INTERLIBRARY LOAN AND DOCUMENT DELIVERY THROUGH THE INTERNET IN ACADEMIC LIBRARIES: AMERICAN AND BRITISH CASE STUDIES

By

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A Master's Dissertation,
submitted in partial fulfilment of the requirements for the award
of Master of Science degree of the Loughborough University

September 1996

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Στους γονεις μου Νικο και Ειρηνη

ABSTRACT

This study examines the present case of Interlibrary Loan and Document Delivery that are provided through the Internet in academic libraries. It introduces basic Interlibrary Loan and Document Delivery concepts and the problems associated with the copyright law. It then examines and analyses Web sites of different American and British Academic Interlibrary Loan (ILL) services and discusses their policies and procedures to facilitate ILL activities.

Selected American and British Academic Interlibrary Loan services were examined in more detail (by questionnaire) to give further insites into the use of the Internet for ILL services. A comparison between the American and British case studies illustrates the level of development in these countries and the way the Internet is influencing the Interlibrary Loan Departments in academic libraries.

ACKNOWLEDGEMENTS

I wish to express my sincere gratitude to my employer, the University of Cyprus, who gave me the chance and the support to pursue this Masters degree at Loughborough University.

I would like also to express my sincere thanks and deep appreciation to the following people who were a great help to me to successfully complete this course:

- My supervisor Ms. Gwyneth M. Tseng for her help, support and intelligent guidance throughout the writing of my dissertation.

- The academic librarians who responded to my questionnaires, especially the ILL librarian at the University of Pann's library for his invaluable comments.

- My deep appreciation also goes to my best friends Osama Baldo and Vivi Pouli for their endless support and help throughout this course.

Finally, my heartfelt gratitude goes to my parents, brother and sisters and all my friends in Loughborough University and abroad for their moral support and encouragement throughout the course.

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1 INTRODUCTION

1.1 BACKGROUND OF THE STUDY

The concept and the practice of Interlibrary Loan (ILL) is essential for the development and improvement of any library. In academic libraries especially, research and study imply the use of more and recent information regardless of where it is located. ILL is a major way to acquire the documents needed. The ever increasing demand for and supply of information has made it impossible for any single library or information centre to stock and supply enough material in order to meet all of its users' demands.

Information Technology (IT) has had a profound influence on ILL activity within the last decade. The Internet, as an increasingly important resource for information and as the main means of transferring electronic information on a massive scale is easily accessible to academic ILL services, but to what extent and how effectively is it being applied ?.

The influence of the Internet on the practice of the ILL operations, has motivated this study. The academic library and ILL are two elements strongly related to each other. IT and more specifically the recent developments on the Internet, as part of the ILL service procedure must also be considered by librarians and information suppliers who are willing to keep themselves updated in this huge area of information distribution.

This study examines selected ILL services that are provided through the Internet in American and British academic libraries.

The research study aims to:

1. Define the concept of ILL services through an analysis of the available literature.
2. Introduce the use of the Internet for providing information and services, with particular reference to ILL.
3. Define the concept of Electronic Document Delivery and its relationship to ILL.
4. Present the copyright issues relates to the ILL service.
5. Present the nature and extent of ILL services in the USA and the UK that are provided via the Internet.
6. Present the results of surveys made of selected American and British academic ILL services.
7. Provide a summary and conclusions to the study.

1.2 METHODOLOGY

The study is based on primary literature searches using LISA CD-ROM (Library and Information Science Abstracts) mainly from 1992-1995, the On-line Public Access Catalogue (OPAC) at the Pilkington Library at Loughborough University, browsing the network and case studies of academic libraries' use of the Internet, which were accessed through the World-Wide-Web (WWW).

Academic ILL sites provided via the Internet have been used as a basis for this study: twenty-four academic ILL services in the USA and twenty-four academic ILL services in the UK (see Appendices A and B).

A survey was conducted to supplement the literature review and the on-line searching. Questionnaires were sent to all 48 libraries by electronic mail (e-mail) in order to collect managerial information about the libraries' experience of the subject studied.

Because the American and British cases of Internet use for ILL were so different, they needed a different approach so it was necessary to create two different questionnaires (see Appendix C and Appendix D).

1.3 INTERLIBRARY LOAN

ILL is the process by which a library requests materials from, or supplies to another library in order to fulfil a user's information needs that cannot be satisfied using locally available resources. It has existed as long as libraries have existed in their present form and when librarians realised the importance of the co-operation and the need for resource sharing. The purpose of ILL, as defined by the National Interlibrary Loan Code for the United States (ALA, 1993), is to obtain, upon request of a library user, materials not available in the user's local library, and the library in the interests of providing a quality service, has an obligation to obtain these materials to meet the information needs of users when local resources are inadequate.

Materials exchange between libraries (concerning all types and sizes of libraries) is a very important element in the provision of an effective information service, especially for an academic library, as emphasised by Poon (1990) who gave the example of the great need for ILL in the City Polytechnic of Hong Kong. ILL can be described as a mean by which a wider range of materials can be made available to users, no matter how far they are from their local libraries, and is an essential activity by which local libraries can establish their links within their communities.

Traditionally, ILL was restricted to the lending of original documents which the requesting libraries did not have in their collections. However, the concept now has been expanded to include photocopies, microforms or electronic format documents.

Social, scientific, economic and technological developments have had a crucial impact on the development of ILL since the Second World War (Roberts, 1984), as a consequence of the so-called "information explosion". In addition, there has been a more increase in the rate of inflation which has rocketed the prices of publications. Moreover, improvements in education and research activities have also increased the demand for ILL activities.

ILL plays an increasingly important role in the activities of the majority of libraries for several reasons. The general cuts in library funding, the added pressure of acquisitions costs which are increasing well above the level of inflation, and the volume of published information available, make ILL a necessity in every modern library. Moreover, especially in academic libraries, the improvements in education and research activities have increased the need for ILL provision with higher standards effectiveness and speed. Facing all these changes and improvements around the world it is obvious that no library can claim total self sufficiency in meeting all the needs of its patrons. This lack of capability justifies the need for the ILL service as part of a resource sharing system in order to meet as much user demand as possible.

The effectiveness of a national resource sharing system, which has been introduced as a solution to the problem, depends mainly upon the responsible distribution of borrowing and lending. As a very basic point, libraries must be willing to lend in order to be able to borrow. The main principle of an ILL system is that libraries of all types and sizes should be willing to share their resources liberally, so that a relatively few libraries are not overburdened. Special provision is made for a library to take on the role of major provider. Good library co-operation requires good contribution of good libraries.

> In any regional network there will be some libraries stronger than others but regional co-operation will only work if there is a core of strong libraries to meet most of the need. A healthy situation might be where 50% of demand for document supply could be met locally, a further 40% nationally, leaving only 10% to be satisfied by other countries in the region (Friend 1993, p.381).

1.3.1 ILL and Collection Development

Several factors in the current academic environment are forcing librarians and academic faculties to reassess their traditional ideas about collection development. The ILL service benefits the requesting library's collection by reducing the cost of purchasing materials for which there are limited demands. ILL has been defined as an adjunct to collection development in any individual library and the interlibrary borrowing is therefor an integral element of collection development for all libraries.

ILL is a necessity in academic libraries because of:

- The plethora of information produced
- The inflatable price of all information
- New technology that has altered the campus information environment
- The decline of resources in higher education (a world-wide phenomenon but particularly topical in the UK)
- Faculty and students generally need to read specific journal articles rather than entire journals particularly, (in the case of staff), when well-served by alerting services and personal subscriptions to their core academic journals.

Some vendors' products have been developed to provide rapid delivery of documents, primarily journal articles, giving so to academic libraries a partial solution to all the above problems. Consequently, as Leach & Tribble (1993, p.359) state in their article, "academic libraries are beginning to seriously explore

commercial document delivery services as supplements to or replacements for the local collection".

1.3.2 National Interlibrary Loan Codes

National Interlibrary Loan Codes are designed by different countries to regulate lending and borrowing relations between libraries. They do not usually prescribe the nature of interlibrary co-operation within formally established networks and consortia and they also do not regulate the purchase of materials from document suppliers, but they are mainly formed to be used as a model for the development of state, regional, or local ILL codes when an official policy needs to be established.

The main idea of the ILL codes is to achieve the best possible co-operation between libraries that are willing to share their materials and to benefit equally. Two libraries at least, must be involved in this activity:

- The requesting library and
- The supplying library

Each one of these libraries has different responsibilities that need to be realised for more convenience and direct communication between them. However direct co-operation between libraries is not applied everywhere due to technical or organisational problems for its application. In the UK, for instance, there is a main intermediary document supplier, the British Library Document Supply Centre (BLDSC), which is the most convenient means for documents interchange between all libraries. By contrast USA libraries make more use of consortium libraries as parts of the Regional Library Co-operation rather than using commercial or only one supplier to process their ILL requests.

The ILL codes cover all aspects of the ILL and define the official process that must be followed by any individual ILL service. They also provide general guidelines for requesting and supplying materials between libraries.

The National Interlibrary Loan Code for the United States (ALA, 1993) is a good example to illustrate the main ideas of operating ILL services under fair conditions. Although its content and information are applied mainly in USA libraries it still to be a model of good practice for countries who do not have a specific ILL code.

1.3.2.1 Requesting Library

According to the American National ILL Code the requesting library should establish and maintain an ILL policy, which must be available to its patrons, in paper and/or electronic form. On-time request processing must also be one of its main concerns. The provision for processing requests within an appropriate timeline has to be established either by paper processes or electronic networks.

The requesting library's responsibility is to identify libraries that own and might provide the requested materials. It has to be knowledgeable about the policies of potential suppliers, about special instructions, restrictions and information on charges prior to sending a request. It is also responsible for all authorised charges imposed by the supplying library or organisation, regardless of the policy established between it and its users. The code advises against sending all requests to a few supplying libraries. The use of all participating libraries is very strongly recommended whilst the major resource library should be used as a last resort.

Transmission of all ILL requests must be done in standard bibliographic format in accordance with the protocols of the electronic network or transmission system used. The copyright compliance must be determined for each copy request before it is transmitted and a statement must be included on each copy request. The requesting library is also responsible for honoring of due dates and maintaining the

good condition of the materials borrowed, from the time they leave the supplying library until they have been returned and received by the supplying library. The requesting library is also responsible for enforcing use restrictions specified by the supplying library. Prevention of damage to material is fundamental to maintaining the co-operation between lending and supplying library.

1.3.2.2 Supplying Library

The supplying library has to take certain responsibilities regarding its role of supplying ILL materials to requesting libraries. It is important to establish an ILL policy and make it available in paper and/or electronic form to all requesting libraries. The timely processing of the requests and also the notification of any problem faced in fulfilling the request must be mentioned to the requesting library promptly as part of its main responsibilities. Renewing, recalling and stating any conditions and restrictions on the use of the materials lent are some rights which the supplying library can apply to its ILL activities.

1.3.3 ILL and Information Technology

The implementation of new IT developments has enabled the ILL process to become faster and more effective (Montgomery, 1993). The rapid development of electronic communication (especially via the Internet) has made this process possible. What Richard De Gennaro (1984, p. 1205) pointed out almost a decade ago, starts now to become more obvious in all academic services, not least in the ILL activities: "Providing access to information will be the principal goal and activity, and coping with technology and change will be the principal driving force of the emerging information age library".

At the end of 1993 the Joint Higher Education Funding Councils for England, Scotland, Wales and Northern Ireland produced a report (known as the Follett

Report) on library and information provision in higher education (Brindley, 1994). The Review Group devoted much attention to how IT can be used to help meet the needs of library users and library management, and proposed that the Funding Councils should jointly invest enough money in order to support a range of activities. The potential for the further application of IT is one of the single most important areas which the Review Group considered. Facilitating resource sharing through networking (e.g. Internet) and electronic libraries, the Review Group considered the following issues related to ILL and document delivery using IT means:

- Implementing electronic delivery of documents over networks.
- Electronic publishing and its potential impacts.
- Opportunities for resource sharing and practical co-operation.
- An integrated approach to information access and delivery in a complex environment (Follett, 1993).

1.3.4 Automated ILL Management Systems

There are few stand-alone ILL packages available (Leeves, 1991). Most automated ILL packages take the form of a module within the library management system which, in some cases, are also capable of running on a stand-alone basis (Killeen, 1991). The facility of an ILL module is not available in all integrated library systems. As a result of the very limited demand for the ILL in some sectors, like public or some special libraries, many library management system suppliers do not aim to produce an ILL module at all (Anonymous, 1994). In addition to this, the pressure of developing upgraded versions of the main library management systems' modules, such as circulation and catalogue modules, often takes priority over further development of "peripheral" modules, such as the ILL module. Moreover, ILL systems require modification, more than other modules, in order to cope with the country variations. For example the functionality of any ILL module is determined by the interlending infrastructure which exists in the various countries.

In the UK, for example. the ILL systems are largely driven by the requirements of the BLDSC (Leeves, 1993) which is the most common in use by most of the libraries.

The main automated ILL systems available can be divided into three sections:

1. The single-function packages, e.g. the Lancaster ILL system (Corp, 1994)
2. Integrated ILL modules which function only as part of the library management system, e.g. the LIBERTAS ILL module (Bradford, 1994)
3. The ILL module of library management systems which are capable of running on a stand-alone basis.

Because only few library management systems offer an ILL module, libraries with a requirement for automated ILL are faced with the difficult question of either restricting their choice of system to those few offering ILL module, or to widen the choice and run a stand-alone operation (Anonymous, 1994).

A vital factor of choosing an appropriate ILL management system is its integration with borrower file, circulation control and OPAC. Integration is very important to avoid double input of borrowers' records, and also for the easier and valid records' control. Access to users is also very important for requesting ILL materials, or for displaying any user notification.

The ILL management systems have also to be integrated with any possible auxiliary software for communicating with specific ILL document suppliers' environment. Some ILL document suppliers, for example, take the opportunity to create their own ordering software and provide it to any borrowing library. The BLDSC, for instance, has its own ILL ordering system, the ARTtel (discussed in more detail in Chapter 3), by which libraries acquiring it can send their ILL requests on-line.

1.3.5 ILL Performance Measurement

The availability of ILL management systems in relation to the development of electronic publishing and electronic document ordering and supply, in wide area networks (WAN), such as Internet, have provided the libraries with new possibilities in the ways of managing and providing their ILL service. The necessity for performance assessment in ILL management has been increased in accordance with these new possibilities where ILL management needs to know the effectiveness of the ILL service by measuring productivity, cost per output, cost per attribute levels (i.e. skills and experience of staff, clerical, librarian, academic), and cost per use.

There are now several ways to handle an ILL request, and it is necessary to use different methods for different requests, depending on the type of request and the users' needs, in order to make the most effective use of the resources available to the library. A project has been developed (Bjarno, 1994) to measure the cost, funding and performance in ILL management. The idea of performance measurement helps for planning, communicating, sorting out problems before they arise, making decisions, monitoring problems and justifying resource allocation.

2 INTERNET

2.1 INTRODUCTION

The Internet is a collection of networks enabling computers to communicate with one another. It is overwhelmingly the biggest computer network in the world. It is now connecting not only research laboratories and universities but also colleges and schools, organisations, business of all sizes and types, libraries and private individuals throughout the world.

The Internet was started by the US military, but it is now supported and used by people who can have access to it from all over the world. It offers many services, a substantial number of which are provided to users free. The networks that now form the Internet use a standard set of protocols, known as TCP/IP (Transmission Control Protocol/Internet Protocol) which enables all the inter-network communications to be carried on across different hardware and software platforms without impacting on the user. The major functions of the Internet are communication (e.g. e-mail and group discussion), and information provision and retrieval.

To support and facilitate these functions the Internet provides different kinds of services such as:

- Finding tools
- On-line public access to library catalogues
- Special interest discussion groups

- News services
- Electronic journals and newsletters
- Electronic mail

The Internet is a service facility which also offers a model for evolving new services and standards. For a distributed service such as document supply, the Internet provides a highly successful platform to develop standards as it brings together users, the research/development community, and suppliers. Internet developments are open, fast and effective because its proposed standards are developed and tested by users and service developers on a global network. A recent article describes the Internet as

> ... not only sophisticated and powerful, it is also cost-effective. ... it offers lower connection charges than any commercial information service. This makes the network the most attractive in the light of the budget crises affecting corporations, governments, and higher education (Xu 1995, p 249).

