UNIT 9  ELECTRONIC DOCUMENT DELIVERY SERVICE

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9.0  OBJECTIVES

After reading this Unit, you will be able to:

• define electronic document delivery system and service;
• explain how electronic document delivery systems are increasing the efficiency of document delivery service;
• identify the important electronic document delivery systems operating in the world;
• discuss the problems associated with electronic document delivery service; and
• highlight the emerging trends in electronic document delivery service.

9.1  INTRODUCTION

We have observed that scholarly journal and its associated services such as current awareness services, indexing and abstracting services have undergone significant changes due to electronic publishing, emergence of the Internet and the World Wide Web. All these secondary services are offering personalised and customised products depending upon the needs of the individual user. However, the emergence of e-journals has made the most significant impact on these services. Traditional
Electronic Document Delivery Service

Publishers have started making available electronic versions of their journals on the Internet. Now, many bibliographic databases are providing links from journal citation to its full-text articles in e-journals. The libraries through licence agreement with publishers provide online access to full-text journals and articles within journals. With this facility the library users can get access to full-text journals on their personal computers. They can browse through the articles and if found useful can have print-outs of the same. Many libraries have joined e-journal consortia to have access to computerised bibliographic databases as well as full-text e-journals for their users. Many journal publishers, database producers, aggregators and subscription agents are offering scholarly full-text e-journal services for individual libraries or for library consortia.

All these developments have made a significant impact on document delivery service (DDS). The scope of DDS has expanded beyond traditional libraries and specialised document delivery centres. Database producers, e-journal publishers, commercial online vendors, commercial e-journal service providers and aggregators have also joined the document delivery service market. Moreover, with the emerging technologies, traditional document delivery systems have also been changed to electronic document delivery systems where a digital copy of the document is sent electronically to users. In this Unit, you will study about electronic document delivery systems and services operating in the world and also about the associated problems of using and accessing digital documents along with the role of international agencies in addressing these problems.

9.2 ELECTRONIC DOCUMENT DELIVERY SYSTEMS AND SERVICES

Systems which employ electronic technology for receipt of request and supply of documents are known as Electronic Document Delivery Systems (EDDS). “British Library Direct (now BLDSS)” and “British Library Direct Plus” are some of the examples of EDDS. Online Dictionary of Library and Information Science defines Electronic Document Delivery Service as “The transfer of information traditionally recorded in a physical medium (print, videotape, sound recording, etc.) to the user electronically via e-mail or World Wide Web. The libraries employ digital technology to deliver the information contained in the documents and files placed on reserve and requested via inter-library loan.”

EDDS provides immediate access to the needed information. In such systems, the request may be received by telephone, e-mail, Fax or online ordering. The document is sent electronically via e-mail, Fax or document delivery software like Ariel. EDDS can provide instant access to material needed. Apart from speed, it is the convenience in accessing information which makes EDDS the preferred method over traditional document delivery methods.

9.2.1 ADONIS (Article Delivery over Networked Information System)

ADONIS, a full-text CD-ROM storage and retrieval system is initiated and developed by a consortium of biomedical publishers. It can be considered as one of the earliest examples of electronic document delivery systems. ADONIS started as a trial project. Ten international publishers, concerned about the widespread photocopying of their material, developed an optical disc system to create journal
archives for the sale of single article on demand. In ADONIS, the journals were scanned as soon as they were published. The machine-readable images were stored on CD-ROM, which were shipped to participating libraries and document delivery centres along with cumulated indexes for searching the articles. ADONIS also supplied two sets of software, one for article retrieval management and other for generating statistics of usage. ADONIS provided on-screen page browsing as well as printing facility. Libraries receiving CD-ROM disks, searched the articles on their personal computers with compatible CD-ROM drive. The required article could be sent to the user by mail or by fax. The printing was automatically monitored on site in the libraries and quarterly reports were generated and sent to ADONIS for per article billing. After two years of trial period, ADONIS was launched commercially in 1991, providing full-text articles of 850 biomedical journals from over 70 publishers to the subscribing libraries. The annual subscription fee was about 16,000 U.S. dollars. ADONIS stopped this CD-ROM product in the year 1997. The availability of full-text e-journals on the Internet, offering wide range of options, like online searching, viewing and pay-per-article basis, led to the closure of this product.

Self Check Exercise

Note: i) Write your answer in the space given below.
ii) Check your answer with the answers given at the end of this Unit.

1) Define electronic document delivery system and state its advantages.

