Interlending in Germany and Great Britain: a comparative analysis of practice in Leicester University Library and the Staats- und Universitäetsbibliothek Bremen

This item was submitted to Loughborough University’s Institutional Repository by the/an author.

Additional Information:

- A Master’s Dissertation. Submitted in partial fulfilment of the requirements for the award of the Masters of Arts degree of Loughborough University.

Metadata Record: https://dspace.lboro.ac.uk/2134/32881

Publisher: © R.R. Ellis

Rights: This work is made available according to the conditions of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) licence. Full details of this licence are available at: https://creativecommons.org/licenses/by-nc-nd/4.0/

Please cite the published version.
Interlending in Germany and Great Britain:
a comparative analysis of practice in Leicester University Library
and the Staats- und Universitätsbibliothek Bremen

by

Rachel Ruth Ellis

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

September 1996

Supervisor: Inese A. Smith, BA, MA, FLA
Department of Information and Library Studies

© R. R. Ellis, 1996
Abstract

Both the theory and the practice of interlending are discussed, using academic libraries in Germany and England as case studies. These two countries represent the two opposite extremes of national interlending systems: the centralised solution in England on the one hand and the decentralised one in Germany on the other.

After an outline of historical developments in interlending in both countries, the problems facing interlending services are described as well as several projects that look at the different possibilities to cope with increased pressures on these services.

The analysis of a performance measurement study, undertaken in one library in England and one in Germany, forms the practical part of the dissertation. Background information about the libraries is given as well as an analysis of their current interlending procedures.

The two libraries show similarities in the kinds of requests that were made, but an important result was the huge differences in speed of supply due to the different systems. A comparative analysis of the advantages and disadvantages of both systems concludes the study, together with suggestions for further research.
Dedication

This dissertation is dedicated to my parents, my family and friends.
Acknowledgements

I would like to thank the following:

My supervisor, Inese A. Smith, for her guidance, support and encouragement, even in the most hectic times.

The staff of the interlibrary loan departments of Leicester University Library and the Staats- und Universitätsbibliothek Bremen for their support during the study.

My parents for their constant support and encouragement during the whole of my studies.

The rest of my family and my friends for their help and encouragement.
# Table of contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Table of contents</td>
<td>v</td>
</tr>
<tr>
<td></td>
<td>List of abbreviations</td>
<td>ix</td>
</tr>
<tr>
<td></td>
<td>List of figures</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>List of tables</td>
<td>xi</td>
</tr>
<tr>
<td></td>
<td>Chapter 1: Introduction</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Chapter 2: Methodology</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>2.1. Preparation</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>2.2. The chosen libraries</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>2.3. The data collection form</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>2.4. The practical aspects of the study</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>2.5. The analysis</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Chapter 3: The historical development of interlending in Germany</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>3.1. The beginning</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>3.1.1. The Prussian Model</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>3.2. The time between the World Wars</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>3.3. The time after the Second World War</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>3.3.1. The Federal Republic of Germany</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>3.3.1.1. Phase I: Reconstruction</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>3.3.1.2. The central regional catalogues</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>3.3.1.3. Phase II: Regional principle</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>3.3.1.4. Phase III: Direct requesting</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>3.3.2. The German Democratic Republic</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>3.4. The present situation</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>3.4.1. The interlending regulations of 1993</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>3.4.2. The national catalogues</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>3.4.3. The regional catalogues</td>
<td>17</td>
</tr>
</tbody>
</table>

v
Chapter 4: The historical development of interlending in Britain

4.1. The beginning

4.2. The period 1900 - 1939

4.2.1. The regional systems

4.2.2. The outlier system

4.3. The period 1939 to the present

4.3.1. The time during and after the Second World War

4.3.2. Towards centralisation

4.3.3. Expansion and rationalisation

4.3.4. The present system

4.3.4.1 The British Library Document Supply Centre

4.3.4.2 The regional systems

Chapter 5: Problems facing interlending services generally

Chapter 6: Future developments and special projects

6.1. In Germany

6.1.1. The Konstanzer interlending project

6.1.2. Links from databases to library catalogues

6.1.3. Electronic document supply

6.2. In Britain

6.2.1. LASER and VISCOUNT

6.2.2. BLAISE-LINE

6.2.3. Electronic document delivery projects

6.3. International developments

6.3.1. EDIL - Electronic Document Interchange between Libraries

6.3.2. Project ION

Chapter 7: Study of interlibrary loan services in Bremen

7.1. Short history of the library

7.2. Background information and statistics

7.2.1. The PICA system

7.3. The present procedure

7.3.1. Problems of the study and general delays in handling the requests
Chapter 8: The performance measurement study in Bremen 45
8.1. Type of material requested 45
8.2. Final location tool 46
8.3. Form of order 47
8.4. Method of transmitting and receiving requests 48
8.5. Successful route 49
8.6. Supplier code 50
8.7. Format of received item 51
8.8. Number of applications 52
8.9. Speed of supply 53
8.9.1. Speed of supply by format of received item 54
8.9.2. Speed of supply by final location tool 55
8.9.3. Speed of supply by type of library 56
8.9.4. Speed of supply by region of supply 57

Chapter 9: Study of interlibrary loan services in Leicester 60
9.1. Short history of the library 60
9.2. Background information and statistics 60
9.2.1. The LIBERTAS system 62
9.3. The present procedure 62
9.3.1. Problems of the study and general delays in handling the requests 64

Chapter 10: The performance measurement study in Leicester 66
10.1. Type of material requested 66
10.1.1. Cancelled requests 67
10.2. Response from the BLDSC 68
10.3. Final location tool 70
10.4. Method of transmitting requests 71
10.5. Method of receiving material 71
10.6. Successful route and source of supply 72
10.7. Format of received item 73
10.8. Number of applications 74
10.9. Speed of supply 74
10.9.1. Speed of supply by Format of received item
10.9.2. Speed of supply of the BLDSC

Chapter 11: Decentralized versus Centralized: Conclusion & Arguments
11.1. Extent of provision
11.2. Cost of provision
11.3. Speed of supply
11.4. Ease of use
11.5. Ability to monitor the system
11.6. Outlook for the future
11.7. Suggestions for further research

Bibliography

Appendix A: Form and explanation sheet used for the performance measurement study in Leicester
Appendix B: Map of Germany
Appendix C: Map of Britain
Appendix D: Flow chart of the interlibrary loan procedure in Bremen
Appendix E: Standard Request Form (Bremen)
Appendix F: Tables of Frequencies for Bremen
Appendix G: Crosstables for Bremen
Appendix H: Flow chart of the interlibrary loan procedure in Leicester
Appendix I: Tables of Frequencies for Leicester
Appendix J: Crosstables for Leicester
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTTel</td>
<td>Automated Request Transmission by Telephone</td>
</tr>
<tr>
<td>BLLD</td>
<td>British Library Lending Division</td>
</tr>
<tr>
<td>BLDSC</td>
<td>British Library Document Supply Centre</td>
</tr>
<tr>
<td>CLS</td>
<td>Central Library for Students</td>
</tr>
<tr>
<td>CUKT</td>
<td>Carnegie United Kingdom Trust</td>
</tr>
<tr>
<td>DBI-VK</td>
<td>Verbundkatalog maschinenlesbarer Katalogdaten deutscher Bibliotheken (German Union Catalogue)</td>
</tr>
<tr>
<td>DFG</td>
<td>Deutsche Forschungsgemeinschaft (German Research Council)</td>
</tr>
<tr>
<td>EDIL</td>
<td>Electronic Document Interchange between Libraries</td>
</tr>
<tr>
<td>FRG</td>
<td>Federal Republic of Germany</td>
</tr>
<tr>
<td>GEDI</td>
<td>Group on Electronic Document Interchange</td>
</tr>
<tr>
<td>GDR</td>
<td>German Democratic Republic</td>
</tr>
<tr>
<td>IFLA</td>
<td>International Federation of Library Associations</td>
</tr>
<tr>
<td>ILL</td>
<td>Inter-Library Loan</td>
</tr>
<tr>
<td>ILZ</td>
<td>Institut für Leihverkehr und Zentralkataloge (Institute of Interlending and Central Catalogues)</td>
</tr>
<tr>
<td>JANET</td>
<td>Joint Academic Network</td>
</tr>
<tr>
<td>LASER</td>
<td>London and South Eastern Library Region</td>
</tr>
<tr>
<td>NCL</td>
<td>National Central Library</td>
</tr>
<tr>
<td>NHI</td>
<td>Neue Hanse Interregio</td>
</tr>
<tr>
<td>NLLST</td>
<td>National Lending Library for Science and Technology</td>
</tr>
<tr>
<td>OSI</td>
<td>Open System Interconnection</td>
</tr>
<tr>
<td>PICA</td>
<td>Project for Integrated Cataloguing Automation</td>
</tr>
<tr>
<td>RAPDOC</td>
<td>Rapid Document Delivery</td>
</tr>
<tr>
<td>SuUB</td>
<td>Staats- und Universitätsbibliothek (State and University library)</td>
</tr>
<tr>
<td>ZDB</td>
<td>Zeitschriftendatenbank (Serials Database)</td>
</tr>
</tbody>
</table>
List of figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Type of material requested in Bremen</td>
<td>45</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Proportion of requests in the final location tools</td>
<td>47</td>
</tr>
<tr>
<td>Figure 3</td>
<td>Proportions of supply by different library types</td>
<td>49</td>
</tr>
<tr>
<td>Figure 4</td>
<td>The regional share of the seven major suppliers</td>
<td>50</td>
</tr>
<tr>
<td>Figure 5</td>
<td>Percentage of requests satisfied in the time period</td>
<td>53</td>
</tr>
<tr>
<td>Figure 6</td>
<td>Dependency of speed of supply on format of received item</td>
<td>54</td>
</tr>
<tr>
<td>Figure 7</td>
<td>Dependency of speed of supply on final location tool</td>
<td>55</td>
</tr>
<tr>
<td>Figure 8</td>
<td>Relation of speed of supply with type of supplying library</td>
<td>56</td>
</tr>
<tr>
<td>Figure 9</td>
<td>Dependency of speed of supply on region of supply</td>
<td>57</td>
</tr>
<tr>
<td>Figure 10</td>
<td>Type of material requested in Leicester and Bremen</td>
<td>66</td>
</tr>
<tr>
<td>Figure 11</td>
<td>Responses from the BLDSC</td>
<td>68</td>
</tr>
<tr>
<td>Figure 12</td>
<td>Format of received item in Leicester and Bremen</td>
<td>73</td>
</tr>
<tr>
<td>Figure 13</td>
<td>Speed of supply in Leicester</td>
<td>74</td>
</tr>
<tr>
<td>Figure 14</td>
<td>Speed of supply by Format of received item in Leicester</td>
<td>76</td>
</tr>
<tr>
<td>Figure 15</td>
<td>Speed of supply of the BLDSC</td>
<td>77</td>
</tr>
</tbody>
</table>
List of tables