2.2 IMPACTS OF THE INTERNET ON ACADEMIC LIBRARIES

The Internet has firmly established itself in academic life and is bringing great challenges to the traditional concept of information storage and retrieval. Its influences will certainly grow in the foreseeable future. Electronic information storage and retrieval requires lower operating costs than storing books and printed formats. As libraries move towards greater co-operative resource sharing, they will have to rely more on electronic forms (Glover, 1994). This is true not only for academic institutions, but also for government institutions and corporations as well.

2.3 ILL, DOCUMENT DELIVERY, AND THE INTERNET

Changes in the last decade have brought increasing availability of materials in alternative formats to the traditional paper form. The Internet, as the biggest collection of computer networks linked together, offers an abundance of verification and location information to libraries, something which libraries could potentially use to facilitate their everyday activities. The Internet, in addition to be an information provider to academic libraries, can also facilitate the transmission of documents, electronic or scanned printing materials, after following the appropriate procedures. The influences of the Internet has caused generally a shift in the very nature of interlibrary co-operation.

> Ultimately networking will change the face of document supply both nationally and globally. Electronic document delivery involves not only the actual delivery of the item but the various processes associated with locating the document, requesting it, and supplying it, either from documents stored electronically or by scanning requested documents (Leeves 1993, p.17).

In academic libraries users need to have speedy access to accurate and up-to-date information and so may make use of national and international interlending and document supply services to acquire materials not held in their local library. ILL services can use Internet facilities to make improvements to all aspects of the service, including receiving and processing of users requests, ordering and supply of documents, and delivery of information to users. The use of the Internet in supplying documents electronically will be examined further in Chapter 3.

2.4 ASSOCIATED DEVELOPMENTS

As well as offering the potential of improving existing ILL services, the Internet also offers alternative methods of delivery information to users. Specifically electronic journals and on-demand publishing should be mentioned.

2.4.1 Electronic Journals

A development of the electronic mail function is the Electronic Journals or "e-journals". Instead of simply digitising material which is already available in printed form, all aspects of the preparation, refereeing, assembly and distribution of the journal and its contents take place electronically. "E-journals" can be distributed in a variety of formats, such as an e-mail message, through the Internet to a list of subscribers. They can also be distributed to the library server, or loaded on the WWW, FTP, etc. Their recipient can receive either the complete issue of the journal, or retrieve the text of the article. The e-journals are still in their infancy compared to traditional publication, but there has been a very recent and rapid expansion in the numbers available. Due to their low operating cost, e-journal publication will definitely challenge many traditional concepts of publishing. Whether the claimed lower operating costs for the producer will be passed on to the consumer is of course a matter that is still unclear. Associated with e-journals are also the serious problems of ownership and intellectual property rights, which have yet to be solved.

2.4.2 On-Demand Publishing

On-demand publishing is a general term covering all conditions of creating information by publishers, often in electronic form provided by networks, without the need of an inventory or conventional distribution techniques. The products of this service have to suit the requirements of the individual users who have asked for specific publishing on-demand. Printing this information becomes, partially or fully, the responsibility of the information user.

> Their objectives are to create a substantial resource base faster than market forces would provide and to assist in solving the current high level of simultaneous demand for undergraduate oriented material. The benefits would be enjoyed by all user groups. Wide availability of on-demand material would help to improve access to

material, make it easier for student to use, and make it easier for their teachers to provide flexible, tailored material (Follett, 1993).

3 DOCUMENT DELIVERY VIA THE INTERNET

3.1 INTRODUCTION

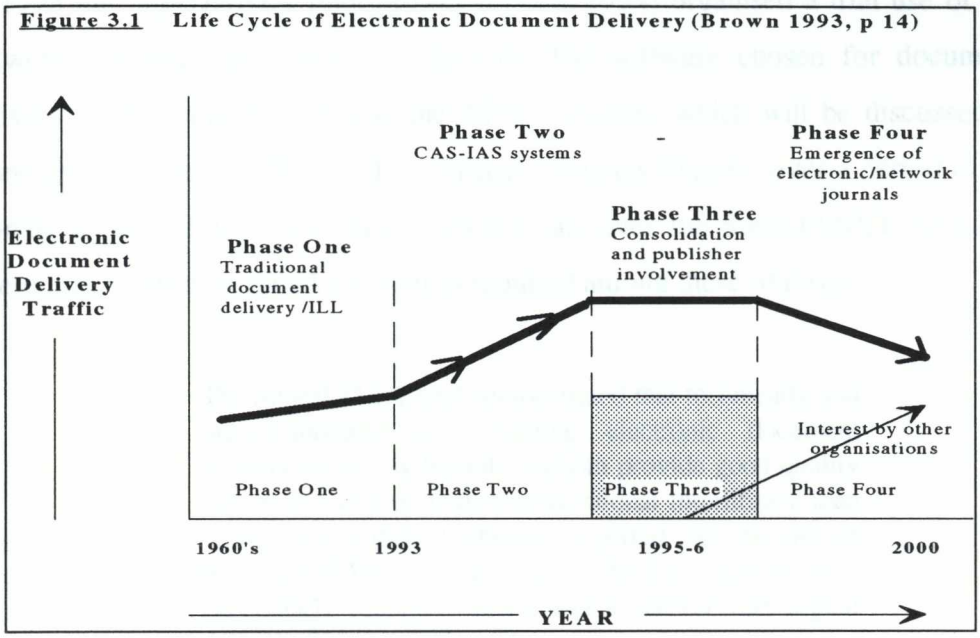
While ILL has been around for many years, document supply is a relatively new concept. It usually means a surrogate of an original article, report, or paper which is required at a remote location. Today the majority of these surrogates are produced by making a photocopy or an electronic form of the original item and sending it to the requester by conventional methods. It is normally a purchased service in comparison to the ILL's activity which in theory is a loan of an item from one library to another.

Not long ago libraries received most ILL requests for documents directly, by mail, or by telephone. Now some receive most of their requests via electronic mail (e-mail), on-line via Internet, or fax, which is an indication that more and more users deal with newer technologies. However, the present technology readily permits electronic delivery of materials existing in electronic form, and also permits scanning electronic form of printed materials. The electronic ordering and delivery of documents through networks and especially through the Internet (Jackson, 1993) is a preferred alternative mode of serving documents requests. A number of academic library consortia such as the JASON system in Germany (Summan, 1994), use this method for ordering and delivering journal articles, an experiment that has already confirmed the efficiency and effectiveness of using the Internet for ILL services.

A lot of benefits are achieved by using electronic document supply in comparison with the fax as a previous major document delivery vehicle. Implemention of an electronic document delivery enables libraries to achieve:

- Cost savings
- Increased document availability
- Improved organisational performance
- Time savings
- More integrated operations world-wide
- Enhanced customer service

With the help of abstracting, indexing and current awareness services offered on-line and by the means of CD-ROMs, pointers to primary information, especially articles, can be found very quickly. However, to get hold of a copy or reprint of an article, especifically in the case of ILL, can be very time consuming. Electronic document delivery systems which offer the supply and reproduction electronically of information that was once only provided in the form of print on paper can help to solve this problem. Figure 3.1 shows the phases that the ILL and document delivery have passed through since 1960 according to Brown (1993). During the first phase 1960-93 ILL services were more passive and acted as the back-up support for information required by any individual library. The second phase between 1993-95 presents selling of articles by new Current Awareness Services and Individual Article Supply (CAS/IAS) with an obvious involvement of technological means. The third phase 1995-6 emerges as publishers and other intermediaries compete for a share of the new separate spoils. This phase will also introduce other organisations, such as library automation supply services, that will likely become active in document delivery during the next few years. The final phase 1996-2000 predicts a decline period for ILL and document delivery since the printed articles start to become obsolete as network and other electronic publishing takes over.



The major advantages of electronic document delivery are convenience for the user and potential saving of storage space for printed documents. In particular, consortia of libraries can in theory get together and agree to merge their holding into a single set of holdings which they can all draw from as required. This will provide cost savings and a speedier service than is currently available using traditional ILL facilities. Such services also give those libraries with significant collections the possibilities of raising revenue by participating in commercial document delivery services. Whilst this is still an ideal that may never be realised on a global scale, not least because of copyright (see Chapter 4), a number of important benefits have been achieved from electrocopying. In particular, anyone anywhere in the organisation, if connected by Local Area Network or Wide Area Network, can log in and view, download and transfer to another location the full text of relevant articles.

Academic libraries should be in a position to take full advantage of, and participate in the development of electronic document delivery services, both as recipients of articles and also as potential suppliers. They should also ensure that users are guided to the holdings of their own library and other libraries, as part of an overall electronic document delivery service.

In 1993 the SuperJANET pilot project (Friend, 1994) organised a trial use of the network for electronic document delivery. The software chosen for document delivery in this pilot project was the ARIEL system, which will be discussed in more details in section 3.2.1.4. Five British university libraries over a period of six months requested articles from printed journals over the SuperJANET network. These articles were scanned and sent as required among these libraries.

> The SuperJANET trial demonstrated that technically and organisationally a continuing electronic document delivery service is feasible and can provide good quality copies in less time than a conventional interlibrary loan service. Participating libraries reported that the use of the SuperJANET with RLG ARIEL system was particularly valuable when a user asked for very urgent delivery (Friend 1994, p.20).

The development of electronic document delivery systems is continuing to give a lot of alternative choices which make the decisions for using the appropriate system for a specific library more difficult. However the development and growth of networks in relation to the ever decreasing price of hardware and software allow individuals and libraries to access documents faster and cheaper. In addition to the electronic document benefits there are also some significant advantages of its use in academic libraries in comparison with previous means such as:

- Improved image quality
- Concurrent send/receive capability
- Added in multiple simultaneous receive capability
- Controllable telecommunication costs.

3.1.1 CAS-IAS

The Current Awareness Services-Individual Article Supply (CAS-IAS) are relatively new document supply services operating as "one-stop shopping services for articles. They enable articles to be identified from a comprehensive database,

then ordered and received through electronic means, with the minimum of effort" (Brown 1993, p. 7). The CAS-IAS can be divided in four categories according to the providers offer them:

- Offered by subscription agencies
- Offered by secondary publishers
- Offered by utilities
- Offered by primary journal publishers

3.2 ELECTRONIC DOCUMENT DELIVERY SERVICES USING THE INTERNET

There are many alternative ways to the traditional ILL requesting and document delivery services. Using the Internet for transferring electronic or printed format documents is nowadays a beneficial one which is used by many ILL and document delivery services.

Some examples (American and British) of the services available have been selected to illustrate briefly how ILL and electronic document delivery services operate by using the huge Internet network for supplying documents.

3.2.1 American Examples

3.2.1.1 OCLC

On-line Computer Library Centre (OCLC) provides interlibrary lending facilities for participating libraries world-wide via the OCLC PRISM ILL system. This service can be used to borrow monographs and serial articles from either participating OCLC libraries or document suppliers. There is a number of document suppliers who participate in the PRISM ILL system e.g.

- British Library Document Supply Centre
- Centre for Research Libraries
- Centre de Pret, Bibliotheque Nationale, Paris
- Danish Loan Centre
- Dynamic Information Inc.
- ERIC
- Facts On-line
- ISI The Genuine Article
- Information on Demand
- Library of Congress
- National Library of Canada

Participating libraries in this ILL network are from more than 52 countries around the world. The European libraries using the OCLC ILL system in 1994 were 74 (Mitchell, 1994).

The introduction of FirstSearch, OCLC's end user reference service, in 1992, provided OCLC with the vehicle to begin to introduce electronic document delivery services and expand its traditional interlibrary loan service to direct document ordering by library users. FirstSearch's order capabilities provide a choice of document suppliers and pricing, which in turn reflect choices in delivery method.

3.2.1.2 Faxon Finder and Faxon Xpress

Faxon Finder and Faxon Xpress are products of Faxon Research Services Inc. (FRS), which receives most of its tables of contents and articles from a Canadian Scientific Institute. A large amount of journals and general interest magazines, covering a wide range of disciplines, are provided. A requester can search for an article and ask Faxon Xpress service for document delivery by fax or via the

Internet. Faxon Finder and Faxon Xpress may be accessed by libraries or individual requesters:

- Via Internet, or dial-up
- Load the FRS database on a local library

3.2.1.3 UnCover

UnCover is the Colorado Alliance of Research Libraries (CARL) index, available to subscribers anywhere on the Internet. It is a current awareness database, listing the table of contents for more than 17,000 periodicals and close to seven million articles (as at July 1996). UnCover was originally designed as a component of CARL's integrated on-line library system and the database is also available as a commercial database to subscribers over the Internet and via direct dial (Notess, 1993).

In addition to the index itself, UnCover2, which is a document delivery service available to academic and corporate libraries, provides document delivery of articles in the UnCover database to world wide users (Anonymous, 1993). UnCover2 can be invoked immediately after finding the citation. The ordered articles can be received by fax on the next day. Payment can be made by Visa, MasterCard or special account number.

UnCover can be accessed via Internet in three ways:

1. With password via Internet or public dial-up lines, providing single simultaneous use and unlimited use.
2. Standard gateway access via Internet through the local on-line catalogue, or through the end users' workstation.
3. Customised gateway access via Internet through the local on-line catalogue.

3.2.1.4 ARIEL on the Internet

The ARIEL software was developed by the Research Libraries Group (RLG) to take advantage of the Internet's high speed telecommunications lines as a document delivery mechanism. According to Bennet & Palmer who compared the advantages between ARIEL, and the Internet-based document delivery with their previous traditional methods found the ARIEL's benefits far outweigh the disadvantages of this technology.

> The ARIEL document transmission workstation demonstrated the greatest potential, primarily due to its use of the Internet and nondedicated equipment. ARIEL was acknowledged in the library literature for its high speed, reliability, and superior image quality (Bennett & Palmer, 1994, p. 164).

A group of Health Sciences Libraries Consortium (HSLC) (located in Pennsylvania, Philadelphia, Pittsburgh and Hershey) evaluated the ARIEL document delivery service against the existing group-3 level memory telefacsimile network used for enhanced ILL (Bennett & Dell, 1993). The result of this trial was that the use of the Internet with appropriate hardware and application software provided a higher quality transmission and service reliability at lower costs. ARIEL, due to its use of the Internet's high speed data lines, has the ability to send and receive messages simultaneously without the need for polling protocols. ARIEL's advantages are mainly the improved transmission speed and eliminated cost for long distance communications.

Libraries willing to get connected to ARIEL have to have access to the Internet and understand the need of the Internet telecommunication protocols (TCP/IP) in order to be able to use it. In cases where ARIEL was used in UK libraries as part of the pilot, successful results were shown. However, for any further future use of ARIEL, libraries have to consider the overall structure of UK national ILL services of which an ARIEL document delivery system would be a part (Friend, 1994).

ARIEL makes it possible to receive exceptional quality documents within minutes from anywhere in the world. Borrowing and lending between participating libraries can be equitable, predictable, reliable and easy. Once connected to the network, a workstation transmits a document to the address of another ARIEL workstation using both RLG's proprietary data compression methods and the network's TCP/IP transmission protocol. The document then can be printed at the receiving end.

3.2.2 British Examples

3.2.2.1 BLDSC

The British Library Document Supply Centre (BLDSC) is the largest organisation in the world which is devoted to the supply of documents, either on loan or as surrogate copies to remote users transmitted by post or fax (Tedd, 1995).

Requests can be sent by post, fax, telephone, telex and ARTtel. ARTtel is the communication system developed by the BLDSC which can be accessed via British Telecom's Global Network Services, the Mercury 5000 Managed Data Network, JANET, and direct dial. Requests can also be sent by e-mail where confirmation receipt and status requests are returned to customers via e-mail. The use of an X.400 address (Moulton & Tuck, 1994) helps for accessing the service via gateways.

The BLDSC is involved in a number of projects investigating the use of the ILL protocols including project ION (Interlending Open Systems Network) which has involved some 50 libraries using the system for interlibrary loans since 1993 (Smith, 1994). Other participants include interlibrary lending services in the Netherlands (Pica), in UK (LASER) and in France (SDB/SUNIST).