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9.2.2 Inter-library Loan Service of Online Computer Library Centre (OCLC)

The Inter-library loan (ILL) service of OCLC is the world’s largest online computerised ILL service used by thousands of libraries, resource centres and document suppliers around the world. OCLC is an online library network which was set up in 1969 in the USA to facilitate cooperative computerised cataloguing. Over the years, the number of libraries increased and the size of the union catalogue (known as WorldCat) grew manifold. At present more than 72,000 libraries, archives and museums in 170 countries are using OCLC services to locate, acquire, catalogue, lend and preserve library material. WorldCat, a worldwide union catalogue created and maintained by over 25,000 OCLC member libraries has approximately 2 billion holdings in more than 470 languages. In WorldCat every 10 seconds a record is added and its database is searched every one second by the users. As WorldCat grew, the combination of bibliographic records and library holdings made it a useful resource for inter-lending purposes as well.
OCLC ILL system is a fully automatic networked borrowing and lending system. A borrowing library sends an online request to potential lending libraries. Each lending library in the system has a total of 4 working days to respond to the request before it is passed on to the next lending library. The ILL system automatically forwards the request in turn to the next lending library until the request is fulfilled. After agreeing to supply the item, the lender library adds to the ILL record information concerning the restriction of use of the loaned item, the mode of delivery, due date and charges to be paid. In terms of level of service, as the system is library-to-library, this is negotiated between borrower library and lender library. OCLC ILL system is integrated with OCLC FirstSearch reference service (providing access to more than 60 databases) as well as WorldCat. Users can access more than 258 million records via WorldCat. A request is filled through WorldCat resource sharing every 4 seconds and around 95% of the requests are satisfied.

‘OCLC ILLiad’ is a web-based Resource Sharing Management Software, which automates routine inter-library loan functions. It manages borrowing, lending and delivery of journal articles through a single window-based interface. It has a seamless integrated interface to both WorldCat and OCLC ILL system. It is also integrated with OCLC’s FirstSearch and other open URL services. Library users can send requests directly and track the requests electronically through the Web. ILLiad processes requests and contacts the user when request is completed and delivers the documents to the user’s desktop electronically. It generates detailed reports in real time that helps the library to track the workflow. Lending reports help the borrowing library to view up-to-date tracking information sent through the online system. Users can access and track their requests from any web browser. ILLiad can send, receive and track requests from NLM’s DOCLINE service. It is also an ISO compliant and allows peer-to-peer lending through ISO ILL. OCLC ILLiad software was developed by inter-library loan staff of Virginia Polytechnic Institute and State University and has been expanded and enhanced by Atlas Systems Inc. Atlas is supporting and developing this product for OCLC. (http://www.oclc.org). (http://www.oclc.org/illiad/).

9.2.3 DOCLINE System: ILL System of National Library of Medicine, USA

DOCLINE system is an automated inter-library loan (ILL) request routing order and referral system of the National Library of Medicine, USA. The purpose of this system is to provide efficient document delivery service among libraries in National Network of Libraries of Medicine (NN/LM). The system provides efficient document delivery service by linking the holdings of member libraries and routing the ILL request quickly throughout the network. ILL requests can be created, edited, routed and filled in DOCLINE system. DOCLINE participants can also check the status of their requests. DOCLINE is available 24 hours a day, seven days a week for use. There are no charges for participating in DOCLINE system. Inter-library loan charges vary from institution to institution. If a request is received and not acted upon within three working days, DOCLINE automatically sends the request to another potential lender. A request is only forwarded to institutions that are members of Electronic Fund Transfer System (EFTS). EFTS is abilling system used by medical libraries in the U.S. and Canada.
DOCLINE serves more than 3200 U.S., Canadian and Mexican medical libraries. DOCLINE system consists of 3 main modules: i) Institutions — This includes participants’ institutional information including their address, contact number, inter-library loan service, NN/LM membership information and routing tables, ii) SERHOLD@ — This module contains information on the journal holdings, iii) Requests — It contains information related to the functions of borrow, lend and status/cancel, etc.

In order to create an inter-library loan request, the borrowing library has to select from a menu of 4 options viz. i) Unique Key (PubMed unique key identifier, an NLM identifier; an OCLC number or ISSN), ii) PubMed (User orders directly from PubMed), iii) LocatorPlus (User orders non-MEDLINE titles using NLM’s online catalogue), iv) Manual (If a user has searched and cannot locate a title in PubMed or LocatorPlus, s/he may manually enter the bibliographic data to request an item).