Table 1: The statistics for interlibrary loans in Bremen 38
Table 2: The requesting rate in Leicester 61
Table 3: The supplying rate in Leicester 61
Chapter 1: Introduction

Interlending is a library service that became more and more important in the time of better access to catalogues, bibliographic databases on the one hand and declining acquisition budgets on the other.

This dissertation describes the historical evolution of this service in England and Germany, two countries of similar economic and social development. Interlibrary loan systems in these countries had to cope with various political changes and as a result the two systems that developed for national lending embody the two extremes that L.J. Anthony describes in his compilation of papers by Maurice Line:

On a national basis, the two extremes for an interlending system, on the one hand, library co-operation based on union catalogues coupled with some degree of cooperative acquisition, and on the other hand, complete centralization, with all requests being channelled to a central collection.¹

The two selected systems can be used as an example for these two extremes. A direct comparison of the systems is difficult as they developed to requirements of the times and political structures. However, it can be analysed if the present system is the appropriate one for the present requirements. Have the librarians and responsible bodies established the most effective form for this time?

Maurice Line lists three criteria for assessing a national lending system: the satisfaction level, the speed of supply and the economics.² Performance measurement study results form the second part of the dissertation and incorporates the first two criteria, with the emphasis lying on the aspect of supply speed. This can also indicate the satisfaction level.

The study is an attempt to answer the question of whether the present system is the appropriate one for the requirements. Its aim is to analyse how well the system performs in itself rather than providing data for a direct comparison. Nevertheless, the results of the study can indicate the direction in which the service is heading and the problems it is facing with expected future developments.

Disregarding the different systems, interlending on the whole is facing several difficulties, which are discussed in detail in chapter 5. The important task for the future is to find the solutions on a national basis as well as on the international level. Several
INTRODUCTION

projects examine future developments and technical prerequisites for library cooperation that will be important for future developments.

Many factors influence the effectiveness and efficiency of interlibrary loan systems, for example, costs of material and personnel, transport arrangements, etc., so it cannot be in the scope of a dissertation to give an accurate judgement of the quality of the interlibrary loan system as a whole. By outlining the special and individual history of the interlending service in both countries, that form the basis for the present system, the performance of the present systems is put into a broader perspective. The study of the procedures in the two selected libraries explains the differences of the systems clearly and their effect on the performance and its efficiency.

The analysis of the collected data serves to illustrate the "old" discussion of centralized versus decentralized solution.
References


Chapter 2: **Methodology**

2.1. **Preparation**

This dissertation is divided into two parts: theory and practice. The theory part outlines the developments of the different systems and is an important prerequisite for the analysis of the systems’ performance studies and the results in the second, more practical part.

The literature search prior to the study indicated that there have been several similar studies in the field of interlending. A national survey of interlending in the UK was carried out in 1977.\(^1\) Due to changes in interlibrary patterns, a new survey was necessary to establish the new developments. The results of this survey are published in *Interlending in the United Kingdom 1985: a survey of interlibrary document transactions* by Brenda White.\(^2\) This survey was carried out in consultation and collaboration with representatives of the UK regional systems and the British Library Lending Division (now called Document Supply Centre). Several statistics for interlending activities have been published since then, the most comprehensive and recent one being *Inter-library lending statistics*, published in March 1995.\(^3\)

In 1987 IFLA published a manual for Measuring the performance of document supply systems.\(^4\) It outlines the aims and objectives as well as the limitations of performance measurement studies. ‘Performance’ in document supply equals the success of a system in meeting demands and needs for documents. The main measures for the performance are the satisfaction level (rate of fulfilled requests), the user satisfaction and speed. There are several means for measuring these different aspects, for example, analysing user satisfaction with interviews or questionnaires directed to the users of the service. However, it was decided to concentrate on the requesting part of interlending, emphasising on the aspect of speed of supply, which would also give indirect information about the fill rate and the level of satisfaction. This method seemed to produce a sufficient number of results in a short time period.
2.2. The chosen libraries

For the practical part two libraries of similar status to represent the interlibrary loan system in England and Germany were selected: for the English system, Leicester University Library; for the German system, the State and University Library of Bremen (SuUB Bremen). Both university libraries are familiar to the author from previous employment.

2.3. The data collection form

Line defined 21 principles of interlending systems. One of them is concerned with "analysing the problem", outlining the basic and desirable statistics. Because of the restricted time period for the collection of the data, it was decided to collect the, as he puts it, basic statistics, such as form of document, channel used for requesting, source of supply, speed of supply and satisfaction level. A more extensive survey including, for example, data about the subject areas of requests, was considered as too detailed. Once the categories for the basic form were selected, individual forms to suit the selected libraries had to be designed.

The data collection form, used in 1985, includes all the categories Line refers to as basic. Therefore this form was chosen as a model also for this study. The used forms rely on the procedures in the library so the general form had to be adapted to the handling of requests in the library. The final forms for the two libraries are a result of the analysis of the procedures and were designed in collaboration with the heads of the interlibrary loan departments. They differ in some aspects but cover the same factors of interlending as a whole (see Appendix A for the form and explanation sheet used for the performance measurement study in Leicester).

Each form includes thirteen categories, the first one being the individual survey number. For further checking and back up, the voucher number, respectively the order number, was noted. The common categories for both libraries are: type of material requested, date of first application, date of receipt of material, final location tool, method of transmitting and receiving, successful route, format of received item, source of supply, number of applications. In the form used in Leicester the category 'Response
from BLDSC was included in order to have the possibility to keep a record if there are some problems with a request or anything else that is important to note. This was not applicable for the form for Bremen. However, on this form, in addition to the source of supply which noted the different library codes, a category for the region which supplied the item was included. This seemed important for the analysis, as it illustrates to what extent the principle of regional self-sufficiency really exists.

2.4. The practical aspects of the study

The simplest and most effective way to carry out this study seemed to be the tagging of request before they were transmitted. In Leicester the requests were directly tagged on the computer record. In Bremen the survey numbers had to be put on the forms. The study itself lasted three weeks in each library (Leicester: 18-22 April and 13-24 May 1996; Bremen: 15 April to 3 May 1996). The whole number of requests that were handled in that period were tagged. All together 302 requests in Leicester and 200 in Bremen were tagged. The data for each request was filled in the appropriate column on the form, either personally in the case of the Leicester study, or by the library staff who dealt with the incoming request in Bremen.

After the three weeks of the actual study in Leicester, in which already a number of requests came through, checking of the further progress of the remaining requests was carried out in Leicester once a week.