The BLDSC has been running an experimental electronic document delivery service with the University of East Anglia (Baker & Wood, 1994) to look at ways of using electronic document delivery following requests transmitted by e-mail, for articles in journals which may no longer be subscribed to by the library. In this case requests are sent by using ARTtel, with specific customer code to identify those for electronic delivery. After following certain technical procedures, using mainly e-mail (Vickers, 1994), the receiving library's program scans a designated incoming mail box and takes the document out of the message and stores the pages in its local disk. The standard protocol for requesting information through the BLDSC interlibrary loan service is ISO 10160/1. A linked standard is SR (Search and Retrieve) or ISO 10162/3, which is used to construct queries and receive the results.

3.2.2.2 BIDS

The Bath Information and Data Services (BIDS) system aims "to be a leading provider of convenient and well supported network access to a wide and growing range of information for the benefit of the higher education and research community and other related organisations" (Smethurst 1994, p.29). It is a networked computer based information service providing bibliographic information about documents or articles in journals. BIDS has computers at Bath University which are linked to the main networks. The main suppliers available through BIDS are:

- Institute for Scientific Information (ISI) in Philadelphia
- Secondary Publishing Division of Elsevier (known as Excerpta Media)
- British Library with Inside Information
- Engineering Information Inc. with Compendex Plus and Ei Page One
- CAB International with Public Health and Tropical Medicine database, etc.

With the BIDS's on-line ordering and supply (BODOS), the user can place an order for delivery of a document from a choice of suppliers, and make payment either by credit card or by raising an account. The document suppliers' human transaction administrators receive instructions over the network to get the documents, copy them, and post them, or fax them to the users, i.e. by passing ILL service-document delivery direct to users.

4 COPYRIGHT ISSUES

4.1 INTRODUCTION

Copyright concerns the rights to copy items. It protects the labour, skill and judgement which on one author, artist or other creator expends in the creation of an original piece of work, known as "literary work". The owner of copyright can be an individual or an organisation. Copyright gives an author a monopoly for a finite period (50 years changed recently to 70 years). After this period, copyright ends and the materials can said to "fall into the public domain" and then they can be used without restriction by third parties. Materials out of their copyright lifetime can be copied and even republished, without the need of a specific permission.

4.2 ELECTRONIC COPYRIGHT

Electronic copyright is primarily, although not solely, concerned with so-called "literary works". Traditionally, document delivery is by means of photocopying, and is a well-established business, with few copyright litigation problems because the photocopying is done on under "fair dealing", or by/with the permission of the copyright owner. There is no real difference between copyright and electronic copyright. The difference lies in the way the material has to be decoded or read by the user. Works published in electronic format are protected in the same way as their printed equivalents and each country imposes its own copyright laws in accordance to its priorities, e.g. economic, educational.

4.3 COPYRIGHT LAW AND PUBLISHERS

There is a lot of work needed to be done on the development of copyright standards. There are many parties involved in this area such as publishers and authors, something which makes the process more difficult and more time consuming as Charles Oppenheim (1995) points out. Publishers attach importance to three issues which threaten their benefits:

- Fear of cancellations of journal subscriptions
- Lack of control, distribution and policing of information
- Payment

American and British projects in IT developments face copyright problems. Electronic Library (ELib) projects, e.g. ELINOR (Harrington, 1996) at the De Montfort University had to manage the copyright limitations on attempting to set up a large database of complete books, journals, etc., which could be directly accessed by students and faculty via personal computers (PCs) and workstations across the university campuses. As Norman (1994) reports, only few publishers were willing to allow their material to be digitised. Consequently, this lack of co-operation was seen as a major barrier to progress of this projects.

As a result of the copyright limitation origins from publishers, the same university has proposed a new project named Electronic Reserves Copyright Management Systems (ERCOMS, 1996) which will be designed to build on the copyright and usage tracking experiences of the ELINOR project providing full tracking of usage, accountability, and automatic counts of the occurrence of copyright events. Under the various copyright licensing schemes for networked texts, libraries and universities with networked systems have to demonstrate that they can control access and meter usage.

In some cases where the copyright law was a real problem, such as the SuperJANET pilot project (mentioned in Chapter 3), suppliers were asked to give

their agreement and their comments about setting up an electronic document delivery.

> It seemed reasonable to assume that there was no threat to sales of journals from the SuperJANET project, and therefore the project provided an opportunity to reassure publishers that electronic document delivery is not harmful to their interest when managed professionally (Friend 1994, p.18).

The problem with this contention is that whilst a publisher may be persuaded to agree to a pilot or experimental project, persuading them to make a long term commitment to electronic document delivery maybe a different matter. Publishers have not mandated the Copyright Licensing Agency to negotiate on their behalf. It seems that electrocopying for research and private study is by no means universally accepted yet by publishers.

4.4 COPYRIGHT AND ELECTRONIC DOCUMENT DELIVERY

Copyright is arguably the key problem in electronic document delivery. Most of the materials requested from document delivery are less than 50 years old and are therefore in copyright. There is not a problem to argue the case for "fair dealing" when a single copy is made. It is quite different matter, however if the material has to be scanned into a machine readable form and sent down a network such as the Internet. The easy way with which materials can be downloaded or disseminated using current technology makes it very easy to ignore the copyright law and hard to police what is happening.

While electronic document delivery grows rapidly a number of copyright-related problems are created to make these services more complex (Hugenholtz, 1994). Many publishers feel that the copyright legislation on right of "fair use" and "fair dealing" have already been contravened for many years by ILL suppliers. This has been further confused with advances in electronic document delivery. Copyright

does not at present cover electrostorage and electrotransmission rights and the problem is more obvious in cases of electrocopying. Electrocopying is the use of Document Image Processing (DIP) or Optical Character Recognition equipment to convert printed material into machine readable form. The problem begins when someone converts journal articles and other copyright materials using DIP without having the copyright permission which is what exactly happened when electronic document delivery services were first offered (Oppenheim, 1995).

4.5 UK COPYRIGHT ACT AND ILL

The Copyright Act in the UK is quite clear about what can and what cannot be copied, but does not always specify the form of reproduction. The legislation is quite clear that making and storing an electronic image is an infringement; it is not clear however whether just making an electronic copy would be an infringement or not. The very nature of electronic information systems is that temporary copying is always required, and if the law is taken to forbid this, then all kinds of normal electronic document use are interfered with. This is one problem which presents the copyright law as a barrier for legal and correct ILL processing .

The UK Copyright Act also allows a single copy of a single article to be made by a library on behalf of another person, provided that it is required for research or private study. Under these circumstances the British Library Document Supply Centre offers a Royalty Paid service, which means that multiple copies of an article or more than one article from the same issue cannot be copied. A fee, required for copyright law, must be paid to the UK Copyright Licensing Agency (CLA), responsible for crediting the copyright holders, normally the publishers in the case of journal articles. The CLA can give a blanket licence on behalf of copyright owners which will cover multiple copying within defined limits depending on the terms of the particular licence (Jones, 1994). These blanket licences are given mainly for educational purposes, and recently, to business and commercial users.

In cases of ILL requesting, an electronic signature is not yet acceptable. So a signed Copyright Declaration on paper is still required for requesting photocopies and routine requests, which will not be transmitted until this declaration is received. This problem is also faced in an ILL management system if it is an integrated module of a library management system where users could place ILL requests via the OPAC. In this case such self-service requesting via OPAC is not very prevalent by copyright law which in the UK requires requesters to sign a copyright declaration for photocopies.

> So here again we are restricted by legal requirements which have not kept pace with technological developments and libraries are obliged to maintain a paper record with the requester's signature (Leeves 1993, p.14).

The British Library in these cases operates a Copyright Cleared Service as a solution for the electronic requesting whereby photocopy requests are charged a flat copyright fee which the BLDSC passes to the Copyright Licensing Agency. Libraries using this service may no longer need to obtain signed declarations from requesters.

The UK government has also recently published a paper on the provision of encryption services to cover the digital signature (Anonymous, 1996) and this initiative should also be monitored by ILL providers

4.6 AMERICAN AND BRITISH ILL COPYRIGHT DECLARATIONS

In the copyright declaration requesters agree that the requester has not previously been supplied with a copy of the same material and they will not use the item except for research or private study. They must also agree that they will not supply a copy to any other person. The way that this is implemented in the USA and the UK will emerge in the results of the research study reported in the next chapters.

All requesters are therefor required to pay for any photocopies of articles they receive.

5 A STUDY OF AMERICAN ACADEMIC ILL SERVICES PROVIDED THROUGH THE INTERNET

5.1 AIMS AND METHODOLOGY

Many organizations use the Internet to provide information about their goals and services to their patrons or people who are interested to know about them. Using the Internet is an up-to-date way of providing and distributing information all over the world. The networked access that is given to users in certain organizations or services is a very important and convenient means of providing communication and information. The advantages of timely access and of on-line communication are the main characteristics of the Internet today.

This method of information and service dissemination is increasingly being used by libraries too. Libraries use this huge computer network to inform their patrons and general Internet navigators through their World-Wide-Web (WWW) sites, about their activities and the services they offer.

In contrast, Intranets are a relatively new concept as part of the Internet continuation. Whereas users of the Internet can have access from any computer across the network, Intranets restrict access to members of a single organization. Many companies now find HTML and WWW technology convenient for the distribution and transference of information to and between their workers, although the concept stems from the academic sector where Campus Wide Information Servers (CWIS), and library servers have been set up predominantly with local

users in mind (though in addition, creating a wider presence on the WWW). Companies create internal Web sites for a variety of purposes, such as making their marketing, personnel, benefits, and corporate policy information available to workers (Bickel, 1996). Universities use Intranets too, to make available curricula, scheduling, and other information campuswide.

In most academic libraries the Intranet concept has not yet been applied, so searching and navigating in these sites still possible for all Internet users. This research study takes advantage of the current situation to search British and American CWIS specifically about ILL in academic libraries, in order to identify the general approaches being taken, but more specifically to identify any innovative or particularly novel approaches being taken, so that these could act as models for other sites which may be constructed in future.

An essential tool for locating candidate sites for investigation is the *Innovative Internet Applications in Libraries(IIAL) [1996]*[*]. The IIAL is a WWW site which provides a convenient place to explore how libraries are using the Internet to improve their services and to maximize users' satisfaction. This page grows up to identify libraries that have developed interesting and innovative web pages for electronic services. Most of them are university libraries from all over the USA. Few exceptions are libraries from Switzerland, Australia, and Singapore which are also providing similar services. In any specific site, a list of the library's forms is provided for patrons to request library services via the Internet. These forms relate, for example, to:

- Inter-Library Loan (ILL) and document delivery requests
- Reference question submissions
- Literature search requests.

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[*] **The use of brackets [ ] means that the specific date of the sites' creation has not been displayed in the WWW. This is the date of accessing these sites.**

This chapter specifically concerns the ILL service policies, request forms and any other innovative approach which is provided by different university libraries in the USA.

Seventeen USA academic libraries are accessible through this site and all of them were studied to locate good examples of how USA academic libraries use the Internet for their ILL services. A further seven American academic ILL services, which were selected by serendipitous browsing through sites, looking for additional innovative Internet applications for their ILL services, were also included in the sample. A list of the Web sites visited is given in Appendix A. The following comparative study contains and analyses data from all twenty-four academic ILL services from different aspects and perspectives. The comparison between all of these cases is going to show the general approach of how USA academic libraries' use the Internet to improve their ILL services. The aspects which are discussed below are prominent features of the sites which were scrutinized.

5.2 USERS' INTRODUCTION TO THE ILL SERVICE

All American academic libraries in the sample present a text to give information about their policies and rules for their ILL service. This text is invariably an introduction for patrons who are not familiar with the ILL service in general. The main goal of these texts is to answer essential questions which patrons may have when making an ILL request. Common examples are:

- What is the ILL service ?
- Who can use this service ?
- What materials can be borrowed ?
- What are the charges ?

Libraries use different ways of providing this information according to the library's convenience or choice. The four following examples indicate how many different

ideas and methods can be used for this presentation. These methods are the most frequently met in all of the USA academic libraries included in this study.

5.2.1 Extensive information

Few libraries use the method of writing a long text which covers all information related to the ILL service and the rules they impose for their university patrons. A good example of this approach is the Louisiana State University Libraries (1994a), where a long and extensive text contains the interlibrary borrowing policies and procedures that apply in that specific academic year. A lot of information is explained in detail, covering in-depth areas such as:

- Definition of the ILL
- Eligibility for using ILL services
- Scope of materials acquired through Interlibrary Borrowing (ILB)
- ILB requests parameters
- Borrowing fees
- Limitations on types of materials, etc.

The way of writing and analyzing the various aspects and limitations in the ILL helps patrons to understand and evaluate its role within the university.

This way of providing information on ILL services seems to be a convenient way of promoting the service and also of informing the users about an area that they do not know so well. The library is a non-profit organization and usually people do not appreciate its services and activities until they need them. The Internet is a valuable means of transferring these services and information about the library's functions to people.

The ILL service, even though it is an established library facility, has undergone many recent changes which are driving it to use more modern applications within

its processes. The rapid IT improvements compel ILL services to use innovations with which patrons need to be familiar with and also kept updated. Information about the ILL service in this Web site helps users to have an answer to many of their questions from the networked information instead of asking library staff during specific working hours.

5.2.2 Most important information

Most of the examples studied provide only the most important information related to their policies and procedures. It is usually a short text where crucial information is presented to familiarize the patrons with the rules and the ILL's operation. Usually a very brief definition is given at the beginning, followed by information about:

- What materials can be borrowed ?
- How patrons can make a request ?

At the end of this text, there is a telephone number and names of the staff in charge where questions can be answered or further information can be given. An example of this is the Indiana University-Bloomington Libraries [1996] where the information is not extensive but can easily cover most of the patrons' questions concerning the ILL service.

This method is the most preferable way of providing information on the ILL service because it contains exactly the necessary information for people who need a quick answer for their questions. They can have this information without spending more than the appropriate time. From the librarian's or home page provider's point of view this is also practical and an easier method of dealing with the majority of queries.

5.2.3 Brief introduction

A small number of these libraries use the Internet only to provide their Web request forms, e.g. Bowman Gray School of Medicine Library [1996]. They do not give further information about the ILL service and they directly display their ILL request forms. In some of these examples, staff names and addresses are given in case of problems which may arise. One example of using this method is the University of Rochester Library (1996) where a very brief ILL definition is given followed by the two Web ILL request forms (see Figure 5.1). This method is not recommended because, in cases of questions or misunderstandings, patrons have to contact staff for explanations. The use of the Internet in these cases does not serve either the library or the patrons except for ILL requesting.