All requests are automatically sent to the library which owns the material, except manual requests of the user, which are sent to the user defined list of libraries. Lender libraries keep status of their requests daily at their workstations. The lender library updates the record of the requests so that the borrower is informed about the status of his/her request. The system also gives warning to the lender library if requests are either pending or not acted upon. DOCLINE user can also check the status of their requests on the system. Each DOCLINE member library receives quarterly summary reports on its activity as a lender or as a borrower. These reports are available online.

Electronic Fund Transfer System (EFTS) is a online billing system used by medical libraries in the U.S. and Canada. Participant libraries create an account with the University of Connecticut Health Centre. Billing data for DOCLINE or other transactions is uploaded by the lender libraries and their accounts are credited and borrowers’ accounts are debited accordingly. This online billing system has virtually eliminated the need to create invoice and write cheques for reimbursement for ILL and document delivery between participants. Monthly transaction reports are generated by EFTS.

National Library of Medicine’s general and historical collections are available through ILL to any library. NLM provides copies of journal articles, books, audio-visuals and microforms on loan. NLM’s ILL services are available only to the libraries and not to the individuals. Members of National Network of Libraries of Medicine (NN/LM) send their ILL requests via DOCLINE.

DOCLINE is a preferred method of receiving the requests for ILL or document delivery. Non-DOCLINE requests are accepted on ALA and IFLA preprinted ILL forms. Most requests received at NLM are processed within a day. The loan period for original material, microforms and audio-visuals is one month. NLM delivers photocopied material e.g. journal articles by Ariel, Fax, e-mail, Web and U.S. Mail. Original materials are delivered by Courier service.

(\url{http://www.nlm.nih.gov/docline/})

Loansome Doc Ordering System enables PubMed and NLM Gateway users to order documents found in MEDLINE. The service is available to the users worldwide. Articles can be ordered from a list of citations retrieved from PubMed and NLM Gateway by sending a request to a medical library for full-text.

(\url{http://www.nlm.nih.gov/loansomedoc/loansome_home.html})
9.2.4 Document Delivery Service of National Library of Australia

The National Library of Australia (NLA) is playing a very important role in providing ILL and DDS in Australia. NLA provides inter-library loan and document delivery services from its own comprehensive collection and also gives access to the collections of other libraries in Australia and around the world. Supply 1 service of NLA is a main service for obtaining copies of reports, conference papers and journal articles. This service is based on the resources of libraries and commercial document suppliers of the world in order to locate and procure the requested documents. Apart from the traditional role of being a net supplier of materials from its own collection, the NLM also provides infrastructure and policy support through the Libraries Australia Document Delivery (LADD) service for the ILL and document delivery community. In 1981, the Australian Bibliographic Network (ABN) was established to share cataloguing data and document location information among Australian libraries. At present, the Libraries Australia Service (formerly known as ABN and Kinetica) has over 1,000 member libraries, and records the location of 42 million items held in most of the Australian academic, research, national, state, public and special libraries. In 1989, The National Library implemented Australian Bibliographic Network’s inter-lending module, which significantly systematised/modernised the document supply service. The NLM uses Ariel software to transmit documents electronically.

In 2005, the NLM implemented Relias Inter-library Loan Management System. By 2007 Relias handled more than 80% of the ILL requests. Relias was basically established to accept ISO ILL requests from Libraries Australia Document Delivery (LADD) and OCLC, as well as requests from individuals. The system is able to check the catalogue and distribute the requests to the National Library of Australia. Relias is used to scan and deliver the material electronically.

The National Library of Australia is actively participating in international ILL/document delivery activities. The National Library is one of the members of the OCLC inter-lending service i.e. “SHARES”, which is an agent for National Library of Medicine’s “Loansome Doc Service” in Australia and the Asian-Pacific region.