Unfortunately the two months allocated for the requests to come in for Bremen proved to be insufficient, only about a quarter of the requests had been completed in that period. This tendency could be used as an early hallmark of the speed of supply. The data of 250 incoming requests were collected during the three week stay there, as something like this was to be expected, regarding the supply times in the past. While dealing with the incoming items for requests the forms were filled in retrospectively. This was possible as all the necessary information for the study was still visible on the returned forms that were included with the material. For the analysis this data was merged with the data of the requests that were tagged originally to have a similar number of data as for Leicester.
Thus the calculation of the success rate is not possible as it is not known how many of the remaining requests will be satisfied at all. However, the success or fill rate in Leicester is also not easily calculated. It can take some time for requests the BLDSC cannot trace to be either satisfied (sometimes via international interlending) or to be abandoned in the end. To assess the actual fill rate for the individual library the number of requests in a whole year should be taken into account to provide an accurate impression and so the data of the last years was used.

2.5. The analysis

Once the data was collected, the statistical package *SPSS for Windows*, Version 6.1 was chosen to assist in analysis of the data. SPSS is usually known as 'Statistical Package for the Social Sciences' but the more recent meaning is 'Superior Performing Software Systems'. With this programme the frequencies of the data from the single categories and so-called crosstables to establish interdependencies were calculated. The graphics used to illustrate some of the results have been created with Microsoft Word for Windows Graphics (German Version).
References


2 Ibid.


7 The principle of self-sufficiency is explained in Chapter 3.3.1.3.

Chapter 3: The historical development of interlending in Germany

The interlending system in the present Germany is shaped by the federal character of the republic. Right from the middle of the nineteenth century the sovereignty of the single states played an important role for the structure of interlending. The main motive for interlending was the idea of resource sharing and enabling people to access the stock of other libraries.

3.1. The beginning

The beginning of an interlibrary loan system that incorporates the whole region of Germany was set in 1890 by the Decree of the Royal Prussian Minister for the Loan of Manuscripts to Other Libraries (Erlaß des Königlichen Preußischen Ministers der geistlichen, Unterrichts- und Medizinalangelegenheiten betreffend die Verleihung von Hand- und Druckschriften an fremde Bibliotheken). This decree concerned all Prussian university libraries as well as the Prussian State Library and two special libraries. These libraries could lend their printed materials and manuscripts to libraries in other states or abroad. A prerequisite for the participation in this scheme was the fact that the partner library was state funded and the obligation for loan to be on a reciprocal basis. In 1891, a similar system was established in the other states. The costs of loans were covered by the borrowing library, which could invoice the requester.1

Librarians had demanded such a regulation for some time before 1890. An interlibrary loan had to be sanctioned by all diplomatic channels involved and was thus difficult and time-consuming. However, single libraries had informal arrangements for loan systems between each other, for example, the interlending between the Royal Prussian State Library in Berlin and the university library in Tübingen, which was established in 1816.2 The decree of 1890 aimed at the improvement of the existing individual interlibrary loan arrangements.

The Prussian decree soon became insufficient. Different attempts were made for a more appropriate regulation, but these came to an end with the outbreak of the Second World War. The changes of the political structure towards a stronger interdependence of the
single states made the decree of 1890 outdated. Instead, the Prussian interstate lending system was used as a basis for a national lending system.

3.1.1. The Prussian Model

This internal interlending model within states was initiated by Prussia in order to save money. It aimed at improved access to information for libraries with insufficient stock, without having to increase the acquisition budget. Already at the end of the nineteenth century a co-operative acquisition programme was suggested. At first this was practised by two single libraries, but a final regulation was never passed, so that instead of a planned co-operative system covering all sciences, it resulted in a variety of activities and individual arrangements. The most important libraries, the Royal Prussian State Library and the university library in Göttingen, had to cope with the majority of requests. Right from the beginning libraries charged for the interlending service but there was not a standardised procedure of charging.³

At the beginning of the twentieth century the idea of a union catalogue for all German libraries developed. The Prussian Union Catalogue, established in 1897, aimed at the recording of all the printed works held in Prussian university libraries.⁴ In 1905 the German Libraries' Information Bureau in the Royal State Library in Berlin was established for direct use of the catalogue. It dealt with requests from libraries from the whole country.⁵

At the end of 1910 a decree for the interlending procedures between Prussian libraries was introduced, aimed at reforming the existing system with standard request forms to simplify the checking of bibliographic details. The pressure of increased demand for the Royal State Library resulted in delays.

Only a few libraries were authorised for direct participation in the interlending scheme. Other academic libraries had to rely on a major library in their region to act as intermediary. The resources of the region had to be tried before the request could be passed on to other regions. A direct approach to another library was only possible when the location of requested items was known. With the increase of records for the
Prussian Union Catalogue and the establishment of the Information Bureau, an improvement for the direct lending method was expected.  

3.2. The time between the World Wars

The First World War led to the breakdown of the economy. Thus co-operation was even more important than before for libraries. The long demanded national interlibrary loan code was finalised in 1924. It was modelled on the Prussian version from 1910 for printed works and on the decree from 1890 for manuscripts. The standard Prussian request form was also taken over. Participants were academic libraries and libraries with special authorisation. The prominent principles were the academic character of the request and loan on a reciprocal basis. The strict regional principle of the Prussian regulation was loosened. The loosening of the regional system led to the concentration of requests on the established major libraries such as those in Berlin and Munich. The Information Bureau’s role in the interlending scheme became more important as all requests that could not be satisfied by the Prussian State Library were passed on to it.  

An updated version of the interlibrary loan code in 1930 could not keep pace with the emerging problems the interlending faced: the vast number of participants, the enormous increase of requests and the unorganised request system. In 1931 the first volume of the Prussian Union Catalogue was published. Four years later it was renamed the German Union Catalogue by the Minister for Science and Education. By 1939, 14 volumes (‘A to Beethordnung’) had been published.

3.3. The time after the Second World War

The division of Germany into a Western and an Eastern part after the Second World War ended the previous efforts for a national interlending scheme. The opposite political developments resulted in two different systems and as an effect, co-operation between the two parts was not possible.
3.3.1. The Federal Republic of Germany

3.3.1.1. Phase I: Reconstruction

The pre-war organisation of the interlending system suffered severe losses in the Second World War. The Prussian State Library was divided into a Western and an Eastern part. The National Library in Leipzig was lost for the Federal Republic. Important library collections were destroyed. The compilation of the German Union Catalogue had to stop without being completed because the records were lost. The Information Bureau was situated in the Eastern part.

Interlibrary loans started again with arrangements between individual libraries, without national regulation or central control. The majority of the requests, naturally, concentrated on the few libraries which had suffered the least losses. In the Western part, a VDB-Kommission für Leihverkehrsfragen (Commission for Interlending Matters) was established. In 1948 the first draft regulations for interlending, an adaptation of the 1930 code to the changed circumstances, were published. An obligatory new interlibrary loan code was published in 1951. The single state governments were responsible for the authorisation of libraries to participate in the interlending scheme. A general prerequisite for participation was that the library had a stock of basic bibliographic tools.

A recommendation by the Commission in 1954 established three possibilities for direct approach. Libraries were allowed to approach one another without applying within the region if the location was traced, requesting directly by the copyright deposit library or if requesting directly by a special subject library. This principle of direct approach aimed at a faster supply and to relieve demand on the major libraries.10

The idea of dividing the sciences by different libraries had been advocated since the beginning of interlending, but only after the Second World War was the subject specialisation scheme, centrally funded by the Deutsche Forschungsgemeinschaft (DFG - German Research Council), formed. It was based on already existing special collections in certain libraries.11 It is a complex system involving three levels of libraries (state, university, special). The libraries with a special subject were required to acquire the appropriate literature, following rules set up by the DFG, and to provide
quick access for interlending requests. In addition to the thirty-three special subject libraries, responsible for 108 subject areas, four libraries were transformed into central special libraries for quicker access to the materials. These were: for agriculture, the Central Library for Agriculture in Bonn; for technology, the Technical Information Library in Hanover; for economics, the Library of the Institute for World Economics in Kiel; for medicine, the Central Library for Medicine in Cologne.\textsuperscript{12} This subject specialisation was set up to fit the needs of industrial research.

3.3.1.2. The central regional catalogues

Another development after the Second World War that had importance for interlending systems was the forming of central regional catalogues. The previous experiences with the German Union Catalogue on a national level supported the setting up of four regional catalogues (Hamburg, Cologne, Frankfurt am Main, Berlin (West)) in the period from 1946 to 1948. These catalogues were not restricted to academic libraries only, but also recorded the stock of state libraries, public libraries and special libraries.