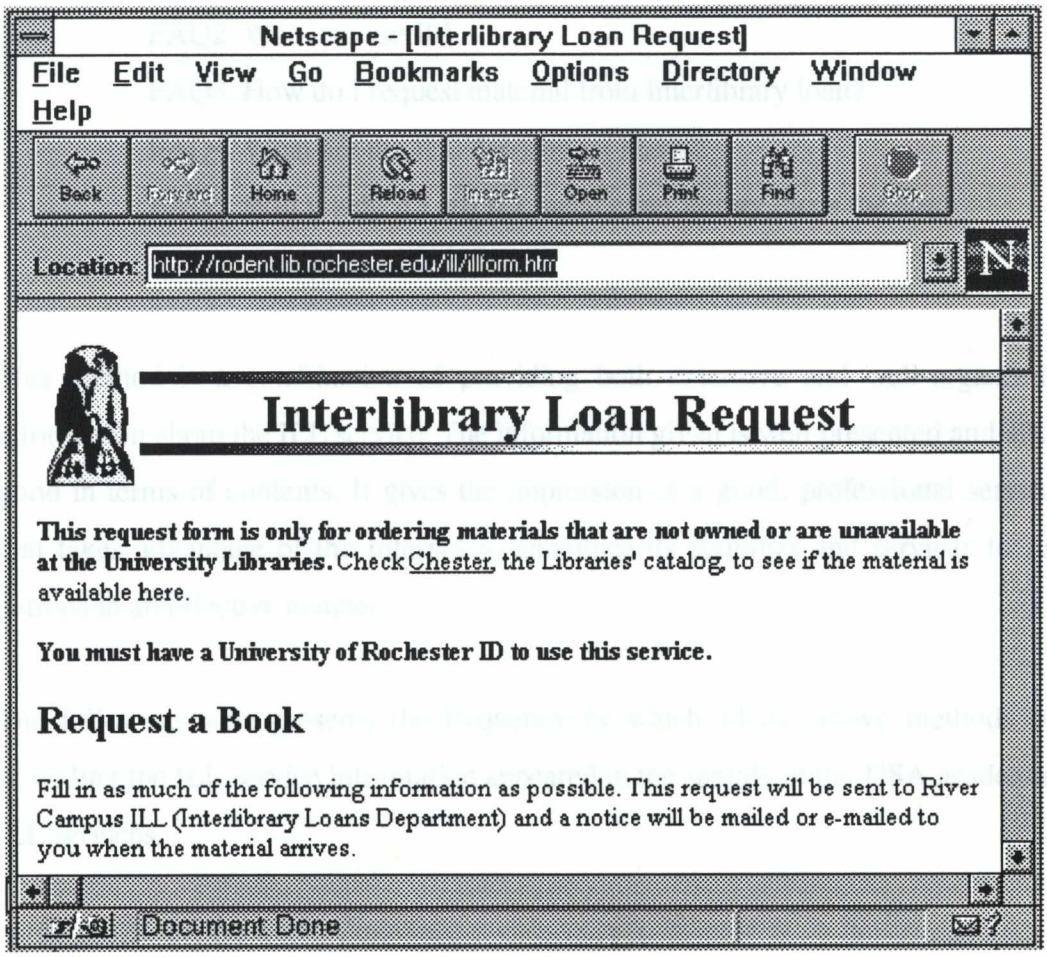


Figure 5.1 **Brief Introduction**

5.2.4 Use of the FAQs method

An innovative way of providing descriptive text on the ILL service is the system of answering the most "Frequently Asked Questions". By clicking on the listed question the user can have the answer displayed in a different screen environment. In this way, the user can easily access the information wanted without the need for browsing or scrolling through long texts. The only example in all of the USA academic libraries that have been studied is the Colorado State University Libraries [1996a], where the most frequent questions are displayed in hypertext form. Clicking on any specific question gives its answer in different WWW environment. Examples of these questions are:

FAQ1. What is Interlibrary Loan?
FAQ2. Who can use ILL?
FAQ3. How do I request material from interlibrary loan?
FAQ4. What are the ILL department hours?
FAQ5. Will it help if I tell ILL what other library owns the item that I am looking for?

This method is a combination of providing both extensive and well-organized information about the ILL service. The information given is well presented and also good in terms of contents. It gives the impression of a good, professional service that takes advantage of the Internet to announce its activities and services to its patrons in an effective manner.

The following table presents the frequency by which all the above methods of providing the ILL service information appeared in the sample of the USA academic ILL services.

METHODS OF PROVIDING INFORMATION ON ILL SERVICES	No. of LIBRARIES
Extensive information	6
Most useful information	13
Brief introduction	4
Use of the FAQs method	1

Table 5.1 **Methods of providing information about ILL services**

5.3 POLICIES OF THE AMERICAN ACADEMIC ILL SERVICES

Through searching the different policy statements of the USA academic ILL services, some common characteristics can be identified. The information provided is mainly similar among all of them with a few exceptions. These exceptions are important for observing how libraries create their policies according to their university's standards and needs and illustrate how academic libraries can establish very different identities and service profiles. The following characteristics are the most frequently appeared and analyzed in these libraries.

5.3.1 Links between the ILL service and the OPAC

One of the main principles of the ILL service is to avoid requesting materials that the library already stocks. In most of the sample ILL policies, the instruction to check the on-line catalogue before ordering is very prominent (see Figure 5.3). A good example, but not so often met, of convenient access to these library catalogues, is the link provided within ILL request forms. Using this method, users do not have to spend their time initiating an OPAC search by using a different procedure. Equally, the ILL service avoids stimulating requests that are unnecessary. For example, the Case Western Reserve University Library [1996] gives access through its ILL requests forms, to the EuclidPLUS, the on-line catalog, and to OhioLINK, the state-wide system, in order to help its patrons verify that the title is not available in local libraries, before submitting their interlibrary loan request.

5.3.2 Who can use the ILL service ?

In most cases the patrons who were allowed to use ILL services must be members of the university community, either faculty, staff or students. Some exceptions are alumni or holders of the special library borrower card under certain conditions, for example, research involvement or visiting scholars. Northwestern University Library (1995a) offers this service to its alumni and guest borrowers with valid borrowing cards. The University of Alaska Anchorage Libraries [1996] provides the ILL service to patrons who have the card of GNOSIS (Global Network Of Silicon Information Services). These guest patrons have to give $60.00 deposit plus a fee of $8.00 per request or fee for any further service, whilst there is not any fee application on regular requests for official patrons. A unique example, within the sample, which is offering the ILL service to people not associated with the university, is the University of Kansas Medical Center Library [1996] where the service is provided to everyone who is interested to use it, but with the commitment of following all the ILL rules and all payment procedures.

The following table presents the categories of patrons eligible to use the academic ILL services. Looking through it, we can see that faculty, students and other university staff are included in all cases as would be expected. A few libraries defined patrons as library borrowing card holders in general, without any clear specifications. Only two libraries do not give any information about categories or limitations, something which presumably means that they accept at least the three above main categories, i.e. faculty, other staff, students.

CATEGORIES OF USERS	No. of LIBRARIES (N=24)
Faculty	22
Students	22
Other staff	22
Library card holders	5
Non members of the university	2
No mention	2

Table 5.2 **Eligible categories of users of the ILL services**

5.3.3 What materials can be borrowed ?

Lending and photocopying policies vary widely from library to library. Materials that may be borrowed are displayed in the table below with reference to the number of libraries that mention them specifically on their Web pages. Not all of the libraries explain all categories in detail, but this list covers the most frequently-mentioned materials. Certain libraries, for example, do not lend some categories of materials, like theses or dissertations, but some others do.

WHAT MATERIALS CAN BE BORROWED (specifically mentioned)	No. of LIBRARIES (N=24)
Books/monographs	24
Photocopies of journal articles	24
Dissertations	10
Theses	8
Positive microforms	5
Copies of microfilm	4
Photocopies within a book	4
Reports	3
Copies of microfiche	3
Government documents	3
Newspapers available in microform	3
Patents	2
Conference papers	2
Technical reports	1
Audiovisual	2
Items that are missing in the university library collection or are unavailable indefinitely	1

Table 5.3 **Materials that can be borrowed through ILL**

5.3.4 Which materials cannot be borrowed ?

In addition to the materials that can be borrowed through the ILL services, there are also materials that cannot be supplied for various reasons. Each library follows its own policy for this according to the lending libraries' policy and what kind of materials they are willing to lend. In cases where materials are unavailable for

borrowing, the Case Western Reserve University Library [1996] for example, can provide information to enable the borrower to purchase the materials or visit a library that holds them, through its department of Access Services. Dissertations or theses are usually not recommended for request, although their microfilm can often be obtained from the University Microfilms service. These materials can be supplied under specific agreements or procedures, e.g. specific declaration signature from the user. The American National Interlibrary Loan Code (ALA, 1993) gives guidelines in these cases which prohibit libraries from requesting items that they do not normally supply themselves, such as reference or audiovisual materials.

Within the research sample a lot of categories of materials were mentioned as "non-borrowable" through the ILL. The following table lists the categories specifically mentioned by the frequency with which they appeared in the twenty-four libraries.

WHICH MATERIALS CAN NOT BE BORROWED? (Specifically mentioned)	**No. of LIBRARIES (N=24)**
Materials that are already owned by the specific university library	24
Dissertations	7
Single issues or volumes of serials or journals	6
Rare items	5
Reference materials	5
Fragile or poor condition materials	4
Theses	4
Audiovisual materials (e.g. sound and video materials, recording, videocassettes, microforms)	4
Manuscript materials	3
Recently published books (in the last year)	3
Books to place on reserve for group use	2
Complete issues of newspapers	2
Material published before 1800	2
Materials that a particular library is unwilling to lend	1
Monographic materials published before 1900	1
Textbooks for classes	1

Table 5.4 **Materials that cannot be borrowed by ILL**

5.4 COPYRIGHT RESTRICTIONS

The ILL service provision is strongly bound by copyright issues. All libraries must respect the proprietary rights of the owners of copyrighted materials. Warnings concerning copyright restrictions are presented on every web photocopy request form. The same paragraph appears at the beginning of each form worded according to the Copyright Law of United States (Title 17, United States Code).

In some cases, the patron has to click on to the positive answer of agreement on the current copyright law in order to be able to complete an ILL request form otherwise the request will be returned or canceled (see Figure 5.2). The individual

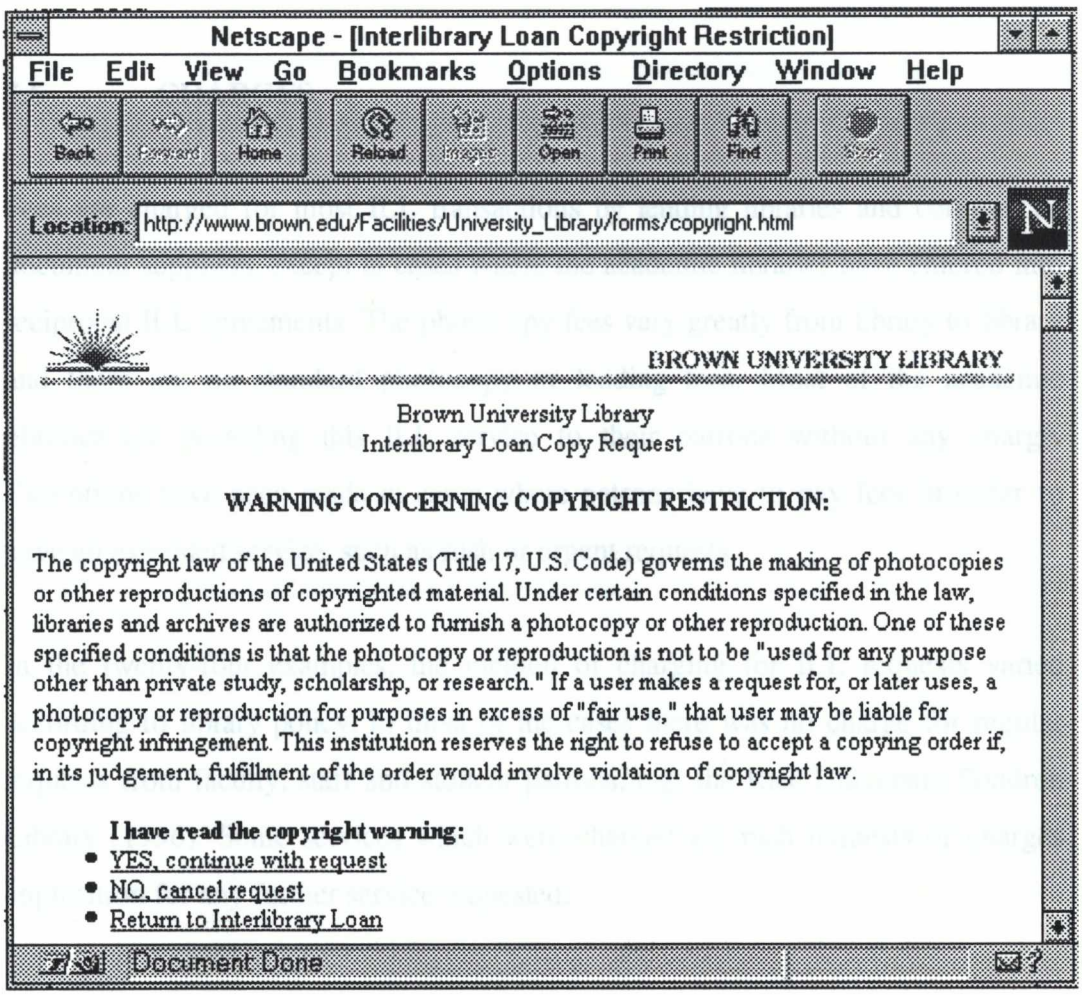


Figure 5.2 **Copyright Restrictions**

borrower is regarded as responsible for any infringement of this Copyright Law in respect of materials on loan from other libraries and should not let others use the book secured on loan unless special arrangements have been made. One of the specified conditions of the law is that the photocopy is not to be "used for any purpose of other than private study, scholarship or research".

The libraries are also limited by this law to the number of articles they request from any given journal. Libraries can order only five articles per year from a single journal title for all users. Additional copies from the same title must be purchased from commercial document supply services which charge processing and copyright fees, such as Louisiana State University Libraries (1994a) mentioned in their ILL policy.

5.5 CHARGES

Fees are charged for most ILL transactions by lending libraries and commercial document suppliers, except in cases where the academic libraries have entered into reciprocal ILL agreements. The photocopy fees vary greatly from library to library and there are no standard photocopy or lending fees. Most of the academic libraries are providing this ILL service to their patrons without any charge. Exceptions have been made in cases where patrons have to pay fees in order to have an extended service, such as rush or urgent requests.

In the twenty-four examples, the method of charging for ILL requests varied according to library policy. In most of the cases there was no charge for regular requests from faculty, staff and student patrons, e.g. the Rice University Fondren Library (1996). Some services which were charged are rush requests or charges application for any further service requested.

5.5.1 Rush requests

When there is a rush or urgent request, the patron is asked to pay the fee for the process needed, such as for fax or any other further delivery expenses. Mercer University Library [1996] charges patrons with $5.00 per fax request. Only one example provided rush requests free to its patrons but with limited number, which is the University of Tennessee Knoxville Libraries (1996).

5.5.2 The option of how much a patron is willing to pay for a specific request

Within some Web request forms there is a question where patrons are asked how much they are willing to pay for cases where the request needs additional expenses or different procedures for fulfillment. For example the Florida Atlantic University Libraries (1996a) and the University of Maine Fogler Library (1996) Web request forms do this by giving specific prices for selection. This is a practical and convenient way from the patron's point of view to prioritize their requests. From the library's point of view it is also important to avoid processing low priority requests with higher costs.

5.5.3 Charges for special materials

Some academic ILL services take the responsibly to obtain atypical materials on behalf of their patrons. These services are usually charged. For example, the John Hopkins School of Medicine Welch Medical Library [1996] acquires patents which are not normally supplied officially but the patron has to pay the charges incurred for the patent plus a $2.00 processing fee.

ILL CHARGING POLICIES (Specifically Mentioned)	No. of LIBRARIES (N=24)
No charge for regular request to eligible patrons	16
Charges for speed deliver/rush requests	9
Providing the option of how much the patron is willing to pay	7
Charges for all patrons	4
Charges for borrowing/copyright fee for single requests exceeding normal cost	3
Charging only for specific categories of materials e.g. patents, theses, reports, standards	2
Charge fees to patrons' departments	2
Free rush/urgent requests	1
Charges only for journal article photocopy	1

Table 5.5 **ILL charging policies**

The above table contains the different ways of charging as they appeared in these ILL policies. There is no common policy about charging and every library has its own priorities to decide upon the charging method.

5.6 TIME NEEDED TO OBTAIN A MATERIAL

The anticipated time needed to fulfill a request varies considerably from one library to another and depends on:

- Thoroughness of information supplied by requester
- Location of library owning the material
- Availability of material at the time of the request
- Speed of the lending library in processing and sending the material
- Speed of delivery

Most of the sample's libraries generally agree that two weeks is the expected time to receive an item from in-state libraries and four weeks from libraries outside of

the state. When there is an urgent request, material may be obtained within 24 hours by a speed delivery service, such as fax, e-mail, or by other electronic means. The following table presents the turnaround time needed for the materials to be obtained in relation to their mode of delivery.

CASES OF MATERIALS THAT NEEDED TO BE OBTAINED	TIME NEEDED	WAY OF DELIVERY
Obtaining ILL materials - Urgent or rush requests	within 24 hours	By Fax or electronic delivery methods
Obtaining ILL materials from in state libraries - regular requests	1-2 weeks	By Mail
Obtaining ILL materials from libraries outside the state - regular requests	2-5 weeks	By Mail

Table 5.6 **Turnaround time for obtaining ILL materials**

5.7 WHEN MATERIALS MUST BE RETURNED

ILL materials are mainly loaned to borrowers normally for three weeks, or in a few cases 30 days, according to Florida Atlantic University Libraries (1996b). This period depends usually on the Lending Library's policy. Renewing may be done three or four days before the due day, something which is not often recommended because it is possible that same request could also be done from a different library's patron. Failure to return or renew materials on time may result in the curtailment of borrowing privileges and more generally in the borrowing library's reputation. Borrowers are considered to be responsible for any material they borrow and in cases where it is lost or destroyed they have to pay the relevant fees.

