defined, can trigger retransmission of parts of or the whole of the document until a satisfactory copy is delivered.