In 1956 a second group of central regional catalogues was established in Göttingen, Munich and Stuttgart. These catalogues were incorporated as location tools into the interlibrary loan system.\textsuperscript{13}

3.3.1.3. Phase II: Regional principle

Due to the establishment of the seven central regional catalogues, their role had to be included in the new interlibrary loan code of 1966. The principle that every request has to be passed on to the central catalogue and should be satisfied within its region became obligatory. The three exceptions for direct approaches (mentioned in 3.3.1.1.) were still applicable.\textsuperscript{14}
3.3.1.4. Phase III: Direct requesting

The demand of interlibrary loans increased enormously. Through the further improvement of location tools with the union catalogues, and the further establishment of special subject libraries, the direct approach was used more and more.

These developments made a new code of practice necessary. In the 1979 regulations the German interlibrary loan principle was defined for the first time as a co-operative facility for all libraries to allow access to literature that is not in the local stock. It divides between regional and interregional lending. The first is aimed at public libraries and the second for the improvement of research by providing access to scientific literature in academic and special libraries.15

The access to the national collections was improved by the introduction of automated systems. Co-operative cataloguing systems for monographs were established on the basis of the central regional catalogues. These different catalogues are combined into the Union Catalogue of the Deutsche Bibliothekskatalog as a national location tool. For serials, a central database became available. In addition to the regional union catalogues, several national catalogues for special materials exist, such as the catalogue for foreign journals in Berlin.16

3.3.2. The German Democratic Republic

In 1949 provisional regulations for interlending in the Soviet zone were introduced. The final code of practice was established in 1955.17 While the development of interlending in the Western part was based on its federal structure, the developments in the German Democratic Republic steered in a central direction. The appropriate ministry issued a regulation of what was acceptable for interlending and how it should operate. In 1966 a scheme for special subject collections involving over 100 libraries was set-up.18 The former Information Bureau was converted into the Institut für Leihverkehr und Zentralkataloge (ILZ - Institute for Interlending and Central Catalogues) in 1971 and was thus responsible for administering interlending for the whole country. With the new interlending regulations of 1975, this central role of the ILZ was recognised. The regional central catalogues were a subordinate body to the ILZ, which collated and
processed the records of all locations centrally. All interlending requests had to pass through the ILZ. Requests from and to the Federal Republic were treated as international interlibrary loan.  

3.4. The present situation

After the reunification of Germany, two very different systems of interlending had to be merged into one. The important libraries, such as the State Library in Berlin or the two national libraries, had to revise their aims and objectives in order to adapt to the changed structure. The State Library in Berlin now operates as one library on two sites. The libraries in Frankfurt and Leipzig were incorporated into a national library scheme. The subject specialisation scheme from the Deutsche Forschungsgemeinschaft had to be revised to include the collections of the libraries in the former GDR and to avoid more duplication. Interlibrary loans between the two parts of Germany started on an informal basis, but the new interlending regulations from 1993 are now the basis for dealing with interlibrary loan requests in the reunited Germany. (see Appendix B for a map of the present German states)

3.4.1. The interlending regulations of 1993

The principles of the 1993 interlending regulations are: the principle of free loans on a reciprocal basis, the regional principle and the possibility for direct approach. The direct cost of interlending for the user is DM 1, to be paid when the multi-copy form that has to be typed is handed in.

In the interregional lending system there are three alternatives for the course of a request:
1. The checking of the request provides a location in the region. The request is thus passed on to this library.
2. Direct approach without location to libraries where a location is highly possible
3. The checking of the request could not trace a location. The request is passed on to the regional central catalogue. If a location is traced the request is passed on to the library.
If the catalogue could not trace a location in the region, the request is passed on to the next regional central catalogue. The so-called ‘Oxtour’ would mean the circulation of the request through all twelve central catalogues but nowadays the circulation is restricted to three central catalogues to avoid long delays.

For quick delivery, the four central libraries have created a special document supply service in addition to the normal interregional interlending scheme. This service is not free of charge, but the requester must pay various charges, depending on the library and the request.

In 1992 1,136 libraries requested items through the interlibrary loan scheme. The items were supplied by 765 libraries, whose stock is recorded in the various location tools. The satisfaction rate for the 2.4 million requests in 1992 was 87%. 21

3.4.2. The national catalogues

The serials database is available on microfiche as well as online with an integrated request module. By the end of 1992 it recorded 660,000 titles that are located in 275 libraries.

The co-operative union catalogue of data from the German libraries (‘Verbundkatalog maschinenlesbarer Katalogdaten deutscher Bibliotheken = DBI-VK’) is used as central location tool for interregional lending. It incorporates all records (monographs, including dissertations but excluding serials) of the regional co-operative catalogues. It records 7.4 million titles with over 17.6 million locations from over 600 libraries. 22
3.4.3. The regional catalogues

Eleven union catalogues cover the whole country. The quality and volume of data differ from one catalogue to another. The bibliographic records and locations from states of the former GDR have been integrated into existing West-German co-operative union catalogues. A universal library automation system does not exist. Data exchange and communication are very problematic due to the technical difficulties. Several projects (state funded and due to a single library's initiative) have been set up to provide solutions to overcome the present difficulties of interlending and data exchange, but so far no general direction is discernible.
References

3 Koscherreck, ref. 1, pp. 10-20.
6 Koscherreck, ref. 1, pp. 27-36.
7 Ibid., p. 50.
8 Kemner, ref. 2, p. 215.
9 Der Deutsche Gesamtkatalog, ref. 4, p. 1055.
10 Kemner, ref. 2, p. 217.
14 Koscherreck, ref. 1, p. 88.
15 Kemner, ref. 2, p. 220.
16 Bundesvereinigung Deutscher Bibliotheksverbünde, ref. 12, pp. 136-151.
17 Koscherreck, ref. 1, p. 104.
19 Zeller, ref. 5, p. 40.
21 Bundesvereinigung Deutscher Bibliotheksverbünde, ref. 12, p. 145.
22 Ibid., pp. 150-151.
Chapter 4: The historical development of interlending in Britain

In contrast to the development of interlending in Germany, the system in Britain was mainly a central one right from the beginning. The basic idea of interlending, as everywhere, was access to other library resources as supplementary service to the own stock, as it was recognised that no one library alone could satisfy all the demands of its users.

4.1. The beginning

The initiative for developing an efficient interlending scheme in Britain was not one of the library profession as a whole, nor was it a state initiative, but rather one of educational institutions and agencies. The idea of interlending and a co-operative system, using the German system as an example, was established at the beginning of the twentieth century. However, no national policy was introduced.

4.2. The period 1900 - 1939

1913 saw the foundation of the Carnegie United Kingdom Trust (CUKT), an organisation for “the improvement of the well-being of the people of Great Britain and Ireland”.

In 1915 W.G. Adams presented his report on library provision and policy to the Trust, recommending the establishment of a Central Library for Students (CLS). An institution such as this became necessary as the adult education movement gained more and more importance and thus book provision for distant students was becoming unsatisfactory. The Central Library for Students was opened a year later. The main motive behind the establishment of the CLS was educational, to provide the textbooks for adult education classes. The broadening of the service to interlending was more on a casual basis than deliberately planned.

After the First World War a report from the Adult Education Committee of the Ministry of Reconstruction proposed the conversion of the CLS into a ‘Central
Circulation Library’. It was also recommended that a union catalogue should be introduced to facilitate interlending. The new library should provide bibliographic information and should act as a centre for library co-operation to ensure a centrally organised system. The report demanded that such a central library with national responsibilities should also be state funded. However, this was not to be realised at this stage. Instead, the funding to broaden the service of the CLS once more was provided by the CUKT. The objectives of the CLS moved from the educational emphasis in the direction of a national ‘central circulation library’. The funding for the library was increased, which enabled the CLS to act as a central store for technical literature. The CLS was now able to purchase more expensive books to supply these to rural libraries and ‘less wealthy municipal libraries’\(^4\). This development consolidated the national, central lending role of the CLS.

Before the establishment of the CLS as a central lending agency, several different agreements between individual libraries served as a basis for interlending. Thus, some librarians could not see the need for a central library for interlending. Even after the introduction of the CLS, librarians remained unwilling to provide the appropriate funding. The CLS was, therefore, dependent on the funding by the CUKT, a charitable trust, which could therefore determine the future developments.

In the Kenyon report (1927)\(^5\) the idea of a central or national lending library as a supplementary service for all kinds of libraries was finally accepted. The establishment of the CLS had determined the structure of interlending in England as a central one. The report repeated the proposal to transform the CLS into a national central library that should become a special department of the British Museum and thus be financed by state funds. The objectives of newly formed National Central Library should emphasise the co-operative aspect of interlending activities with the lending activity playing the subordinate role. Only after a request failed to be satisfied in the regions should it be passed on to the NCL, which would thus act as of library of "last resort". In 1931 the Central Library for Students was renamed as, widening its scope, the National Central Library to act as a book provider and interlending co-ordinator. However, funds for the development of lending collections were still lacking. The National Central Library was
established as an independent body due to the refusal of the British Museum to incorporate it as a new department as suggested in the Kenyon Report.  