At present, the Libraries Australia Document Delivery (LADD) service is based on the OCLC Virtual Document eXchange (VDX) software. This software
facilitates ILL/document delivery activities between LADD and other systems used in Australia and in the world. It is used by more than 700 libraries in Australia to exchange ILL requests and about 300 New Zealand libraries are able to exchange such requests with Australian libraries through the “Te Puna Inter loan service”. The LADD service supports access from Australian libraries, using their own ISO ILL protocol compliant inter-library loan management system and it also provides access to Infotrieve, Inc. and CISTI. For members of LADD it is also possible to exchange documents via the DocStore function in the system. Fig 9.1 shows this environment schematically. During 2007-2008, the LADD service had about 730 subscribers and it handled approximately 320,000 requests. (http://www.nla.gov.au/dss)

National Library ILL system and Libraries Australia Document Delivery (LADD)

Copies Direct Service of the National Library was introduced in 2001. It is a web-based service available to overseas users also. Due to the emergence of such a service, all the copy requesting services of the library were brought under one single platform. Copies Direct Service of the National Library of Australia is a fast and economical service to get copies of articles, chapters of books, photographs, pictures, maps, manuscripts, music and sound recordings from its online library catalogue. A copy of the item requested by a user can be delivered in three ways: i) the copy is scanned and posted to NLA website in PDF format and the user is informed via e-mail with a link and password to the website to allow her/him to pick up the copy; ii) the copy can be printed and sent by post to the user; iii) the copy can be picked up by the requester from NLA personally. (http://www.nla.gov.au/copiesdirect)
Self Check Exercise

Note: i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

3) What is Copies Direct Service of National Library of Australia?

9.2.5 Document Delivery Service from E-Journal Service Providers

As you are aware, most of the scholarly journals are now available in print as well in electronic form. Publishers of scholarly journals are now offering online access to full-text e-journals to the subscribers of their print publications. For non-subscribers or individuals, they offer services like pay-per-view. This service enables the libraries and individuals to purchase or have immediate access to full-text of an article or research data without subscribing to the periodical or other source in which it was published. Now, producers of bibliographic databases are collaborating with publishers of primary periodicals and have started providing links from citations to full-text articles from publisher’s websites. New generation of e-journal service providers are emerging like aggregators. Aggregators like EBSCO, PROQUEST, Infotrieve Inc., with license rights from primary journal publishers are providing online access to full-text aggregated databases. They provide links from secondary services to the full-text articles online. In this section you will study about electronic document delivery service from some of these e-journal service providers.

i) E-journal Publishers

Publishers like Springer, Elsevier and Emerald provide online access to their publications like full-text e-journals, e-books and e-reference collections to their subscribers. Most of these publishers offer free access to table-of-contents, abstracts and references of articles of their e-journals. Subscribers can search and download full-text articles on their desktops, while non-subscribers can download the article or chapters from books on pay-per-view basis.

SpringerLink is an online information service from Springer Science+ Business Media Group for scientific, technical and medical journals (over 2000), book series (1,108), e-books (over 1,20,000) and more than 7000 new e books reference works (193) on a single integrated platform. SpringerLink offers free access to search table-of-contents and abstracts of e-journals. Libraries have full-text access to articles via institutional subscription. Authorised users are allowed to send e-journal articles only in print format via post or fax to fulfil ILL requests from academic, research or other non-commercial libraries. They are not allowed to send articles in electronic format for ILL purposes.
Springer through INDEST-AICTE Consortium offers more than 1495 journals across 11 disciplines which includes behavioural science, biomedical and life sciences, business and economics, chemistry and materials science, computer science, earth and environmental science, engineering, humanities, social sciences and law, mathematics, medicine and physics and astronomy. In addition to that it provides access to 14 Indian journals to the subscribed members. There is no limit for concurrent users or number of downloads. Access to back files of the last 13 years of these journals is also provided free of cost. Access of journals includes tables-of-contents, abstracts and full-text of articles.

Emerald publisher offers online access to over 229 e-journals and over 2000 books and book series volumes on a single integrated platform. The subjects include business, management, library and information science, education and materials science. Apart from individual institution’s subscription option, Emerald also offers consortia purchasing options. The option of institution wide license offers unrestricted, concurrent multi user access on campus and remote access. Through consortia purchasing option, each user has access to electronic titles on Emerald full-text databases, which gives smaller libraries access to otherwise unavailable material. Back files of journals (from 1994) are also available. Current Emerald consortia agreement with India is with INDEST-AICTE Consortium.

Pay-per-view options are available on all e-journals, e-book chapters and e-book series. Emerald licenses content to a wide range of information providers including aggregators, A/I services, document delivery services, resellers, web portals, gateways and technology companies. Copyright Clearance Centre’s Right Link Online System now delivers Emerald permission service.

9.2.6 Document Delivery Service from Database Producers

Before March 2011 Chemical Abstracts Service (CAS) had a provision to provide photocopies for non-copyrighted publications, publications registered with Copyright Clearance Centre and American Chemical Society publications. CAS DDS did not provide translations (copies were provided in original language), multiple copies of single document (for multiple copies each copy was to be requested separately) and entire publication such as single authored monograph or entire conference proceedings. One could place orders online or through mail.