5.8 WAYS OF SUBMITTING ILL REQUESTS

The traditional way of submitting paper ILL request forms directly to ILL departments or to the library issue desk is still available in all of these ILL services. IT, and more specifically the Internet, have influenced this academic library service giving to patrons the chance to submit their requests by using electronic and on-

line methods. The extent to which traditional ways of submitting ILL request forms has been replaced by electronic means, such as telnet, e-mail or directly through WWW, is not widely known yet, although it is recognized that they offer the potential to make the ILL process easier and quicker. All the examples of the selected libraries have adopted one or more of these methods for submission of ILL requests. These methods are obviously convenient for both patrons and ILL services.

The above mentioned three ways of submitting electronically ILL requests forms are described below according to how they were presented in the WWW from different academic libraries as a mean to provide their ILL services.

5.8.1 Via WWW

A modern way of submitting request forms is directly via the WWW. ILL services provide Web-based form(s) ready to be completed by the patron with all the information needed. Patrons can have access to this service by using mainly their valid ID number. For users who are not associated with any university's affiliation there is no response, even though these forms are accessible to all WWW users. The university patrons have to complete valid personal and material information and send them on-line to the ILL department by clicking on the submitting option. This method is a new and innovative way of submitting ILL request forms. From the patrons' point of view, all electronic forms for ILL requesting offer considerable convenience, including access from home or office, and avoid the need to fill in personal information for every request, as it is needed for a paper request form. In some cases, bibliographic details of the requested item can be "cut and pasted" from their source. From the ILL services point of view, this method provides a clean, and legible request.

5.8.2 Via telnet through WWW

This method is one step behind the previous one where ILL request forms are provided directly by the WWW server. In these cases the WWW forms are not, most probably, ready to be provided so the specific ILL service gives access from its home page to the ILL request system used such as via telnet. Some other libraries use both ways simultaneously to give patrons more choices in submitting their requests though probably the older, telnet services are not being withdrawn once the Web pages are introduced. Colorado State University Libraries [1996b], for example, provides telnet access to its patrons for submitting requests where no password or e-mail account is needed or alternatively patrons can use the WWW request form according to preference.

In addition to this case, the University of Tennessee Knoxville Libraries (1996) use the WWW to provide only telnet access to their patrons for submitting their ILL requests (see Figure 5.5.). A convenient and user-friendly ILL requesting system is displayed which can be accessed with a log in provided

5.8.3 Via e-mail through WWW

For the patrons' convenience, some ILL services provide the facility of requesting ILL materials through e-mail. Patrons can send their requests to the e-mail address given by the ILL service, containing the necessary bibliographical information for their materials requested. An example of this case is the Louisiana State University Libraries (1994b) which provides this facility in addition to the WWW request forms (see Figure 5.3).

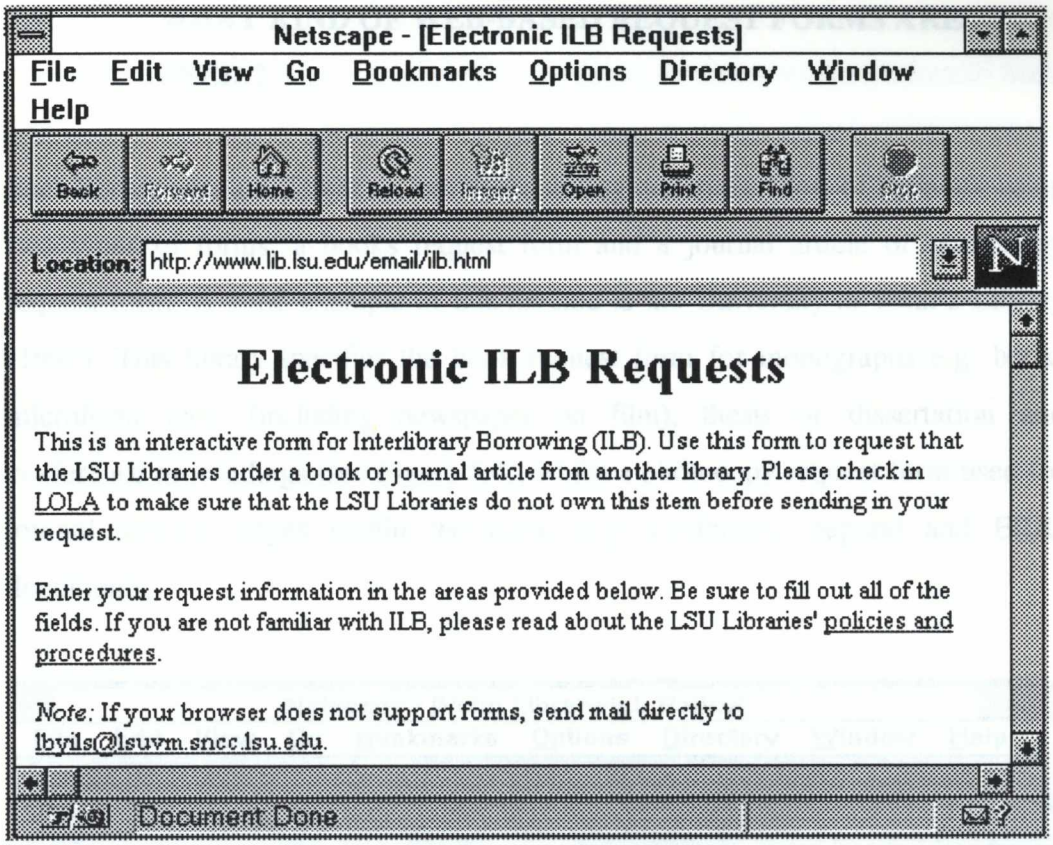


Figure 5.3 **Requesting via e-mail through WWW**

The Oregon State University Libraries [1996] offer to their patrons who are using UNIX gopher the option of requesting through the e-mail too. A specific request form is provided which can be downloaded to patrons' e-mail accounts and be re-used whenever patrons want to. The following table shows the methods of submitting ILL request forms in relation to the number of the libraries that used each one of these methods. Most of the libraries provide WWW ILL request forms. There was only one exception within these examples which provides only telnet access to its patrons for their ILL requests without using the WWW ILL request form.

WAYS OF SUBMITTING ELECTRONICALLY ILL REQUEST FORMS	No of LIBRARIES (N=24)
Requesting by forms provided via WWW	23
Requesting via E-mail through WWW	5
Requesting via telnet through WWW	2

Table 5.7 **Ways of submitting ILL requests electronically**

5.9 WHAT KIND OF WEB-BASED REQUEST FORMS ARE USED ?

Each library uses a different system of requesting materials. Most of them are using two types of forms: a books request form and a journal article or photocopy request form. A good example of this method is the University of Penn's Library (1995). This library specifies the book request form for monographs e.g. book, microform reels (including newspaper on film), thesis or dissertation and conference proceedings (see Figure 5.4), whilst a photocopy request form used for journal articles, pages within the book (e.g. conference papers) and ERIC documents.

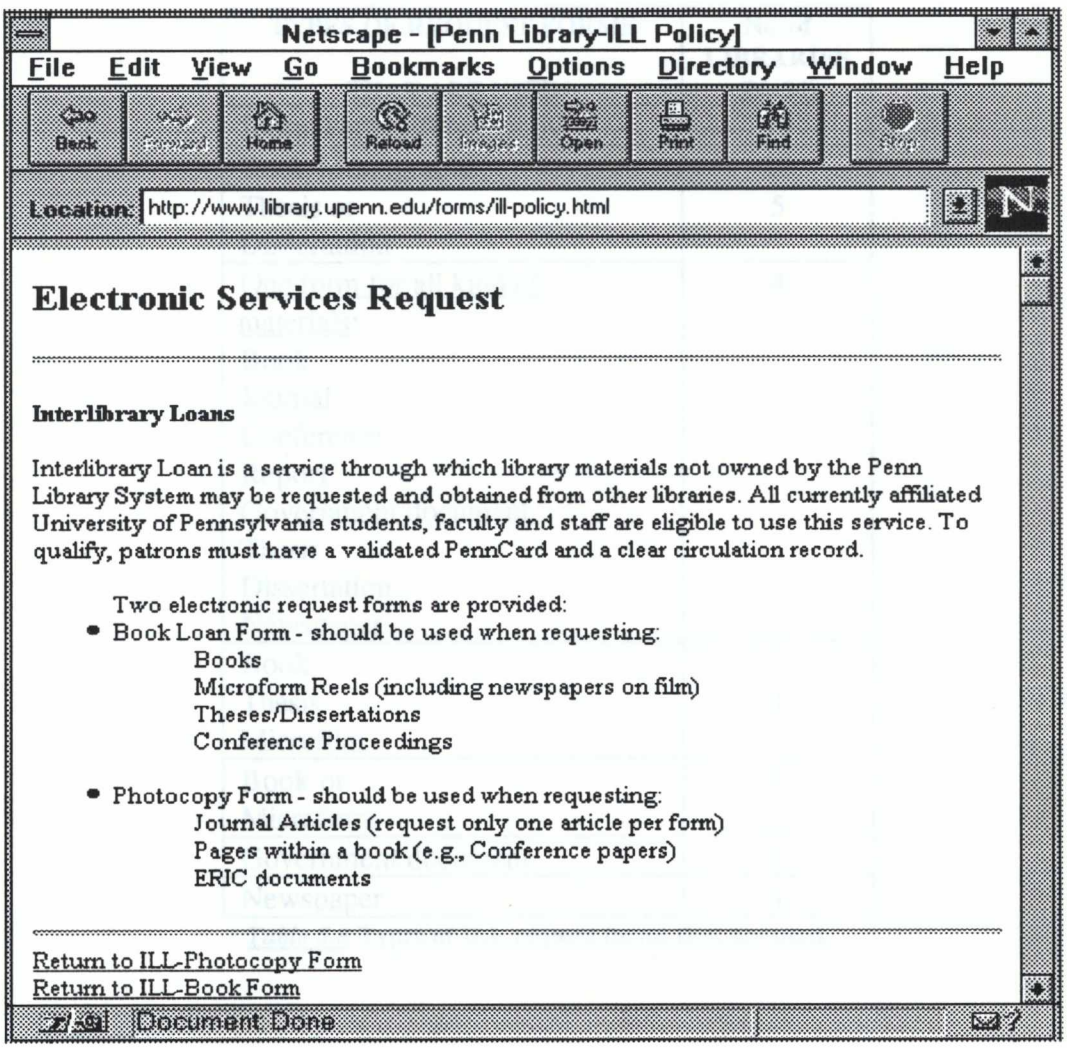


Figure 5.4 **Kinds of Web-based ILL request forms**

In a few other cases, four different types of requesting forms are used: for books, journal articles, government documents and theses or dissertations. Colorado State University Libraries [1996c] and Northwestern University Library (1995b) use a separate form for newspaper requests. One library that uses one form for all kind of materials is the Louisiana State University Libraries (1994b) and on this, all the categories of materials are displayed with the possibility to select the appropriate category for each request.

The following table shows how many different request forms are provided within all these examples. Some of them are very common and some others are only used by one library.

TYPES OF REQUEST FORMS THAT ARE USED	No. of LIBRARIES (N=24)
Journal article/Photocopy	19
Book/Monographs	18
Thesis or Dissertation	5
One form for all kind of materials: Book Journal Conference Report Government document Thesis Dissertation Newspaper	4
Book Thesis Microfilm	1
Book or Microform	1
Government document	1
Newspaper	1

Table 5.8 **Types of ILL request forms that are used**

Ways of providing ILL request forms depend on the policies and decisions of each library. There is no common strategy of what request forms should be specifically

provided. The University of Tennessee Knoxville Libraries (1996), although only uses telnet to give access to its patrons for requesting, employs a very well organised ILL request system where patrons can request materials by category, such as book, report, or thesis(see Figure 5.5). Each one of these categories has a different record that must be filled with the appropriate information for a clear, correct and valid request.

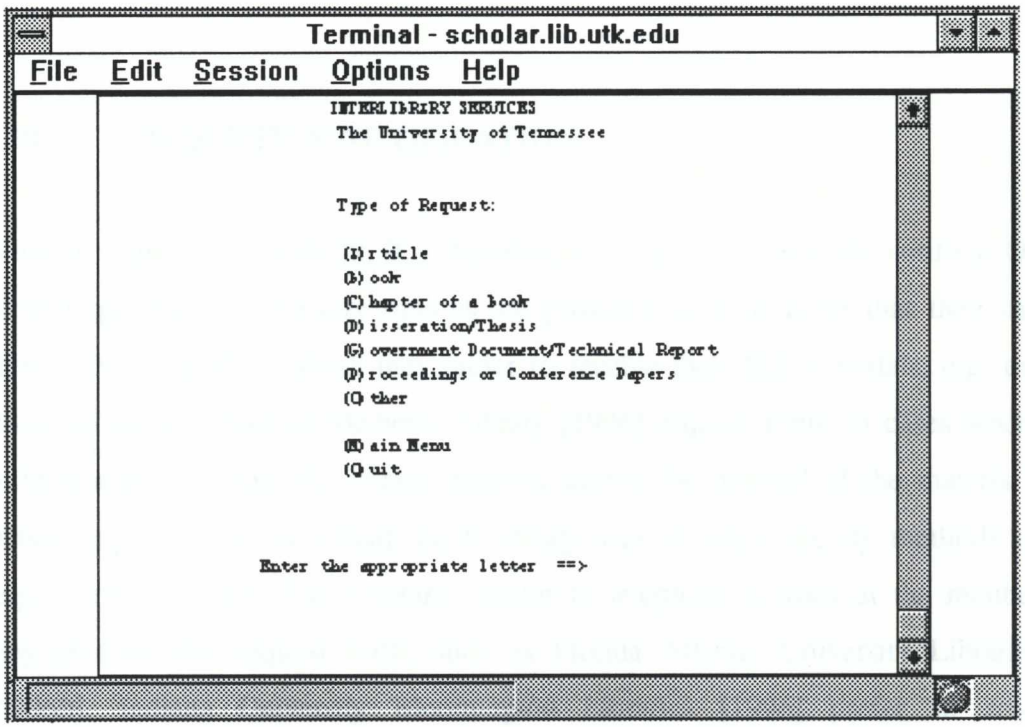


Figure 5.5 **ILL requests forms via telnet**

Different bibliographical information is needed for different requested materials and users sometimes are not familiar with what is appropriate in each case. In these cases, patrons need to follow the directions in order to complete the requesting forms correctly. Giving separate request forms for every category of material is helpful for patrons and enhances the organisation of the ILL department's data.

The table below presents the number of the Web-based ILL request forms that are offered in the sample in relation to the number of the libraries which prefer any combination:

HOW MANY ILL REQUEST FORMS THE DO THE LIBRARIES USE	No. of LIBRARIES
2 (two)forms	13
1 (one) form	4
4 (four) forms	2
3 (three) forms	1
Requesting only via telnet	1
No access to any form	1

Table 5.9 **How many ILL request forms are usually used**

5.10 REQUESTER NOTIFICATION

When a request arrives in the ILL department, the patron has to be notified. On some request forms, delivery options are provided to patrons so that they can choose the method by which they prefer to receive their ILL materials, e.g. the Bowman Gray School of Medicine Library [1996] request form. In cases where collection is only from the library, patrons have to be notified of the material's arrival, e.g. by post or e-mail. Each library uses different speedy methods of requester notification. Some libraries prefer to telephone patrons at the number they give on the request form, such as Florida Atlantic University Libraries [1996b]. Indiana University Bloomington Libraries [1996] prefer to send notification to the address currently used for correspondence in the libraries' patron database whilst George Mason University Libraries [1996] use e-mail to confirm the transaction.

5.11 CONCLUSION

The American academic ILL services use the Internet extensively to provide information and services to their patrons. With the availability of the direct access to library catalogue (OPAC) and the access to the Web-based request forms, ILL services can greatly enhance the facilities and services they can offer to their patrons. The information given in these sites about the ILL service itself and about

the policy followed can keep the users informed and updated about any of their ILL needs. The way by which these libraries process their ILL service can be easily distinguished among equivalent services in different countries either for similarities or differences. Some examples of these ILL policies and methods of ILL processing can be adopted by other academic libraries which have similar methods of operating an ILL service.