4.2.1. The regional systems

As pointed out previously, library co-operation on an informal basis already existed between several libraries. The demand for co-operation increased with the inadequacies of acquisition budgets. A study by the Carnegie United Kingdom Trust to analyse the existing co-operative scheme in the regions was carried out. The study also identified the existence of some local co-operative purchasing schemes. In 1927 the CUKT provided the funding for the introduction of a regional interlending scheme in Cornwall. This was based on a union catalogue and co-operative acquisition schemes. Similar systems were established in the other regions, so that by 1936 regional systems covered England and Wales. The interlending practice and policy in the systems varied from region to region (from concentration on major libraries in the Midlands to an equal spread of the requests in Wales). The quality and form of the regional union catalogues varied, so that the compilation of a national union catalogue by the NCL proved to be difficult. However, on the whole, the development of the regional systems lacked co-ordination and national planning.  

4.2.2. The outlier system

The constant funding problems of the CLS, and later the NCL, influenced its acquisition policy, resulting in an inadequate stock for the task of national lending provision. The CLS had to rely on the stocks of other libraries. This resulted in the so-called "outlier system", funded on the basis of grants from the CUKT for selected libraries on condition that they were willing to lend books to other libraries with the CLS acting as intermediary. Two libraries took part in this system at its beginning, but the number of participating libraries increased over the years and an outlier union catalogue was started, with special libraries supplying information about their stock to the CLS.
4.3.  The period 1939 to the present

4.3.1.  The time during and after the Second World War

Criticism of the existing interlending system resulted in another report, the McColvin Report (1942)\(^\text{10}\). McColvin summarised the various problems of interlending: the results and use of interlending did not justify the effort put into it; lack of standard practice and union catalogues proved costly to produce and maintain. His criticism concentrated especially on the regional systems that, in his opinion, "contributed nothing to the efficiency and effectiveness of interlending". He proposed the abolition of the regional systems and the enforcement of subject specialisation schemes, with NCL acting as co-ordinator of these activities.

McColvin's harsh criticism notwithstanding, the system proved satisfactory for librarians at that time. Interlibrary loan requests had increased enormously between 1931 and 1945. While in 1931 NCL handled the vast majority of request, the regional systems gained more importance, and by 1945 they satisfied 54% of the requests.\(^\text{11}\) However, the provision of literature in the field of science and technology had been neglected in the interlibrary scheme so far and thus changes in further planning were necessary.

4.3.2.  Towards centralisation

The NCL and other British libraries suffered partial destruction of their stock in the Second World War. The lack of funds and staff in individual libraries and the demand on interlending increased the pressure on the NCL. Again the idea of co-operative acquisitions along lines similar to the Special Collections Scheme in the Federal Republic of Germany and other countries was favoured. Regional Subject Specialisation schemes were introduced during the 1950s.\(^\text{12}\) Nevertheless, a review of the system became essential for future planning. The recommendations of the Vollans Survey\(^\text{13}\), approved in 1954, aimed at relieving the pressure on the NCL by shifting more emphasis onto the regional systems by means of a co-operative acquisitions scheme. This proposed a level of inter-regional self-sufficiency for British books. The
results of this decentralised solution were not satisfactory for a number of people, who favoured the centralised system.

The need for literature in science and technology was not included in national library planning but was recognised by the manager of the Science Museum Library, who established a direct postal loan service. This library was also included in the outlier scheme. With the increase of interlending demand, the Science Museum Library set up its own network for interlending of books and provision of photocopies.

Soon the creation of such a lending library for science and technology on a national basis was demanded. In 1961 the National Science Lending Library, with a special Library Lending Unit, was established. 14

Academic libraries seemed to rely more on bilateral arrangements with other libraries than on the regional and national co-operative schemes.

4.3.3. Expansion and rationalisation

With the central lending provision by the National Lending Library for Science and Technology (NLLST) a comparison of its efficiency and effectiveness with the one of the NCL and regional bureaux showed the quality of a centralised service. 15 The British Library Act of 1972 underlined the tendency of the British interlending system towards centralisation. The British Library was formed from the British Museum Library, the British National Bibliography, the National Central Library and the National Lending Library for Science and Technology. One unit of the British Library was the Lending Division, covering all subject areas, situated in Boston Spa. 16 This was renamed the British Library Document Supply Center (BLDSC) in 1986. The system of backup libraries, libraries with special collections in important subject areas and legal deposit libraries, was introduced in 1974 to consolidate the centralised interlending system of the BLLD and later the BLDSC.

In 1972 the Local Government Act affected the membership of public libraries in the regional systems and the administrative structure as a whole. The interregional coverage
scheme was ended in 1973 as the service of the British Library Lending Division for the provision of current British non-fiction was on a similar or better level.  

4.3.4. The present system

The present system of interlending in Britain offers two alternatives for obtaining documents via interlibrary loan. One is the direct approach to the British Library Document Supply Centre and the other is application within the regional systems.

4.3.4.1. The British Document Supply Centre

As described in the previous section the collections of the BLDSC were built for the specific purpose of interlending to other organisations. The Centre also maintains records of holdings from other UK libraries and is the national centre for handling international loans. A direct approach to other libraries is only advised if some sort of arrangement for interlending exists. Otherwise, the first application should always go to the BLDSC. It can provide the requester with alternative locations if it is not able to satisfy the request. In 1995/6, 89% of the requests were satisfied from BLDSC stock, for 3.6% alternative locations were supplied, 2.2% were passed on to Backup libraries, 0.2% went abroad and 5% could not be satisfied.

In order to use the service of the BLDSC, libraries must register with the BLDSC and purchase request forms (BLDSC vouchers) as means of payment. The UK prices from 1 April 1996 were: £229.14 for a pack of 50 request forms (ART, Postal and Transport Schemes) and £97.37 for a pack of 20 (Postal only). The usual rate for an interlibrary loan request is one voucher, but special materials (e.g. theses) require more than one. Requests can be transmitted by post, telephone, telex, fax or a number of other forms of automated transmission, for example ARTTel or JANET. The incoming requests are automatically matched with the location. The delivery of requests can be via post or the regional transport scheme, such as the East Midlands Regional Library System. If the BLDSC is unable to supply an item, it is decided if the requested item will be added to
the stock if further use is to be expected. The BLDSC is able to monitor the demand at the time it arises and thus is able to react quickly to changes.

4.3.4.2. The regional systems

At present there are seven regional systems in Britain (see Appendix C). The regional systems are agencies dealing with library co-operation in their area, including interlibrary lending. These facilitate access to local resources and expertise. The BLDSC generally advises libraries to join their appropriate regional system. Presently the regional systems have similar administration and constitutions, but membership conditions vary. The regional systems maintain union catalogues of the holdings of their member libraries, for example, in the form of ISBN location lists (1969 to date) in the East Midlands Regional Library System. The level of comprehensiveness differs from region to region, as some include older material or Extra-MARC material.21

In general, most academic libraries tend to use the direct approach to the BLDSC, while the regional systems are used mainly by public libraries.22 However, their services complement each other.
References


2 Ibid., pp. 88-89.

3 Jones, Brynmor. Inter-library loans, 1979, p. 4.

4 Roberts, ref. 1, p. 90.

5 Ibid.

6 Jones, ref. 3, p. 17.

7 Ibid., p. 6.

8 Roberts, ref. 1, p. 91

9 Ibid., pp. 89-90.

10 Ibid, p. 91.

11 Ibid, p. 92.


13 Jones, ref. 3, p. 25.

14 Bunn, RM. How it all began. BLL Review, 1974, 2 (3), 75.

15 Ibid., p. 122


17 Jefferson, ref. 12, pp. 122-123.


20 The British Library. BLDSC Services, 1996

21 British Library Document Supply Centre, ref. 18, p. 4.

Chapter 5: Problems facing interlending services generally

Several factors influence the demand on interlending and document supply, independent of what system is established as the national one. These factors can cause problems and have to be analysed thoroughly to adapt the system appropriately.