Document Detective Service (DDS) of Chemical Abstracts Service (CAS) was discontinued since March 2011 and replaced by FIZ AutoDoc, the default document provider. FIZ AutoDoc provides print copies of journal articles, patents, conference proceedings, technical reports and edited monographic collections.

9.2.7 Document Delivery Service from Aggregators

Aggregators provide online access to digital full-text periodicals published by different publishers on a single platform and customise information for the individual library, based on the need of each library. Some examples of such journal aggregators are EBSCO, ProQuest, Thompson Gale and Infotrieve Inc.

EBSCO through EBSCOhost offers more than 375 full-text and secondary research databases and more than 300,000 e books and audio books. EBSCO
A to Z@ title service provides links and coverage information to more than 1,115,000 unique titles from over 5400 databases and e-journal packages. All major database vendors and publishers are represented. EBSCO provides links to major document delivery systems like Infotrieve, Inc., CISTI and the British Library.

(http:www.ebscohost.com)

**Infotrieve, Inc.**

Infotrieve, Inc. is a leading electronic document delivery service provider to organisations all over the world. Infotrieve makes electronic delivery methods available to individuals, corporate and institutional customers. The Infotrieve online processing and fulfillment technologies provide easy access to copyright compliant delivery of e-journals, magazine articles, conference papers, case studies and book chapters. It has a proprietary reference database of over 60 million citations aggregated from partnerships with libraries and publishers around the world, including the NRC-CISTI Canadian National Science Library collection and STM (Science, Technology and Medicine) Library of Infotrieve. Infotrieve delivers approximately 1 million documents yearly and out of which 70% of documents are delivered electronically. Infotrieve provides secure, easy-to-use gateways, to corporate’s e-resources and pay-per-view STM content. The company provides 24/7 cloud-based access to make content available on user’s desktop, laptop or on an iPad. (http://www.infotrieve.com/document-delivery/)

**Ariel Inter-library Loan Software:** Ariel is an Internet document transmission system. It is owned and supported by Infotrieve, Inc. This software is used by over 9400 institutions around the world for electronic document delivery purposes. Users of Ariel software can scan, store, transmit and print material. Ariel software can scan an article in a paper journal and the image can be transmitted on the Internet to other Ariel workstations anywhere in the world via FTP or e-mail. The scanned image then can be converted in PDF for easy delivery to the customer. Ariel allows the institutions to receive TIFF file and convert it to PDF to e-mail to the requesting patron. Some of the other features of Ariel include: i) ability to scan and send grayscale and colour; ii) print variable resolution images on plain paper up to 600 DPI; and iii) scan and print on letter, legal, journal, A3 or A4 paper size. Ariel works on a wide range of printers which are Ariel compatible and it is a better printing option than Fax in terms of speed, quality, reliability and cost.

**9.2.8 Access to E-Journals through Library Consortia**

Scholarly e-journals have many added features when compared to their print counterparts. They offer many advantages to libraries and end-users. E-journals have the following advantages: i) they allow remote access; ii) same issues of the journal can be used simultaneously by many users; iii) they provide anywhere, anytime (24x7x365) access to periodicals, iv) have built in searching facilities and multimedia capabilities. As a result, libraries are witnessing increasing demands from the scholarly community to provide access to e-journals. At the same time, escalating cost of the scholarly journals and shrinking library budgets are making it difficult for the libraries to meet this demand individually. Hence, many libraries are joining to form a consortium for subscription to e-journals. Consortia offer several benefits to the libraries, such as: i) access to otherwise
unsubscribed material; ii) reduced storage cost; iii) developing common resource
databases; iv) better scope for developing a union catalogue among participating
libraries; v) getting heavy discounts through joint pricing negotiations—hence
lower per unit cost of information; vi) availability and monitoring usage statistics;
and vii) effective document delivery system.

Consortium based library subscription to e-journals and electronic full-text
databases are picking up good momentum in India as well. At present there are
more than 10 national level consortia operating in India. Some examples are
INDEST-AICTE Consortium (http://www.indest.iitd.ac.in), UGC-INFONET
Digital Library Consortium (http://www.inflibnet.ac.in/econ/), CSIR DST
e-Journal Consortium (now known as NKRC), etc.

(See Unit no 9 of Course BLI-221 for more information on consortia).