6 SURVEY OF THE AMERICAN ACADEMIC ILL SERVICES

6.1 AIMS AND METHODOLOGY

A Questionnaire (Appendix C) was sent to the twenty-four American academic ILL services (Appendix A) in the USA. Out of these, five responded giving a response rate of only 21%. The questionnaire was divided into two areas:

- WWW request forms
- Electronic Document Delivery

Because of the limited response from American ILL services to the questionnaire, it has been decided to use the response from the University of Penn's Library as a case study for the American ILL services since this one provided the best and more comprehensive data about the subject.

6.2 CASE STUDY OF THE UNIVERSITY OF PENN'S ILL SERVICE

6.2.1 About WWW ILL request forms

6.2.1.1 For how long have they used the Internet for their ILL service (Question 1)

The University of Penn's library has been using the Internet for its ILL service for more than a year in order to provide information about ILL, WWW ILL request forms and Electronic Document Delivery.

6.2.1.2 Methods of receiving ILL requests (Question 2)

A popular method of receiving ILL requests, in addition to the WWW requests forms, are by e-mail, even though the library does not actively solicit unformed e-mail requests. The library receives also electronic requests through the Research Libraries Group Eureka database. Eureka has the REQ function which allows patrons to browse the database to select items desired and create a request that is forwarded to the home ILL departments e-mail account. The request includes the full bibliographic record and the owning locations as indicated by Eureka.

6.2.1.3 The percentage of using WWW request forms within one year (Question 2a and 2b)

The University of Penn's library noticed that since the time they began to accept electronic requests forms (WWW and Eureka), since March 1995, the first month their statistics showed that 19% of all requests were electronic. The volume of

electronic requesting increased steadily, and according to their last statistics, from October 1995 through February 1996 the electronic requesting was in excess of 50% of all requests.

6.2.1.4 How the introduction of WWW request forms influences the total number of ILL requests (Question 3, 3a)

Introducing the WWW requests forms in the University of Penn's Library has served to increase the total number of all requests (for loans and photocopies) by about 15%. In very busy months like September, the increase has been more than 55%. Introduction of the WWW requests forms are considered a substantial reason for this increase, along with one other major factor, the addition of new citation databases which may also have had a main impact on the number of requests.

6.2.1.5 The patrons' response to the WWW request forms (Question 4)

Patrons' response to these forms has been very positive and favorable. All groups of patrons are willing to use them and even longtime faculty members are now using these forms without any problems. There are also some patrons who are interested to know further information about them and about how can they be completed. The facility provided for "cut and paste" from other bibliographic sources makes the use of these forms much easier compared with the paper ILL request forms.

6.2.1.6 Training for using WWW request forms (Question 5)

Training is available in form usage during general library training and orientation sessions. There is no organized training specifically for ILL submission or forms completion.

6.2.2 ABOUT ILL AND DOCUMENT DELIVERY

6.2.2.1 What are the providers of ILL document requests (Question 6)

The providers of the University of Penn's Library ILL requests are mainly Regional Library Co-operation, Commercial Document Delivery Services and they also belong to the Research Libraries Group (RLG) ShaRes program of resource sharing which is operating through the RLIN sub-system.

6.2.2.2 Methods of Document Delivery to/from library (Question 8, 8a, 8b)

The following table shows the preferable ways of delivering documents between University of Penn's Library and other libraries and also from the library to patrons. The Internet is the preferred method of delivery between libraries that are using the ARIEL system. Fax is used for sending and receiving among libraries and between libraries and patrons, but to a limited extent and only if it is necessary. Courier is used more often between libraries for returnable materials, such as United Parcel Service, whilst post is used only for international air mail. For delivery to patrons they use the postal services only for photocopies whilst returnable loans, like books, must be collected from the library.

	Delivery to other libraries	Delivery to the library	Delivery to patrons
Courier	X	X	
Fax	X	X	X
Post		X	X
Internet	X	X	
Collecting from the library			X

Table 6.1 **Methods of document delivery**

6.2.2.3 The percentage of the documents that are supplied to the library by different methods (Question 9)

The data given from the University of Penn's library about the percentage of documents received by different methods shows that the Internet is the main method of transferring documents (especially journal articles) with a percentage of 70%. The hardcopy methods are also used but at a much lower level of 30%. Even though the fax service is used for document delivery, it is not preferred as it was a few years ago. Its present use is less than 2%.

6.2.2.5 Comments about using document delivery through the Internet (Question 10)

After experiencing the use of the Internet for document delivery, the University of Penn's ILL service has noticed an improvement in the ILL service for patrons and borrowing libraries for providing faster and more effective document delivery. They believe that Internet transmission via ARIEL is faster and cheaper since the University of Penn's library use student assistants for document scanning, transmission and receipt.

6.2.2.6 Patrons notification of receipt ILL materials (Question 11)

The patron notification about the material's arrival is mainly by telephone. The e-mail is still the preferred method for the ILL service if patrons provide their electronic address on their request forms. Paper method is used only as a last resort if patrons cannot be contacted using the above methods.

6.2.2.7 Staff changes implemented for using IT for ILL and document delivery (Question 12)

After introducing IT for ILL and document delivery activities, the changes implemented were mainly the need to cover the cost of appointing non-professional staff and making a heavy use of part-time student assistants to accomplished more of the routine tasks.

6.2.2.8 Software and hardware needed for applying document delivery through the Internet (Question 13)

The equipment necessary for operating an electronic document delivery are mainly scanners and computers, The University of Penn's ILL service purchased a scanner, printers and computers to utilize the ARIEL Software. They also upgraded all staff workstations to Pentium machines with Internet access for replacing the single-purpose low-end computers.

6.2.2.9 Maintaining software and hardware for ILL service (Question 14)

The maintenance of software and hardware needed in the ILL service is essential for the normal and continuing operation of the ILL activities. To solve every day

problems and technical needs, the University of Penn's ILL service has appointed its own technical staff to support the service. The library staff are also capable of dealing with day-to-day simple technical problems. External contractors are a final resort since all equipment has a maintenance contract.

6.3 CONCLUSION

The survey has shown an extensive use of the Internet in American Academic ILL services. The provision of Web-based ILL request forms as an auxiliary service for ILL requesting has influenced the nature of the ILL in general. The patrons have found it quite helpful and convenient for their needs. The use of the Internet in document supply and in communication with cooperative libraries and patrons has been a valuable means of processing any relevant ILL activities. It is obvious that the benefits of the Internet availability help libraries to provide effective, faster and convenient access to its services and keep its patrons informed about any progress on their requests.

7 A STUDY OF BRITISH ACADEMIC ILL SERVICES PROVIDED THROUGH THE INTERNET

7.1 AIMS AND METHODOLOGY

In addition to the American academic ILL services provided through the Internet, there are also the equivalent example of the British academic ILL services. Both of them are using the Internet in accordance with their library's policies to facilitate ILL activities. Different methods are used by British libraries who want to provide their ILL policy through the Internet. Most of them use the Internet to give only the information required about the ILL service and how the patrons can access it and use it.

Twenty-four academic ILL services (see Appendix B) were accessed for this study through the Internet. All of them were selected by serendipitous browsing through UK university sites looking for innovative Internet applications in the area of ILL. Many British universities' sites do not give any specific information about their ILL on their Web-server. In some examples the library service, as a general facility within the university is not provided for general public access. A possible reason for this must be the introduction of the Intranet application which keeps access to the library server only for university members. It is also possible that these libraries have not yet introduced the Internet for their ILL provision.

7.2 LACK OF WEB-BASED ILL REQUEST FORMS

A comparison between the American and the British academic ILL services shows a major difference in using the Internet, which is the total absence of use of any Web-based request form by British ILL services at the time of writing. Clients do not actually have the facility of on-line requesting through the Internet while they are away from the library. The only way of submitting their requests is via paper cards or via ILL management systems, if the specific software exists, in the library or on the campus network. As aforemention (chapter 4) this is because electronic signatures on the ILL request form are not currently feasible or acceptable.

7.3 APPROACHES TAKEN BY UK ACADEMIC ILL SERVICES

The UK academic libraries selected in this study present their policy about ILL in different ways. Most of them gave some information about the service in general, and instructions about how to submit ILL requests. Some others mention only that the ILL service exists.

There is no standard model followed by the libraries about how this information should be presented. It appears that every university has worked independently to write its own Web pages. The following four methods appeared to be as the most frequently used in these library samples.

7.3.1 Extensive information

Many ILL academic services use the Internet to provide the library's general policy followed in the ILL service. They gave information about different approaches related to this area and also provide this information in detail. The Open University Library (1996) is an example of using this method where the information given is covering in detail the ILL relevant issues. Eight out of the twenty-four ILL services

prefer this method as a convenient means of facilitating the information provision to their patrons.

7.3.2 Most important information

This method is used very often in order to inform the patrons about the ILL service and about the facilities it offers. Usually it has the form of a short text separated in paragraphs describing different areas, such as materials requested, requesting procedures. An example of using this method is the Leicester De Montfort University Library (1995) which is providing clearly the information needed.

7.3.3 Brief introduction

In some cases there was a brief introduction about the ILL service without any further details. Seven libraries presented the ILL service very briefly, accompanied with contact information for the librarian responsible for answering any further questions , e.g. University of Bath Library (1996). Usually the definition of the ILL service was given with a brief information about the service and about any restrictions applied to its use.

7.3.4 Use of the FAQs method

The method of answering the "Frequent Asked Questions" is used only by the University of Central Lancashire Library [1996] where questions (two questions) about the ILL are included with all the questions provided that are related to the library as a general service. The ILL service is not displayed on a separate home page (which is more typical) but comprises part of the general information about

the library. The following table shows the frequency of using the above methods of presenting information on ILL service.

METHODS OF PROVIDING INFORMATION ABOUT ILL SERVICES	No. of LIBRARIES (N=24)
Extensive Information	**8**
Most useful information	**8**
Brief introduction	**7**
Use of the FAQs method	**1**

Table 7.1 **Methods of providing information about the ILL services**

7.4 POLICIES OF THE UK ACADEMIC ILL SERVICES

The sample libraries have different ideas and approaches in writing the ILL policy and providing it through the Internet. Their policies varied considerably depending on, for example, the users who can use the service and on the materials that can be borrowed through the ILL. According to the information provided a comparison between them is going to give the general approach of the UK academic libraries in the ILL areas. Due to the different information given, there are examples that do not give information about a specific area, e.g. users' categories, borrowing restrictions and in these cases the certain libraries are not included as part of the sample.

7.4.1 Who can use the ILL service ?

The British academic libraries mainly provide this service for research and academic purposes. Postgraduate students, final year undergraduate students and academic staff who are involved in academic research are eligible to use the ILL. For categories of other users such as first years undergraduate students and people who are not members of the university, different procedures and different charging policies are adopted, e.g. requests must be signed by students' tutors or otherwise students must pay any ILL expenses themselves.

The following table shows how the libraries in the sample shape their policy for people eligible to use the ILL service.

WHO CAN USE THE ILL SERVICE (Specifically mentioned)	No of LIBRARIES N=24
Undergraduates and postgraduates taught course students with requests counter-signed by their tutor or an authorised individual	11
Postgraduates (academic and research)	8
Staff involved in course writing or university supported research study	7
All members of the university	6
All members and not members of the University	5

Table 7.2 **Who can use the ILL service**

7.4.2 What materials can be borrowed through ILL ?

There is a wide range of materials that can be requested from the ILL service. Usually libraries accept requests for books and journal articles which are most commonly used. In other cases, such as theses and patents, there is also the possibility of obtaining them by using different procedure.

MATERIALS THAT CAN BE BORROWED THROUGH THE ILL (Specifically Mentioned)	No of LIBRARIES (N=24)
Materials not held in the library	24
Books/monographs	24
Journal articles	24
Theses	11
Conference proceeding	8
Microforms	4
Reports	3
Patents	3
Standards	2

Table 7.3 **Materials that can be borrowed through the ILL**

The above table presents the materials that are clearly mentioned for borrowing from other libraries. The number of libraries indicates how many of them give, in their policy, the right to their patrons to ask for certain materials. Most probably there are some other categories of materials that can be borrowed, like newspapers or audio-visual, but no any ILL service mentioned about them specifically.

7.4.3 Which materials cannot be borrowed ?

The UK academic ILL services can obtain the previously mentioned categories of materials on behalf of their users. For the rest of the categories (see the following table) libraries may face problems in locating and acquiring them. In cases of foreign theses, the expense and also the time needed to obtain them is much greater. The access to on-line library catalogues is now very extensive and if an item is not available in the UK, libraries will go abroad if necessary via the BLDSC. Final decisions about processing these requests is taken by the ILL staff.

WHICH MATERIALS CANNOT BE BORROWED
Materials that are for reference use
Materials published before 1800
Recently published books
Foreign theses
Rare books

Table 7.4 Materials cannot be borrowed through ILL service

7.5 COPYRIGHT RESTRICTIONS

Within the ILL policies, there are Copyright restrictions in using the ILL service. A copyright declaration is mainly written on the back of any journal request card. Patrons, in order to make their request valid and transmitted, have to sign it, as the Exeter University Library (1996) states in its policy. Only few libraries gave enough information to their patrons about the Copyright Law and its restrictions on using the ILL service

7.6 CHARGES

The policy of charging is similar for most of the libraries due to their heavy use of the same document supplier, i.e. BLDSC. The payment is usually done by vouchers or tokens which have a standard monetary value. The cost is different for any material requested according to the category it belongs to. For example theses cost more than books or journal articles. These vouchers can be supplied to departments or to individuals who can enclose them with their request at any time.

In most cases the payment for ILL requests was applied to all patrons; only four libraries offer this service free but with specific limits and under certain conditions. There were limits on the number of requests restricted to an authorised person. The following table shows where the cost of ILL is charged in different academic libraries.

CHARGES FOR ILL REQUESTS MUST BE PAID FROM	No. of LIBRARIES (N=24)
Requester's academic department	8
Individuals who are not members of the University	5
All the members of the University, individually	4
No charges to anyone	4
Members of the University who do not have departmental vouchers	2

Table 7.5 **Charges applied for ILL request**

7.7 TIME NEEDED TO OBTAIN A MATERIAL

The main document supplier in UK academic libraries is the BLDSC which is also a main source for international ILL requests in various subjects. All libraries use it as an intermediary supplier even if in some cases the documents supplier is another library. The time needed for materials to arrive is mainly the same for all libraries: 1-2 weeks for journal articles, and about 3 weeks for lent books. For requests that

are more complicated, like materials already on loan or need more time to arrive because of their high demand, this period of delivery increases. There are also cases of urgent requests that are sent by fax in a shorter delivery time and with different charging rates.

7.8 WHEN MATERIALS MUST BE RETURNED

The loan period for materials obtained by ILL varies according to the material borrowed and its use. The most common loan length is 3 weeks with an equivalent extension after on-time renewing and if there is not a recall for the same item. In some cases the loan period reaches 6 weeks with the same possibility for renewing.

7.9 WAYS OF SUBMITTING ILL REQUEST FORMS

All ILL services in the UK use paper forms (cards) for receiving ILL requests. These forms vary in use according to the category of the requesting material. Sometimes, they can be easily distinguished by their colour e.g. University of York Library (1995). In addition to this method of submitting ILL requests some libraries offer the method of requesting through the ILL management systems, e.g. the ILL module in the LIBERTAS in the London University, King's College Library (1995).

7.9.1 What kind of request forms are used ?

The table below shows examples of requests forms (cards) that are provided in these ILL services. Some services use two or more forms for requesting different categories of materials whilst there is not any example of using one request form for all kinds of materials.

TYPES OF FORMS USED FOR REQUESTING
Book/thesis form
Book/ report/thesis form
Book form
Journal/conference/report form
Journal articles form

Table 7.6 **Types of forms used for requesting**

7.10 LIMITS APPLIED ON THE NUMBER OF REQUESTS

Due to many requests being received by the ILL departments and the increasing cost of fulfilling them, some libraries give limits to the requests that any patron can submit in any specific period. This policy makes processing easier and more effective in order to distribute the service more equitably between patrons. According to their policy, libraries gave their own limits as they are presented below.