1. The output of publications world-wide has increased enormously.

One of the causes for the introduction of interlibrary loan schemes in England and Germany was the realisation that no library, no matter what size and how well funded, could rely on the self-sufficiency principle and comprehensive acquisition. And since the beginning of this century, when due to these shortages the idea of interlending and resource sharing was born, the world-wide output of publications has risen enormously.¹

2. Inadequate funding of libraries in key positions for interlending

Libraries that hold a central position for the interlibrary loan systems cannot provide the comprehensive acquisition like they used to. The Special Subject Libraries and the four Central Libraries in Germany also have to cope with reduced budgets. The BLDSC from 1 April 1996 ceased to purchase one-off copies of market research reports and monographs in foreign languages, imposed stricter selection criteria for non-UK English language monographs and ceased to consider purchase of monographs that cost more than £300.²

3. The inadequate funding for acquisitions increases the demand of interlending.

Libraries have to rely more and more on interlibrary loans as the acquisition budgets can not keep pace with the increase of literature production and the inevitable increase in production prices.³ In times of stringency several serial subscription had to be cancelled in Bremen which led to an increase of interlibrary loan demand.⁴
4. *The number of students, particularly research students, is increasing dramatically.*

Research students in particular demand a different library service to undergraduates. This user group has different needs, relying on literature provision in wide-spread subject areas which might not be in the scope of the local library. Therefore, the demand for interlibrary loan requests is increasing. This is also connected with the pressure on the researcher to do more research in less time despite decreasing research funds. Speed of supply is an important criteria to measure the efficiency of a document supply system as time is a crucial point for research, especially in the area of science and technology.

5. *New means for literature provision have emerged*

As pointed out by Marlene Nagelsmeier-Linke⁶, the use of online database has become an indispensable prerequisite for scientific work. It is technically possible to build up fulltext databases which then could provide not only the bibliographic details but also the text or article itself. So far different projects testing electronic document delivery have been undertaken, but these seem to aim at services in competition with the interlending systems rather than being integrated as an additional service.

6. *Access to bibliographic information is becoming easier.*

Improved means of access to bibliographic information has not resulted in improved access to the information itself. Current awareness services and a wider use of CD-ROM and online databases can quickly result in a vast number of references which then have to be ordered via the interlibrary loan service. The time span between the tracing of the reference and the supply of the item itself can be too long for the user.

Databases usually include less known and grey literature which can be difficult to trace. Thus, the interlibrary loan requests can become very specialised.
7. Increasing demand from the private sector

Research has gained more importance not only in the academic sector but also for trade and industry. This opened a whole new market for document supply services. Requests from this sector rely heavily on speed of supply, disregarding the costs, so that special express delivery services that are charged for by the libraries have been established. A negative result of these express delivery services is that these requests are dealt with first, which can delay the dealing with the ‘normal’ requests.
References


4 Discussion with Jutta Fregin, Head of Interlibrary Loan Department, State and University Library Bremen, 16 April 1996.

5 For example in Leicester University Library the number of students increased from 6,041 in the 1989-90 academic year to 11,460 in the 1994-95 academic year.

Chapter 6: Future developments and special projects

Several projects to overcome the current problems of interlending have been initiated. They rely on the developments in communication technologies, based on the standard protocols. Also, charging for interlibrary loan requests is an obvious tendency for future developments. This is, however, difficult on an international basis as each country or even each library has a different charging policy.

6.1. In Germany

The main problem in Germany is the number of different co-operative systems. The Deutsche Forschungsgemeinschaft (German Research Council - DFG) in its recommendation from 1994 emphasises the importance of developing a communication structure for the exchange of data between different systems. This should include the union catalogues Verbundkatalog maschinenlesbarer Katalogdaten deutscher Bibliotheken (DBI-VK) and Zeitschriftendatenbank (ZDB) and provide an option for international lending. There have been several projects from individual libraries or a group of libraries to improve the interlibrary loan system on the basis of these recommendations. However, there is no national policy for the improvement of interlending with modern (communication) technology so far.

6.1.1. The Konstanzer interlending project

The aim of the project at the university library in Konstanz was to implement two OSI protocols, the X.400 and ILL-Protocol. It is funded by the DFG. In preparation for the implementation of this project, a survey of the request and supply rate was carried out.

The project in Konstanz uses the Reference Model for Open Systems Interconnection for the transmitting of requests. The participants of this project can be divided into three groups: requester, responder and intermediary. These can interact with each other in various ways. For the transmitting of requests, an electronic form that includes all the details from the conventional form has been developed. The aim is that the user puts in
the required data for interlibrary loan requests, which are then automatically checked in the local database, at a terminal linked to the library server.\textsuperscript{3}

This project is still in its experimental phase and has not yet supplied any usable results.

6.1.2. Links from databases to library catalogues

The catalogue of one of the four central subject libraries, the UB/TIB Hannover, is available online via the host STN. This library introduced online ordering in 1979. A method to combine the results of a search in a STN database with the classmarks of the library has since then been developed in the so-called TIBQUICK project. The requests are mailed directly to the library, sorted into normal and express orders, printed out, copied and sent to the requester. To improve this service further the use of a scanner for direct data transmission is planned.\textsuperscript{4}

6.1.3. Electronic document supply

Some projects not only aim at the improvement of the transmission of requests but also at the transmission of the requested articles in electronic form. These projects are not limited to one single country but can involve other countries as well. The RAPDOC (Rapid Document Delivery) was developed in the Netherlands by PICA (Project for Integrated Catalogue Automation) but now also includes some German libraries. This project aims at making the articles of the 7000 most used serials available in electronic form. The scanned articles are sent directly to the requester.\textsuperscript{5} The request should be satisfied within 48 hours.
6.2. In Britain

The developments in Britain, naturally, are co-ordinated mainly by the British Library. These projects also rely on the OSI Standard that aims "to provide communication based user services which operate between computer systems of different origin which may be located in different countries". The aims of the English projects also correspond with those of the German ones.

6.2.1. LASER and VISCOUNT

The regional system LASER (London and South Eastern Region) is worth including in this chapter even though it is not a special interlending project but a regional system. However, this system gained more and more importance since it came into existence in 1969 by merging the London Union Catalogue and the Southeast Regional Library System. LASER produces ISBN location lists. The interlibrary communications network, VISCOUNT, was set up in 1985. VISCOUNT can be used as a location tool as well as a means for transmitting request using the ILL-standard for communication. It can also link libraries to the BLDSC and holds listing of the BLDSC’s serial and monograph stocks. It is now widely used not only by the members of LASER but also by several other regions.

6.2.2. BLAISE-LINE

The BLDSC runs a number of services for interlending, such as Urgent Action Service and Lexicon. BLAISE-LINE is part of the National Bibliographic Service. Its database consists of the output of UK publications since 1950. A number of online hosts also offer ordering facilities to the BLDSC, either direct with the database citation or individual electronic order forms. In 1995/96, 3.3% of all requests were made via database hosts.
6.2.3. **Electronic document delivery projects**

The British Library is the initiator of an electronic document delivery project. Its Inside Information database holds the bibliographic details of articles from the 10,000 most popular serials. The articles can be sent to libraries or direct to the requester. The possibility to send the requests directly via email using the Joint Academic Network (JANET) to the requester is being analysed at the moment.\(^\text{10}\)

6.3. **International developments**

Interlending is an important issue not only on a national basis, but the modern technologies now also allow international communication if it is standardised. As the demand for interlending increases and the means of accessing bibliographic details for the world-wide output of publications rapidly improves, the pressure for interlending on the international level is rising. The projects for international interlending also affect developments on the national level.

6.3.1. **EDIL - Electronic Document Interchange between Libraries**

This project is based on work on existing OSI-standards and products by the Group on Electronic Document Interchange (GEDI). This project aims to prove that an international exchange format for electronic document delivery is feasible despite various national network standards. Participants of this EU-sponsored project are: BLDSC, PICA, France's MESR and INIST, and UB/TIB Hannover. The planned results of this project are quick electronic document delivery by improved access to information for science and technology and the improved co-operation of the participating libraries by use of modern communication technology.\(^\text{11}\)
6.3.2. Project ION

This project started in 1990 with the participation of the United Kingdom (LASER), The Netherlands (PICA) and France (SUNIST). It aims at establishing interconnection between the libraries of the participating countries to improve international interlending services. It is also a demonstration project for the use of OSI standards for interlending. Thus the European Information Market is strengthened. The searching and requesting network is extended to pan-European access. The specification and development phases for this project have been completed in 1993 when ION began its service.¹²
References


2 Data from this survey are used as comparison in the analysis of the study in Bremen when appropriate.


7 Nagelsmeier-Linke, ref. 4, p. 354.

8 *BLDSC database hosts* (URL: http://www.bl.uk/dsc/db-hosts.html), 08 Aug. 1996.