Self Check Exercise

Note: i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

4) Describe briefly Ariel Inter-library Loan Software.

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9.3 PROBLEMS FACED BY DDS OPERATORS
AND THE ROLE OF INTERNATIONAL
ORGANISATIONS

Copyright issues, inter-library loan (ILL) at national and international level,
incompatibility of ILL protocols for electronic document delivery and restrictions
imposed on the storage and delivery of documents electronically by publishers
are some of the problems faced by DDS operators.

International Convention on Copyright (Bern 1886) and Universal Convention
of Copyright (Geneva 1952), of which India is also a signatory, acknowledge the
exclusive rights of authors or publishers over their literary work, but at the same
time, also permit to make single copy of the document for research and educational
purposes for the benefits of the users. However, copyright laws in relation to
electronic material are ambiguous and are continuously changing. To prevent
unauthorised use and exploitation of electronic material, most of the publishers
are selling their e-publications under license agreement. The license agreements
have rigid clauses which impose a number of restrictions on the libraries on the
use of e-publications. These problems are being discussed at international forums
and many international agencies are involved in finding solutions to these
problems.
9.3.1 IFLA Committee on Copyright and Other Legal Matters

The Committee represents the voice of the international library community in copyright and intellectual property concerns. The Committee is active in the issues relating to: i) Disputed claims of ownership of library material; ii) Economics of trade barriers to the acquisition and use of library resources and effective library services; iii) Subscription and license agreements; and iv) Wide range of other legal matters of international significance to libraries and librarianship.

**IFLA Document Delivery and Resource Sharing Section:** Formerly known as Document Delivery and Inter-lending Section, IFLA Document Delivery and Resource Sharing Section was founded with the objective to improve as well as extend document delivery and also inter-library lending on national and international level with the use of emerging technologies and to increase cooperation among libraries and document suppliers. It is a forum in IFLA for libraries and associations concerned with making information available throughout the world through a variety of resource sharing and document supply techniques. The Section monitors developments in the area of document delivery and resource sharing and gives information to its members through its website. IFLA Document Delivery and Resource Centre also publishes a twice-yearly newsletter, and organises programmes at IFLA Conferences, document delivery workshops and cooperative projects with international organisations.

(http://www.ifla.org/en/docdel)

**IFLA Voucher Scheme:** This scheme was started by IFLA in 1995. Under this scheme IFLA gives plastic vouchers of Euro for inter-library loan transactions. Libraries purchase these vouchers from IFLA HQ and use them for paying inter-library loans and for photocopies of material. These vouchers can be re-used for number of times by the members. Libraries that supply more items can redeem their excess vouchers by sending them to IFLA HQ. This voucher scheme does away with all financial payments for example, payment for international borrowing and document supply. The advantages of this scheme include: i)“No bank charges for either requesting or supplying library; ii) No money lost in international exchange rate; iii) No need for invoices, therefore reduced administrative costs; iv) The vouchers can be retained for future use; and v) Libraries are encouraged to offer an effective ILL service in order to earn vouchers, which they can use or redeem”.

(http://www.ifla.org/voucher-scheme)


ISO-10160-the Inter-library Loan Application Service Definition is an ISO standard. It defines the terminology normally used for inter-library loan transactions between various document exchange systems. This standard provides technical definition of messages as well as a set of rules on using these messages between the systems. Many libraries which are using multiple ILL methods, are implementing ISO ILL compliant systems, because this enables the libraries to manage all their ILL transactions in a single database. (http://www.iso.org)
9.3.3 Counter

Project COUNTER (Counting Online Usage of Networked Electronic Resources) is an international initiative for developing global standards for measuring online usage of electronic resources. It was launched in March 2002. COUNTER is serving libraries, publishers and intermediaries by setting standards that facilitate the recording and reporting of online usage statistics of e resources in a consistent, credible and compatible way. The Working Group of the Project, includes many key industry players. It is currently working on an internationally agreed Code of Practice which paved the way for significant improvements in the consistency and accuracy of usage data of e resources. The first Code of Practice, which covers online journals and databases, was published in 2003. With the launch of Code of Practice for online books and reference works in 2006 its coverage was extended. Release 3 of the Code of Practice for journals and databases was published in August 2008 and Release 4 of the COUNTER Code of Practice for e-Resources was published in April 2012. All these releases of the code of practice are available on its website.