LIMITS ON REQUESTING ILL MATERIALS	No. of LIBRARIES (N=24)
Different limits according to the category that the user belongs to	6
10 requests per week	1
20 per month	1
No limits	3
No mention about any limit	13

Table 7.7 **Limits on requesting ILL materials**

7.11 REQUESTER NOTIFICATION

The UK academic ILL services notify their patrons about their ILL materials' arrival mainly by post. In cases of journal articles, they are sent directly to departments or to the address given on the request form. For books, libraries send a notification by post asking users to come and collect them from the library. Patrons can be informed about the progress of their requests at any time by the ILL management system if this provides access to the users.

7.12 VISITING OF THE BLDSC

Some university libraries such as the University of Hull Library (1995) and the University of Sheffield Library (1996) which are quit near to the BLDSC provide travel facilities for visiting the BLDSC in cases where patrons require a large amount of ILL materials. They organise trips within the term time for a day in order to bring researchers nearer to materials they need.

7.13 CONCLUSIONS

The general approach of the British academic ILL services of using the Internet has the character of a simple information provider rather than the character of providing and electronic services. They do not give to their patrons any service facility, e.g. searching in OPAC or submitting ILL requests through their WWW home page. In comparison with the American academic ILL services these are less well-developed in the way they are provided.

8 SURVEY OF BRITISH ACADEMIC ILL SERVICES

8.1 INTRODUCTION

Because of the difference between American and British ILL services the use of two different questionnaire was necessary to study and evaluate both cases objectively.

In accordance with the observations made on the British academic ILL services by using the WWW, a special questionnaire (see Appendix D) was prepared and sent to the twenty-four selected academic libraries (see Appendix B) asking for further information about their ILL services. Out of these, nine responded giving a response rate of 37%. The comparison between their answers is used to give a general picture about how British academic ILL services are using the Internet for their every day activities and what are their impressions from this experience, but it cannot be regarded as being statistically significant.

The questionnaire was divided into two areas:

1. Using the Internet for providing services and/or information on ILL
2. Using the Internet for supplying ILL documents

8.2 USING THE INTERNET FOR PROVIDING SERVICES AND/OR INFORMATION ON ILL

This category of questions was used in order to estimate the level and the way that academic libraries use the Internet to advance their services and especially their ILL service.

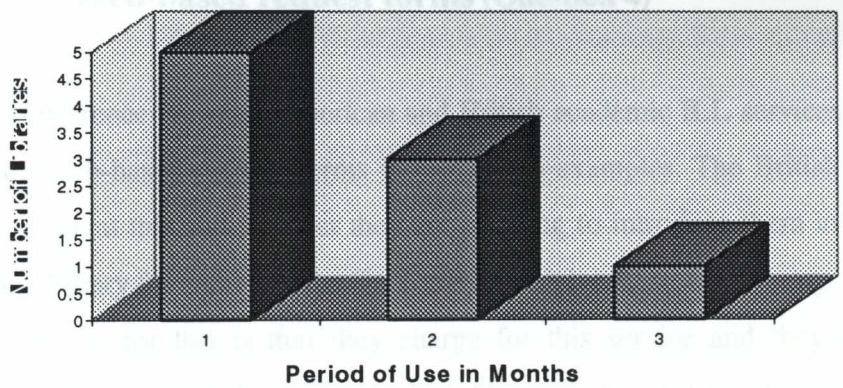
8.2.1 Internet officer appointments (Question 1)

The Internet is a relatively new means of transferring information between libraries, companies and individuals. Therefore many Universities have identified a need to provide a specialist on this area who is going to be the primary developer of the Web site. The libraries have been asked whether their university offers this facility for them or whether members of the library staff are responsible for this job. Six of the nine libraries answered that they have their own Internet officer based in the library, whilst two libraries have plans to appoint one within the next 12 months. One library uses the Internet officer who is based in computer services. This showed that most of the libraries are concerned about Internet developments related to their particular services' needs and promotion.

8.2.2 For how long have they used the Internet for their ILL services (Question 2)

The use of the Internet in British academic ILL is a recent innovation. About a year and less in most of the libraries. There are some examples of using it for more than a year but these are very few. The University of London has been using Internet for more than two years. The Figure 8.1 illustrates the period that the Internet has been used in the sample's libraries.

Figure 8.1 **For How Long Has the Internet Been Used in British Academic ILL Services**

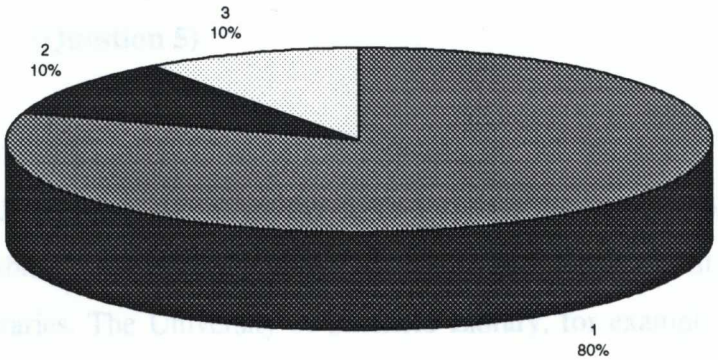


1: 0-12 months **2:** 13-24 months **3:** 25-36 months

8.2.3 Methods of receiving ILL requests (Question 3)

The main way of receiving ILL requests in almost all of the libraries is overwhelmingly by paper ILL request forms. Seven out of nine libraries receive 100% of their requests in this manner whilst the Open University ILL service receives 99% of the ILL requests via automated ILL management system. Only one example, i.e. the Reading University Library, receive by e-mail but its rate of preference is only 1% compared with the paper form requesting. Figure 8.2 shows the percentage of libraries using each one of these methods.

Figure 8.2 **Methods of receiving ILL request forms**



1: Paper based **2:** Via e-mail **3:** Via ILL management system

8.2.4. Why British academic ILL services do not use Web-based request forms (Question 4)

The main difference between American and British academic ILL services was the absence of Web-based request forms in the British examples. The British libraries were asked about this and whether they are planning to introduce them in the near future. One library for example, the University of Wolverhampton Library, said that the main reason for this is that they charge for this service and they insist on signatures as required by the copyright law. However this did not mean that they would not look at other approaches and even using Web-forms in the future. The Exeter University Library does not use Web-based forms and does not have any plans for this because of their internal charging system. The problem mainly faced was the need for signature and also some lack of technical facilities as the South Bank University Library mentioned.

The University of Ulster Library does use these forms, but the uptake until now has been almost zero, they believe that there is a need to relaunch them. Their forms can not be accessed through the WWW.

8.3 USING THE INTERNET FOR SUPPLYING ILL DOCUMENTS

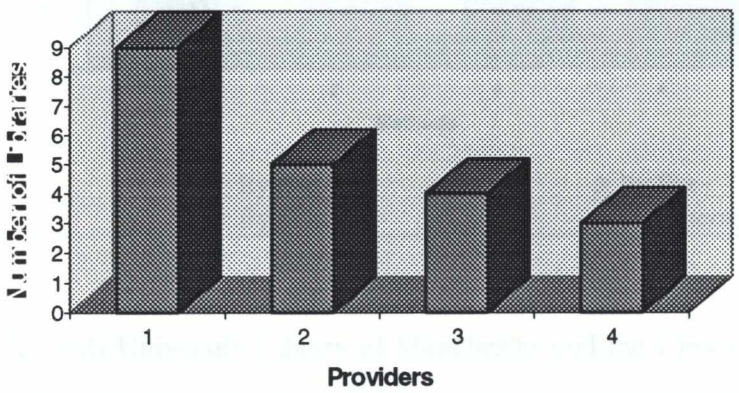
8.3.1 What are the providers of ILL document requests (Question 5)

The main provider of ILL document requests for all university libraries is the BLDSC. All of them use it as the main resource for their information needs. Regional Library Co-operation are also used but to a lower extent by four out of the nine libraries. The University of Sheffield Library, for example, has individual co-operation with other universities libraries for certain materials whilst the Exeter

University Library sends direct applications to libraries owning the materials requested. In special subjects where there was a specific documentation service such as in the Health Sciences with the Health Documentation Service, requests are sent i.e. by the South Bank University, to the consortium of participating Health Libraries. These requests are counted as a different category within the total requests.

Figure 8.3 presents the number of libraries that prefer the ILL co-operation with specific document suppliers.

Figure 8.3 **Providers of ILL Document Requests**



1: BLDSC
2: Other Co-operative Libraries
3: Regional Library Co-operation
4: Commercial Document Delivery Services

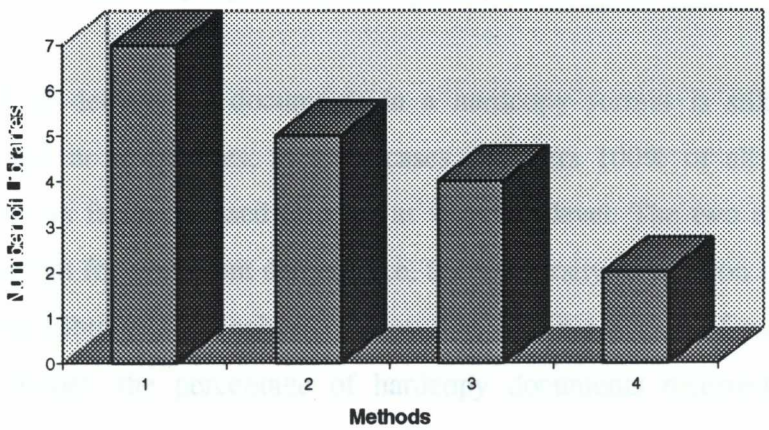
8.3.2 Methods of Document Delivery to/from the library

(Questions 6, 6a, 6b)

The most used method of document supply between libraries and between library and patrons are post and courier (regional transport schemes). In some cases, between libraries, the fax was also used but to a limited extent because of its higher cost. Electronic methods of document delivery are not so often

used in British academic ILL services although this was more common in American academic ILL services (see chapter 6) and projects to explore these possibilities are now underway as part of the eLib programme, e.g. FIDO [1996] where the Loughborough University is participating too.

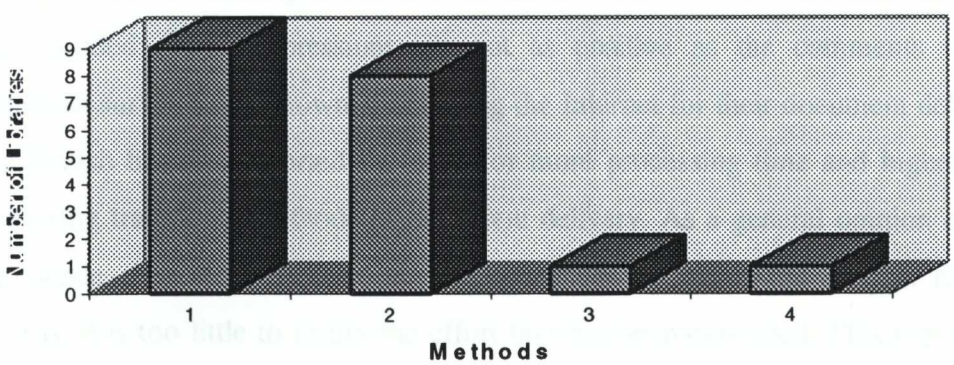
Figure 8.4 **Methods of Document Delivery Between Libraries**



1: By Post
2: By Courier
3: By Fax
4: Via Internet

The John Rylands University Library of Manchester and the University of London Library are the only examples in this sample that are using the Internet to deliver documents to other libraries or to receive documents from other libraries (see Figures 8.4 & 8.5). The patrons have to collect the returnable materials from the

Figure 8.5 Methods of Document Delivery to Library Patrons



1: Patrons Collect from Library
2: By Post
3: By Fax
4: Via E-mail

library whilst photocopies are sent to them through the post, by courier or, very rarely, by fax. The Reading University Library uses e-mail to deliver documents to their patrons which is the only example of this service.

8.3.3 The percentage of the documents that are supplied to the library by different methods (Question 7)

The method of delivery of documents in a hardcopy format is still the most common in use in all libraries; in most cases it covers 100% of all documents received. The fax facility is used also but at very low level. The two examples of using the Internet for document delivery, i.e. the University of London Library and the University Library of Manchester, show that within a period of two years of using the Internet, the percentage of hardcopy documents received has been reduced to half. This is a very strong evidence of the scale of changes which happen within the ILL activities due to the Internet's application.

8.3.4 Comments about using document delivery through the Internet (Question 8)

Seven out of the nine libraries do not use the Internet for document delivery. The two examples of using it have noticed the need for more non-professional staff and also the need for training about how to use the different software and hardware units needed. Their impressions are not as positive as the comments of the American survey study shown about using the Internet for their document delivery. The British libraries reported the need for more processing time and higher cost than using traditional methods of document delivery. As a general opinion of this experience, they did not notice any important change within the service. Even if there is, it is too little to justify the effort that has been expended. This is possibly

due to the fact that these libraries are facing the inevitable teething troubles that go a long with innovation.

8.3.5. Patrons notification of receipt ILL materials (Question 9)

The patrons notification for the arrival of their materials is made, in most cases, in the traditional way of paper (internal or external mail). In four of the nine examples the ILL services use both methods of paper and electronic notification (by e-mail). In cases where it is difficult to have postal addresses, the notification to patrons by e-mail becomes the preferable method, e.g. University of Wolverhampton Library, as e-mail starts to be used more often and by more libraries in their communication process. The Open University, for example, is undertaking the process of changing the notification process from paper form to electronic form by using e-mail.

8.3.6 Staff changes implemented for using IT for ILL and document delivery (Question 10)

The introduction of IT in the area of ILL and document delivery causes some changes and needs for managing the best results in their everyday activities. Four out of the nine ILL services reported little or no changes in staffing whilst six out of the nine reported the need for staff training to use IT effectively. The University of Wolverhampton Library, which does not use electronic document delivery, reported the need for more non-professional staff since the demand for ILL has grown hugely with the availability of CD-ROMs, something which forces the service to either charge more or step up the staffing to moderate this problem. Libraries that do use electronic document delivery stated that there were little or no changes in staffing and they believed that the combination of more non-professional staff with the appropriate staff training will give better results in using IT for their ILL activities.

8.3.7 Software and hardware equipment dedicated for the ILL service (Question 11)

Dedicated computers were available to all the ILL services whether using electronic document delivery or not, whilst scanners are, by necessity, mainly for implementing electronic document delivery. The difference between the ILL services is mainly on the software used for their ILL management. All the ILL services use a specific ILL management system for receiving and processing their ILL requests. The most common ILL management systems in the UK market are the Lancaster University ILL package, the LIBERTAS ILL module, BLCMP Talis and the ARTtel (BLDSC). The two libraries using electronic document delivery have in addition to the ILL management systems, the ARIEL software for transferring documents electronically.

8.3.8 Maintaining software and hardware for ILL service (Question 12)

Maintaining the software and hardware equipment for the ILL service is a difficult and also very time consuming process. Libraries were asked to give information about who was responsible for this task. Seven out of the nine services answered that the library has its own technical staff for these purposes whilst three libraries that do not have their own technical staff used the technical staff in other University departments. The library staff were also reported to be capable of handling some every day simple technical problems. External contractors are the last choice in cases where the problems can not be solved by the university technical staff.

8.4 CONCLUSIONS

The general approach of the British academic ILL service in using the Internet has been shown to be much less prevalent than the American cases. The academic libraries in Britain do not use the Internet extensively for their ILL service other than to provide information about its existence. There is no any evidence from this survey of any electronic service provision, such as web-based ILL request forms. The use of the Internet in document supply is to a much lower extent than is happening in the USA and even user notification through e-mail has only started to be introduced recently.

9 SUMMARY AND CONCLUSIONS

ILL is essential in any modern academic library. The influence of IT and more specifically, the use of networking, has made ILL more responsive in acquiring appropriate materials faster in relation to previous means. Co-operation between well-stocked libraries of different kinds is the key to better results in ILL services. The contribution of ILL to collection development in each library is very valuable since it reduces the need to purchase materials with low demand and makes them available from other libraries when they are needed and at lower cost.

The regulations for the ILL can be established by National Interlibrary Loan Codes which each country prepares to facilitate the fair use of the ILL among participating libraries. Requesting and supplying libraries have to follow specific regulations in order to keep this co-operation equally beneficial for both parties.