10 Nagelsmeier-Linke, ref. 4, p. 364.


Chapter 7: Study of interlibrary loan services in Bremen

7.1. Short history of the library

The beginnings of this library go back to the seventeenth century when the public library, situated in the convent, was opened for the public in 1660. This public library, now called Bibliotheca Bremensis, consisted of the stocks from the church libraries, the library of the Gymnasium illustre and the Council Library. Like in so many other old Germany libraries, the nucleus of the stock was formed by a private scholarly collection. Only in the 18th century was the library stock increased notably.¹

With the beginning of the 19th century lending activities were recorded. The first interlibrary loan was noted in 1825 when two books were sent to a famous scholar in Kiel. The books took 10 years to arrive and were never returned to Bremen.²

In 1927 the public library was renamed state library. In the Second World War the library suffered severe losses. In 1965 a new university was built and the state library was incorporated into the university activities to serve the researchers and students. It was re-established in 1975 as a university library and seven years later renamed to state and university library.³

7.2. Background information and statistics

Due to historical developments, the library in Bremen has to fulfil two tasks: firstly, as a university library, it has to provide the academic institutions in the state of Bremen with appropriate literature and other media; secondly, as the state library, it has the copyright deposit right for state publications and has to provide the citizens of the state with local literature. It is also included in the Subject Specialisation Scheme by the DFG as the library responsible for collecting material concerned with journalism and the history of publishing. The shelf register for newspapers and media research, one of the national catalogues for special materials, is situated within the library. The library is part of the Northern German Union Catalogue that serves the states of Bremen, Hamburg and
Schleswig-Holstein, and co-operates with Mecklenburg-Vorpommern in the former GDR. The central regional library is based in Hamburg.

Bremen also offers its readers access to the RAPDOC project via the online contents database by the Göttinger Union Catalogue. Access for searching and ordering is possible via the Internet (URL: http://www.uni-bremen.de/bibliothek). At the moment this service is in the test phase so that the number of serials for selection is small and the requested article has to be published after 1993 but therefore the ordering is presently free of charge. The SuUB also participates in the Neue Hanse Interregio (NHI) program. The NHI is the joint effort for improved co-operation, including document supply, by four Dutch provinces and the German states of Bremen and Niedersachsen. This project enables readers in Bremen to search in catalogues of five other libraries. The direct ordering is limited to journals, and the reader has to include the classmark as a result of the former search.

The stock includes ca. 2.3 million volumes and over 13,000 journals. About one million volumes are on open access, divided over the four levels. Since 1993 the management structure of the library changed from a task orientated hierarchy to subject orientated teams. The interlibrary loan department is listed under services and presently 9 people share the 7 positions in the department.

### Table 1: The statistics for interlibrary loans in Bremen

<table>
<thead>
<tr>
<th>Year</th>
<th>Requesting rate</th>
<th>Supplying rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total number</td>
<td>Satisfied</td>
</tr>
<tr>
<td>1992</td>
<td>15,707</td>
<td>13,059</td>
</tr>
<tr>
<td>1993</td>
<td>17,419</td>
<td>12,115</td>
</tr>
<tr>
<td>1994</td>
<td>14,813</td>
<td>13,364</td>
</tr>
</tbody>
</table>

The statistic rates outline that the number of requests send to Bremen outweighs the number of requests made from Bremen (Table 1). This illustrates the high demand the interlibrary loan department has to cope with. While the satisfaction rate for the supply of material by the state and university library remains constant, the satisfaction rate for requests by the library shows significant variations. In 1993 a new code of practice for interlibrary loan requests was introduced. This phase of reorganisation might be
responsible for the low satisfaction rate in that year. In the following year the total number of interlibrary loan requests decreased, but the satisfaction rate increased to an impressive 90.2%.

7.2.1. The PICA system

The Northern German Region changed two years ago from its own cataloguing system to PICA (Project for Integrated Catalogue Automation). This system is also used in several other states and the German National Library.

PICA, developed in The Netherlands from 1969, was originally developed as a system for shared cataloguing, and the first version was implemented in 1978. The development of the interlibrary module followed four years later. It is an open system designed to integrate modules for all library functions - acquisition, cataloguing, lending and interlibrary loans. The interlibrary loan requests can be passed on to a library after the search in the union catalogue provides the appropriate location. The system can automatically stipulate the order in which the request should be passed on to the libraries, considering the size, the interlending capacity and regional connections.

In 1993 the PICA system was introduced in Niedersachsen, Sachsen-Anhalt and the national library. The implementation of OPACs, the lending, acquisition and interlibrary loan module is still in its beginning stages in those libraries. In Bremen, only the cataloguing department uses the PICA-system so far. For lending, a different system (BABSY) is used that is not connected with the data in PICA. Acquisition and interlibrary loan are not automated. The use of PICA as an integrated library automation system is planned, but the full implementation will take some time.
7.3. The present procedure

A step by step guide to the procedures for handling an interlibrary loan request till it is satisfied is helpful for the interpretation of the results from the performance measurement study. It illustrates the different stages a request has to pass until the reader finally gets the requested photocopy or book. A flowchart (Appendix D) of the procedures serves as an overview for the possible ways for a request.

**Step 1:**
The reader fills in the multi-copy form (Appendix E). Due to the regulations the bibliographic details have to be typed. A stamp representing the requested 1 DM fee has to be attached. An increase of this fee to 3 DM is under discussion at the moment. This might reduce the number of interlibrary loan requests. There is no limit for the number of items students or academic staff can request.

**Step 2:**
The librarians have to check the details of the requests in the DBI-VK or ZDB for serials. Locations are noted in regional order, so at first locations preceded by HAM have to be tried. If there is more than one location, usually three locations all together are noted. If the requested item is in the local stock or cannot be traced, it is passed back to the reader.

**Step 3:**
The requests are stamped four times with the order number and signed. The green part of the form remains in the library, filed under the name of the requester. The pink part then is sent via mail to the traced locations.

If the librarians were unable to find a location for the item, but verified the bibliographic details with printed bibliographies or other means, the requests can take three routes: directly to the Central Regional Catalogue in Hamburg, to a Special Subject Library or the appropriate Copyright Library. The request is transferred to a regional location if the Central Regional Catalogue is able to trace one. If a regional location cannot be traced, the request is passed on to the next regional catalogue. As the
tour through the 12 existing central catalogues is a long and cumbersome one, it is now common practise to limited it to three regions.

Step 4:
If the library the request is send to can supply the item, a photocopy is made or the book is processed for the tour via the van service. If the library cannot supply the item as it is out on loan or not traceable, the request is passed on to the next location.

If there are no further locations, the request is sent back to Bremen where it will be decided which further steps can be taken.

Step 5:
The requested material arrives in Bremen with the van service or the daily post. The green part of the form are removed from the file, compared with the supplied item and, if it is satisfactory, the notification for the reader is written. If the supplied material is unsatisfactory, the supplying library has to be admonished, for example, because of poor copying quality, missing pages or sending the wrong item altogether.

7.3.1. Problems of the study and general delays in handling the requests

During research in the interlibrary loan department, it was noticed that several points at the various steps could cause problems for the practical implementation of the study were obvious. Also at some points the local arrangements in Bremen resulted in general delays of requests. These, too, influence some of the results of the study.

Step 1: As there is no limit on the number of requests a reader is entitled to, some people hand in hundreds of requests, thus causing unnecessary delays. To counter this, the fee for a request will be increased so that a selection process by the reader is encouraged.

Step 2: The checking of the bibliographic details of the requests can be delayed as it is up to the librarians to check them in their own time. The quality of the checking varies. Some librarians tend to note down all the locations while others provide just one.
to the high number of requests, the interlibrary loan department in Bremen suffers from backlogs in their work. Therefore, readers are encouraged to check the locations for their requests themselves by using the main location tools on microfiche at the information desk. This could cause problems, as readers cannot know what the important information for interlibrary loan requests is and so some double checking might be necessary.

*Step 3:* The time span from noting down the location on the request form to the actual transmitting of the requests can be long. Ideally, each morning a certain number of request should be stamped and sent to the appropriate locations, but due to the work overload in the department it can take some days (or a week at worst) before the request is passed on. Therefore, for this study it was decided to use the stamp date (i.e. the date when the requests were transmitted to the first location) as request date, because it was not possible to identify the date when the reader actually typed the request.

The transmitting of requests is mainly via post. Therefore, the writing of the different envelopes is a very time-consuming task for sending of the requests. However, it is planned to automate the transmitting process in the near future.

The location tools only provide the classmark. The librarian cannot recognise if the item is out on loan or for use in the library only with the DBI-VK or ZDB. So some requests are sent to locations that will not be able to provide the item.

The requesting library is not in charge of request channels once it is sent to the first location. It cannot trace the present state of a request if some enquiries or problems occur. Chasing of requests is thus very difficult.

*Step 4:* The library that has the item and is willing to provide it, has to consider if the interlending use might interfere with local use. So the lending of very recent books or heavily used books tends to be difficult. The speed of supply of photocopies or books is also dependent on the local provision, equipment and staffing.