(http://www.projectcounter.org/)

9.3.4 International Coalition of Library Consortia (ICOLC)

ICOLC was established in 1996. It is an informal group of more than 200 library consortia around the world. For example from India, UGC INFONET Digital Library Consortium and INDEST-AICTE consortium are members of this coalition. ICOLC holds and supports discussions among library consortia on the issues of common interests. It conducts meetings every year in order to inform the participating consortia about the new electronic information resources and pricing practices of electronic publishers/vendors and other issues of importance to Coalition Directors and Governing Boards. The Coalition also meets and discuss with the information providers, publishers and vendors about the products and issues of mutual concerns. ICOLC issues statements from time to time on the topics which affect the libraries and consortia. All these statements issued by the Coalition are available on its website.

(http://www.library.yale.edu/consortia/)

Self Check Exercise

Note: i) Write your answer in the space given below.
ii) Check your answer with the answers given at the end of this Unit.

5) What are the advantages of IFLA Voucher Scheme?

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9.4 ELECTRONIC DOCUMENT DELIVERY SERVICE: EMERGING TRENDS

The emergence of electronic document delivery systems have improved the efficiency of the service, but at the same time brought in many more competitors in the document delivery service market. Users have the option to avail of the services of publishers, e-journal service providers, database producers and aggregators to search and have instant access to the documents/information they need.

Two contradictory trends in document supply/delivery are being observed. First, libraries have options to purchase information in smaller units, like journal article or part of book, rather than subscribing to a journal or purchasing a book. This information can be obtained via document delivery, inter-library loan or pay-per-view download. Secondly, libraries are becoming part of library consortia for website licensing of electronic scholarly publications (like INDEST-AICTE Consortium), which is making an increasing amount of content available to the individual library, at consortial discount. This has resulted in less demand, particularly for journal articles. National document delivery centres like BLDSC in UK, CISTI in Canada and INIST in France are witnessing decline in requests for document supply. For instance, BLDSC supplied over 3.8 million items in 2001, but during the last many years the demand has fallen by more than 50% to 1.6 million items. The British Library is entering into partnership with publishers, web search engines and database producers to generate more revenue. Service such as ‘British Library Direct Plus’ is an example of such partnership. This service is a subscription-based service and allows searching the three databases viz. the British Library ETOC (Electronic Table of Contents), Google Scholar and Pubmed Databases simultaneously. The British Library is also digitising back runs of periodicals for various publishers. Recently NRC- CISTI has withdrawn from document supply business and has awarded the contract to Infotrieve, Inc. to take over its customer base. INIST has also introduced ‘Refdoc’ a new service for ordering scientific and technical documents from INIST. All these new services offer online searching facility and delivery of documents electronically. Though the requests for journal articles have decreased, the ILL requests for books (returnable) have witnessed considerable increase. Many libraries are even purchasing books in response to ILL requests.

9.5 SUMMARY

Document delivery service is one of the important services of the library and information centres. The emergence of electronic document delivery systems (EDDS) has improved the efficiency of this service. In this Unit, we have discussed:

- Important EDDS operating in the world, such as ILL service of OCLC, DOCLINE System of National Library of Medicine, USA and document delivery service of National Library of Australia;
- Document delivery service from database producers, e-journal publishers and aggregators;
- Access to e-journals through library consortia;
- Problems associated with electronic document delivery service;
Role of international organisations in addressing these problems; and
The emerging trends in electronic document delivery service.

9.6 ANSWERS TO SELF CHECK EXERCISES

1) Systems employing electronic technology for receipt of request and supply of documents are known as Electronic Document Delivery Systems (EDDS). An EDDS system provides immediate access to the needed information. In such systems, the request may be received by telephone, e-mail, Fax or online ordering. The document is sent electronically via e-mail, fax, or other document delivery software like Ariel.

2) DOCLINE is an automated inter-library loan (ILL) request, routing order and referral system of National Library of Medicine used by over 3200 medical libraries from the U.S., Canada and Mexico. The purpose of the system is to provide efficient document delivery service among libraries in National Network of Libraries of Medicine (NN/LM). The system provides efficient document delivery service by linking the holdings of member libraries and routing the ILL quickly throughout the network. Requests can be created, edited, routed and filled in this system. DOCLINE participants can also check the status of their requests. DOCLINE is available for use 24 hours a day, seven days a week for use. There are no charges for participating in DOCLINE. Inter-library loan charges vary from institution to institution. If a request is received and not acted upon within three working days, DOCLINE automatically routes the request to another potential lender. The request is only routed to institutions that are members of Electronic Fund Transfer System (EFTS). EFTS is a billing system used by medical libraries in the U.S. and Canada.