The recent developments in IT have offered new approaches to the ILL process. IT's value for higher education in general has been recognised by the Joint Higher Education Funding Councils for England, Scotland, Wales and Northern Ireland which, as a result, decided more pro-actively to introduce IT to information delivery in all aspects in order to improve the services' effectiveness.

Automation in ILL management has been a necessity in all libraries. There are currently few choices of ILL management systems which makes the decision of choosing the most appropriate one more difficult. Stand-alone ILL systems against ILL modules within the library management system are the two main alternatives. With all these IT developments in the area of the ILL there is also the need to measure performance and evaluate the benefits and advantages of using them. Due

to the new IT influences the standards of this performance have been higher and also more demanding from both library's management and library's users.

The Internet, as the main an increasingly significant means of operating ILL activities, has been extensively used for locating, ordering and receiving ILL documents especially in the USA. The Internet is also the source of new forms of information delivery, such as electronic journals, electronic books supplying, and of the creation of on-demand publishing, all of which will have a growing impact on ILL services.

The Electronic document delivery through the Internet seems to be the newest method used for transferring documents between academic libraries. Projects that have been set as experiments in this area have shown its benefits and advantages in the process of ILL in general but their remain significant issues still to be tackled. Both American and British document delivery services are using the Internet to supply documents to their users (libraries and individuals) easily and faster. Some of these services have been distinguished among others due to their propriety and effectiveness for the academic libraries' needs.

Even though IT has been used apace within the ILL service giving easy and effective results, there are some legal problems that still need to be solved. The crucial area of the copyright law supporting any literary work and its creator for his/her work's controlled distribution is still unclear and is also a barrier for free operation in ILL and document delivery. Some aspects related to ILL and its authorities have been decided without any specific problems, an exception of this is the requesting without the written signature of the requester. The area of electrocopying and electrotransferring remains a controversial argument between publishers and information providers because of the lack of any control on the information distribution. Some trials have given some temporary solutions but the copyright problem seems more difficult for any final decision or negotiation among these two parties.

The characteristic approaches from American and British academic ILL services in using the Internet for their policy and service provision varies considerably in different areas. The American academic ILL services seem to use the Internet more than their British counter parts and their use is more comprehensive and variable. British libraries do not provide any service to their patron through the Internet other than that needed to familiarise them with the ILL service availability.

The most significant difference in using the Internet in the American academic ILL services is the use of the ILL web-based request forms, something which was not met in the examples of the British academic ILL service. This lack of convenience in the on-line requesting, makes the facilitating services for patrons and library staff poor. The American comments about this facility are positive in relation to their practicality and also to their contribution in the ILL management. Some of the British libraries plan to introduce Web-based request forms in the near future. Some others find the copyright law against this innovation since the signed request form from the requesters is a primary need.

People eligible to use the ILL service in the American Academic libraries are mainly university members (faculty, other staff and students) who can have this service free except in the case of extraordinary requests, like rush or difficult requests. Library card holders can also be served which gives libraries the flexibility of deciding who is allowed to use the ILL service. In the British academic libraries the ILL service is mainly a charging service and is provided only for people involved in research. Undergraduate students need to have the authorisation from their tutors in order to make any ILL requests. Consequently the charge is transferred to the specific academic department. This difference between the American and British academic libraries is mainly because of the higher expenses applied to the British ILL system where there is extensive use of only one document supplier whilst in American academic cases the co-operation between the libraries is more organised and in common use.

The information given by all libraries in the sample shows that the American academic ILL services are using more IT in their activities. The receiving of the ILL requests and the user notification are processed via e-mail and the Internet. Most of the documents delivered are received or sent through the Internet. In the British examples there is also the presence of the IT but to a lesser extent and only by very few libraries. The receiving of ILL requests is in some cases through ILL management systems. This is more common in British than In American examples. The rest of the British academic libraries are still using the traditional way of operating ILL activities, e.g. paper form and post services. The application of electronic document delivery has already been introduced in a few libraries and hopefully, with the kick-start provided by the Follett Report, IT is going to be more necessary in the near future as soon as legal and economic problems will been resolved.

The American and British opinions about the cost-effectiveness of the electronic document delivery through the Internet. The possible reason for this is the short time of using this facility in the UK and that the results given are presenting the beginning only. With longer time and more widespread use and with the appropriate statistics and performance measurement the real influence of this facility to the ILL process is going to be proved. The data collected from the literature review supports the view that electrocopying and electrotransffering are much more beneficial than the traditional methods with lower cost and staffing needs, and it seems inevitable that their use grow in the foreseeable future.

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APPENDICES

APPENDIX A

AMERICAN ACADEMIC LIBRARIES

1. Bowman Gray School of Medicine Library
2. Case Western Reserve University Library
3. Colorado State University Libraries
4. Florida Atlantic University Libraries
5. George Mason University Library
6. Indiana University - Bloomington Libraries
7. John Hopkins School of Medicine Welch Medical Library
8. Louisiana State University Libraries
9. Mercer University Library
10. MIT Libraries
11. Northwestern University Library
12. Oregon University Libraries
13. Rice University Library
14. University of Alaska Anchorage
15. University of Delaware Library
16. University of Kansas Medical Centre Library
17. University of Maine Libraries
18. University of Missouri - Columbia
19. University of Missouri - St. Louis Libraries
20. University of Penn's Library
21. University of Rochester Library
22. University of Tennessee, Knoxville Libraries
23. University of Washington's Libraries
24. Vanderbilt University Lean and Alexander Heard Library

APPENDIX B

BRITISH ACADEMIC LIBRARIES

1. University of Bath Library
2. De Montfort University Library
3. Exeter University Library
4. Hull University Library
5. Lancaster University Library
6. Liverpool University Library
7. London University, Kings College Library
8. London University, Royal Holloway and Bedford New College Library
9. Open University Library
10. Queen's University of Belfast Library
11. Reading University Library
12. Robert Gordon University Library
13. Sheffield University Library
14. South Bank University Library
15. Strathclyde University Library
16. Surrey University Library
17. University of Central Lancashire Library
18. University of Manchester Library
19. University of Newcastle Library
20. University of Plymouth Library
21. University of Ulster Library
22. University of Wales College of Cardiff Library
23. University of Wolverhampton Library
24. University of York Library

APPENDIX C

QUESTIONNAIRE SENT TO AMERICAN ACADEMIC ILL SERVICES

For the attention of the Inter Library Loans Librarian

Dear Sir/Madam,

I am a postgraduate student at Loughborough University, UK, currently Researching issues related to American and British Academic Interlibrary Loan Services (ILL) provided via the Internet.

I notice that you provide ILL request forms or/and information about your ILL service to your patrons via WWW, and I hope you will be prepared to spend 5-10 minutes answering this short Questionnaire.

Please reply to my e-mail address (E.Diomidi-95@student.lboro.ac.uk) by 22nd JUL. 1996.

Thanking you in advance for your assistance.

Eleni Diomidi
Postgraduate Masters Student
Department of Information and Library Studies
Loughborough University, UK

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QUESTIONNAIRE ON THE
ACADEMIC INTERLIBRARY LOAN SERVICES
YOU PROVIDE VIA THE INTERNET

****

Please Type (X) Against All Appropriate Answers Where Applicable, or Enter Figures Where Requested.

A. About your Web-based ILL request forms

1. You have used the Internet in your ILL service for the last:

[ ] 0-12 months
[ ] 13-24 months
[ ] 25-36 months
[ ] More than 36 months

2. Approximately what percentage of your ILL requests do you receive from your patrons by the following methods:

[ ]% E-mail -
[ ]% Via OPAC
[ ]% Via WWW
[ ]% Other Internet (e.g. telnet)
[ ]% Paper based
[ ]% Other (please specify)

(a). Over the last 12 months has there been an increase or a decrease in use of the WWW request forms?

[ ] Increase
[ ] Decrease

(b). Please estimate the percentage increase or decrease

[ ]%

3. Since introducing the WWW request forms has there been an overall increase or decrease in the TOTAL number of ILL requests you receive?

[ ] Overall increase
[ ] Overall decrease
[ ] No change

(a). If there has been an increase or decrease in the total number of ILL request you receive, do you ascribe this to the introduction of the Web service?

[ ] Wholly due to introduction of Web service
[ ] Partly due to introduction of Web service
[ ] Due to other factors
[ ] Do not know

4. What of the following patrons' reactions have you noticed in response to your WWW ILL request forms?

[ ] Patron response has seemed generally favourable
[ ] Patrons response has seemed generally unfavourable
[ ] Only some groups of patrons seem willing to use them
[ ] All groups of patrons seem willing to use them
[ ] Many patrons have not got familiar with them yet
[ ] Many patrons ask further information about these forms and about how can they complete them
[ ] Most patrons fill in the forms correctly
[ ] Patrons have no more problems completing the WWW forms than other methods
[ ] Patrons have more problems completing the WWW forms than other methods
[ ] No special reactions

5. Do you provide patron training for using the Web-based ILL request forms?

[ ] Yes - for all patrons
[ ] Yes - for some patrons
[ ] No

B. About ILL document delivery

6. What are the providers of your ILL document requests?

[ ] Regional Library Co-operation
[ ] Commercial Document Delivery Services
[ ] Other (please specify)

7. Do you lend or receive more materials via ILL?

[ ] Lend more
[ ] Receive more

8. Which of these methods are used by ILL suppliers to deliver documents to your library

[ ] Fax
[ ] Courier
[ ] E-Mail
[ ] Post
[ ] Internet
[ ] Other electronic

(a) What of these methods do you use to supply documents to your patrons:

[ ] Fax
[ ] Courier
[ ] E-Mail
[ ] Postal
[ ] Internet
[ ] Patron collects from library
[ ] Other electronic (please specify)

(b) What of the following methods do you use to supply documents to borrowing libraries:

[ ] Fax
[ ] Courier
[ ] E-Mail
[ ] Postal
[ ] Internet
[ ] Other electronic (please specify)
[ ] Do not supply ILL's to other libraries

9. What approximately is the percentage of the documents that are supplied to you via the following methods?

[ ]% Hardcopy
[ ]% Fax
[ ]% Internet
[ ]% Other electronic

10. If you use electronic document delivery have you noticed

[ ] An improving ILL service for patrons and borrowing libraries
[ ] An improving ILL service for borrowing libraries
[ ] Faster and more effective document delivery
[ ] Need for more processing time
[ ] Technical problems which delay document delivery -
[ ] More cost per item requested
[ ] Less cost per item requested
[ ] Little or no change

11. Do you notify patrons of receipt of ILL by

[ ] Paper
[ ] Electronic methods

12. What of the following staff changes' needs have you noticed using IT for your ILL and document supply services

[ ] More professional staff needed
[ ] Fewer professional staff
[ ] More non-professional staff needed
[ ] Fewer non-professional staff needed
[ ] Appointment of new staff with IT experience
[ ] Little or no changes in staffing
[ ] Need for staff training

13. By applying IT to your ILL service, did you need to purchase or rent additional:

[ ] Equipment

Yes No

[ ][ ] Computers
[ ][ ] Photocopiers
[ ][ ] Scanners
[ ][ ] Fax machines
[ ][ ] Other (please specify)

[ ] Software (please specify)

14. Who maintains the hardware and software for your ILL service?

[ ] Technical staff in the library
[ ] Technical staff in other university departments (e.g. Computer Services)
[ ] Library staff in the library
[ ] Students
[ ] External contractors -
[ ] Other (please specify) >

Thank you very much indeed for your co-operation.
Would you like to receive a summary of my findings in due course?

[ ] Yes
[ ] No

APPENDIX D

QUESTIONNAIRE SENT TO BRITISH ACADEMIC ILL SERVICES

For the attention of the Inter-Library Loans Librarian

Dear Sir/Madam,

I am a postgraduate student at Loughborough University, UK, currently researching issues related to American and British Academic Interlibrary Loan Services (ILL) provided via the Internet.

I notice that you provide information about your ILL service to your patrons via WWW, and I hope you will be prepared to spend 5-10 minutes answering this short Questionnaire.

Please reply to my e-mail address (E.Diomidi-95@student.lboro.ac.uk) by 22nd JUL. 1996.

Thanking you in advance for your assistance.

Eleni Diomidi
Postgraduate Masters Student
Department of Information and Library Studies
Loughborough University, UK

****

QUESTIONNAIRE ON THE
ACADEMIC INTERLIBRARY LOAN SERVICES
YOU PROVIDE VIA THE INTERNET

****

Please Type (X) Against All Appropriate Answers Where Applicable, or Enter Figures Where Requested.

A. About the Internet Use

1. Does your University have an Internet officer or offer member of staff whose job includes development of your University Web site?

[ ] Yes - Based in library
[ ] Yes - Based in Computer/IT Services
[ ] Yes - Based in a different Department
[ ] No - But have plans to appoint one within the next 12 months
[ ] No

2. You have used the Internet to provide information about your ILL service for the last:

[ ] 0-12 months
[ ] 13-24 months
[ ] 25-36 months
[ ] More than 36 months

3. Approximately what percentage of your ILL requests do you receive from your patrons by the following methods:

[ ]% Paper based
[ ]% E-mail
[ ]% Via ILL management system
[ ]% Via telnet
[ ]% Other (please specify)

4. By searching in your ILL WWW site I have noticed that you do not use Web-based request forms on your public server. What are the reasons for this?

[ ] You have Web ILL forms for use by members of the University only (on CWIS/Intranet etc.)
[ ] You are planning to introduce Web-based ILL forms within the next 12 months
[ ] You are planning to introduce Web-based ILL forms in the longer term
[ ] You have no plans to introduce Web-based ILL forms
[ ] You have considered the possibility but rejected it on technical grounds (e.g. electronic signature)

B. About ILL document delivery

5. What are the providers of your ILL document requests?

[ ] BLDSC
[ ] Regional Library Co-operation
[ ] Commercial Document Delivery Services
[ ] Other (please specify)

6. Which of these methods are used by ILL suppliers to deliver documents to our library

[ ] Fax
[ ] Courier
[ ] E-Mail
[ ] Post
[ ] Internet
[ ] Other electronic

(a). What of these methods do you use to supply documents to your patrons:

[ ] Fax
[ ] Courier
[ ] E-Mail
[ ] Postal
[ ] Internet
[ ] Patron collects from library
[ ] Other electronic (please specify)

(b) What of the following methods do you use to supply documents to borrowing libraries:

[ ] Fax
[ ] Courier
[ ] E-Mail
[ ] Postal
[ ] Internet
[ ] Other electronic (please specify)
[ ] Do not supply ILL's to other libraries

7. What approximately is the percentage of the documents that are supplied to you via the following methods?

[ ]% Hardcopy
[ ]% Fax
[ ]% Internet
[ ]% Other electronic

8. If you use electronic document delivery have you noticed

[ ] An improving ILL service for patrons and borrowing libraries
[ ] An improving ILL service for borrowing libraries
[ ] Faster and more effective document delivery
[ ] Need for more processing time
[ ] Technical problems which delay document delivery
[ ] More cost per item requested
[ ] Less cost per item requested
[ ] Little or no change
[ ] Do not use Electronic Document Delivery

9. Do you notify patrons of receipt of ILL by

[ ] Paper
[ ] Electronic methods

10. What of the following staff changes' needs have you noticed using IT for your ILL and document supply services

[ ] More professional staff needed
[ ] Fewer professional staff
[ ] More non-professional staff needed
[ ] Fewer non-professional staff needed
[ ] Appointment of new staff with IT experience
[ ] Little or no changes in staffing

[ ] Need for staff training
[ ] It is little used

11. Does your ILL service have any of the following dedicated equipment?

[ ] Hardware

Yes No

[ ] [ ] Computers
[ ] [ ] Photocopiers
[ ] [ ] Scanners
[ ] [ ] Fax machines
[ ] [ ] Other (please specify)

[ ] Software (please specify)

12. If YES, Who maintains the hardware and software for your ILL s service?

[ ] Technical staff in the library
[ ] Technical staff in other university departments (e.g. Computer Services)
[ ] Library staff in the library
[ ] Students
[ ] External contractors
[ ] Other (please specify)

Thank you very much indeed for your co-operation.
Would you like to receive a summary of my findings in due course?

[ ] Yes
[ ] No