3) “Copies Direct Service” of the National Library of Australia is a fast and inexpensive service to get copies of articles, chapters of books, photographs, pictures, maps, manuscripts, music and sound recordings from its online library catalogue. The copy of the item requested by a user can be delivered in three ways viz. i) the copy is scanned and posted to NLA website in PDF format and the user is informed via e-mail with a link and password to the website to allow her/him to pick up the copy; ii) the copy can be printed and sent by post ii) or it can be picked up by the requester from NLA.

4) Ariel is an Internet document transmission system. It is owned and supported by Infotrieve, Inc. This software is used by over 9400 institutions around the world for electronic document delivery purposes. Users of Ariel software can scan, store, transmit and print material. Ariel software can scan an article in a paper journal and the image can be transmitted on the Internet to other Ariel workstations anywhere in the world via FTP or e-mail. The scan image then can be converted in PDF for easy delivery to the customer. Ariel allows the institutions to receive TIFF file and convert it to PDF to e-mail to the requesting patron. Some of the other features of Ariel include: i) ability to scan and send grayscale and colour; ii) print variable resolution images on plain paper up to 600 DPI; and iii) scan and print on letter, legal, journal, A3 or A4 paper size. Ariel works on a wide range of printers are Ariel compatible and it is a better printing option than Fax in terms of speed, quality, reliability and cost.
5) Under IFLA Voucher Scheme IFLA issues plastic vouchers to be used for inter-library loan transactions. Libraries purchase these vouchers from IFLA HQ and use them for paying inter-library loans and for photocopies of material. Vouchers have unlimited validity and can be re-used for number of times. Libraries that supply more items can redeem their excess vouchers by sending them to IFLA HQ. They get refund also. This scheme eliminates all financial payments when paying for international borrowing and document supply. The benefits of this scheme include: i) “No bank charges for either requesting or supplying library; ii) No money lost in international exchange rate; iii) No need for invoices, therefore reduced administrative costs; iv) The vouchers can be retained for future use; and v) Libraries are encouraged to offer an effective ILL service in order to earn vouchers, which they can use or redeem.”

9.7 KEYWORDS

Cloud Computing : This type of computing is based on sharing of computing resources rather than having local servers or personal devices to handle applications.

Cloud-based Access : Access to computing resources based on cloud computing.

Consortial Discount : A reduction in the annual subscription price of an electronic information resource for libraries that subscribe as a group, often calculated on a sliding scale, with the percentage of discount proportional to the number of libraries in the consortium and eligibility determined by a fixed number.

Consortial License : A licensing agreement for an electronic information resource in which the licensee is a group of libraries, instead of a single library.

Library Consortium : A formal association of libraries which is established to develop and implement resource sharing among the members.

DIALOG : A vendor that provides pre-search access to a wide selection of online databases via proprietary software. Established in 1972, DIALOG led the market for many years in online information retrieval. Now owned by Thompson, the company also provides technical support for Internet users and e-commerce.

DPI : Dots Per Inch- In computing a measure of image quality resolution in display and printing.

FTP : File Transfer Protocol, the TCP/IP protocol that allows data files to be copied directly from one computer to another over the Internet regardless of the platform, without having to attach them as in e-mail.
Google Scholar: A free service launched by Google in November 2004 that allows users to search the Internet for scholarly literature across many disciplines using the company’s proprietary software.

PDF: Portable Document Format— the format used for page description in the Adobe Acrobat Document Exchange Program. In Acrobat, the PDF writer converts most DOS, Windows, UNIX and Macintosh data files into PDF format. With Adobe reader installed at the receiving end, PDF file can be displayed and printed in original format.

TIFF: Tagged Image File Format— a widely supported data format developed by Aldus and Microsoft for storing black and white, gray scale or colour bitmapped images. The file usually has the extension .tiff or .tif added to the file name.

9.8 REFERENCES AND FURTHER READING


Websites

<http://www.library.yale.edu/consortia/>
<http://www.oclc.org>
<http://www.oclc.org/illiad/>
<http://www.sringerlink.com>
<http://www.emeraldinsight.com> (http://www.ebscohost.com>
<http://www.indest.iitd.ac.in>
<http://www.inflibnet.ac.in/econ/>
<http://www.ifla.org/en/docdel>
<http://www.iso.org>
<http://www.projectcounter.org/>
<http://www.library.yale.edu/consortia/>