*Step 5:* The period from arrival and unpacking of the material to the date of notifying the reader can also be delayed. The usual practice is that the material is unpacked on the day of arrival but then temporarily stored on the shelves till the remaining material has been processed. For this study the date when the reader notification is written was
chosen as the date of receiving as it is the accurate one to outline the period a reader has to wait for the request to be passed on. It sometimes proved to be difficult to assign the photocopies to individual libraries as the majority of them supply the copies without an individual mark or library stamp.
References

1 SuUB Bremen. *Bestandsgeschichte.* [unpublished paper]


Chapter 8: The performance measurement study in Bremen

In this chapter the results of the study are analysed, and comparative data from past studies are quoted as appropriate. The order of the categories in the chapter corresponds with the one on the form. The specific dates of the requests have not been included as they just served as means to calculate the speed of supply.

8.1. Type of material requested

The types of material were limited to the four categories in Figure 1 as they seem to be the most important ones.

![Figure 1: Type of material requested in Bremen](image)

The tendency of two thirds serials and one third monographs being requested is also noted in a 1985 survey in the United Kingdom, where 54% were requests for serials and 33% for monographs. In a more recent study, analysing the requesting and supplying part in the university library in Konstanz, Germany, the rates of requests for serials (35.6%) and monographs (64.4%) were also similar to the one from Bremen (see Appendix F, Table 1 for the table of frequencies).
Modern research, especially in science and technology, relies on up-to-date information, which is usually published in form of journal articles. It is common practice for researchers to do searches in online and CD-ROM databases to acquire new bibliographic information. The contents of these databases are, naturally, in the majority journal articles. In times of stringency usually subscriptions of lesser used journals are cancelled to save more money. However, this can lead to an increased pressure on the interlibrary loans. It is to be expected that the tendency towards high request rates for serials will not change in the near future.

8.2. Final location tool

For a decentralised system, like the German system, an important point is the quality of the union catalogues that form the heart of the system. Without a comprehensive record of the nation's library stock, the location of requests is impossible (see Appendix F, Table 2 for the table of frequencies).

As pointed out in the methodology (Chapter 2.4), there is no record of how many requests are returned to the reader as they have to be cancelled, either because they are in stock or because the librarian cannot trace the requested item. In the latter case the requester is asked to supply the source of reference before the request is transmitted. So all requests that will be transmitted have been traced in one of the various location tools (Figure 2).
The most common ones are the DBI-VK for monographs and the ZDB for serials. Both are available in Bremen in their latest edition on microfiche. The majority of the requests (91.4%) were traced in either one or the other. However, these location tools proved to be insufficient for over 7% of the requests that had to be checked in other printed bibliographies. These do not supply location but verify the bibliographic details. These requests are then passed on to the appropriate Copyright Library if it is a German publication, to a Special Subject Library if it fits in the scheme, or otherwise to the Central Regional Library.

In general, recent German literature should have been recorded comprehensively in the union catalogues. Printed bibliographies are more important for older literature and special materials. It is to be expected that, with the further implementation of PICA in the library, this system will become more important as a location tool. It is already observable that some librarians use the one information link to PICA as a means to locate more recent literature.

8.3. Form of order

Nearly 97% of the requests were passed on directly to a fixed location that either resulted from the checking in DBI-VK, ZDB or the special catalogues. This outlines the importance of direct ordering for the present interlibrary loan system. Only three
requests had to be sent to the Central Regional Library as no other location could be traced. For these request the principle of regional self-sufficiency still applies. At first it has to be verified that this request is not available within the region. Sometimes the Regional Central Catalogue can provide a location as more libraries report their acquisitions to the regional catalogue that might not be included in the national location tools. Five requests were sent directly to libraries with a suspected location, either because of the copyright legislations or the subject specialisation scheme (see Appendix F, Table 3 for the table of frequencies).

Due to changes in research, the introduction of new sciences, this scheme has to be monitored so that it always represents current research emphasis. So far the system has proved to be functioning well. The four Central Libraries play an important role for industrial document supply. They offer a variety of services for fast delivery. However, they are quite expensive. Other libraries complain that the supply times from the central libraries are longer as the latter handle the urgent requests first, which causes delays for the normal requests. [See Speed of supply (8.9)]

8.4. Method of transmitting and receiving requests

During the weeks of this survey all requests were transmitted via the normal post, which is the usual procedure. Only occasionally are requests passed on via the van service if they have to go to the next stop of the van, but this can be seen as an exception to the rule. In the study in Konstanz it is noted that the average delivery time of a letter in the German mail system is 1.4 days. There is no separate mail service for the interlibrary loan requests. In a national interlending study in 1993, online ordering was possible in only 18% of the libraries, including the libraries participating in the Konstanzer project and Niedersachsen.

The majority of requested material is received via the van service (98.7%) which calls in at the library three times a week. The rest of the material is supplied by mail (see Appendix F, Table 4 for the table of frequencies). Such a proportion is quite common in the German system, as similar results in Konstanz underline. With the implementation of the PICA interlibrary loan module the means for automated requests become available. However, this cannot be expected in 1996 or the next year. Electronic
document delivery via the RAPDOC project is presently tested, but with the further improvement this service will no longer be free of charge.

8.5. Successful route

It is interesting to see how the different types of libraries contribute to the supply of interlibrary loan requests (Figure 3). For the analysis university libraries that are part of the Special Subject Scheme are included in the category of 'Special Subject Libraries'. This does not automatically indicate that they supplied the material from their special subject collection. Indeed, this was only occasionally the case. However, the chosen distinction clearly shows that Special Subject Libraries also have a good stock of normal academic collections that form an important part for interlending.

![Figure 3: Proportions of supply by different library types](image)

Surprisingly, the Central Regional Library only supplies 8.9% of the requests. Equally low is the rate for supply by the four Central Libraries (8.2%). This is due to the practice to use these libraries only as 'last resort' if there are no other locations. The Central Libraries only serve as back-up as they handle numerous other requests via their various online services.

The majority of requests are supplied by other university libraries. Together with the Special Subject Libraries, they supply 67.8% of all requests. In the category of 'other'
libraries fall public libraries, special libraries and smaller libraries. These are the third group of the major suppliers (see Appendix F, Table 5 for the table of frequencies).

The interlibrary loan requests are not concentrated on a few major libraries but are distributed among the university libraries, with or without additional special functions. The decentralised system does not rely on a few libraries with important collection but makes use of all the nation's library resources. However, it is a natural development that libraries with major collections have to handle more requests than others. For example, the State and University Library Göttingen that already played an important role in the history of interlending, handled approximately 14% of the requests in this study.

8.6. Supplier code

The principle of regional self-sufficiency is still included in the 1993 code of practice. The librarian has to chose first the locations with the code HAM for the Northern Region that Bremen belongs to. If no HAM location can be found, it has to apply to NIE, meaning the region of Niedersachsen (Lower Saxony), the neighbour state. In theory the majority of requests should be supplied from the local or the next neighbour region, without having to apply too often to other states. Figure 4 lists the seven states that supplied more than 4% of the requests each:

Figure 4: The regional share of the seven major suppliers
The Northern Region consists of the states of Hamburg, Bremen and Schleswig-Holstein. Only one third of the requests from Bremen have been satisfied by the other two states, i.e. by the own region. Indeed, the share of Niedersachsen as supplier of requests is higher (35.3%) than the one of Hamburg and Schleswig-Holstein combined (30.2%). These two regions can only satisfy two thirds of the requests. The remaining requests were supplied from other regions. This indicates that the principle of self-sufficiency is not feasible.

The states are individually responsible for the financing of academic and other libraries in the state. Thus the politics and budgets of libraries vary considerably from state to state. The Northern part of Germany is generally seen as less wealthy than the Southern part. Therefore, libraries from the North rely more on the resources of Southern libraries than vice versa. Only 1.0% of the requests have been supplied from libraries in the former GDR. Their stocks still have to be retrospectively converted in the union catalogues so that these libraries are completely integrated in the interlending scheme.

Nordrhein-Westfalen is a major supplier outside the Northern region as 15.1% of the requests were supplied by libraries situated in that state. The other regions and states only supply two to four percent each.

It has to be stated that the satisfaction rate of 30.1% within the Northern Region is very low. Even if the supply rate of the neighbouring region is added to this, the level of regional self-sufficiency is still only 65.4%. This shows clearly that Bremen relies not only on various types of libraries but also on the states outside its own region to satisfy the majority of its requests (see Appendix F, Table 6 for the table of frequencies).

8.7. Format of received item

The data for the type of material requested already gave a clear indication that there is a tendency towards photocopies for articles - in fact, 71.9% of the supplied material was in form of photocopies for retention (see Appendix F, Table 7 for the table of frequencies). Only 28.1% was supplied as material for loan. Some of the monographs that were requested also arrived in the form of photocopies as only one chapter was
relevant or the supplying library decided that a copy of a short or valuable monograph
was more suitable than sending the monograph itself. Also photocopies require less
work for the receiving library as they only have to be received and not returned.

8.8. Number of applications

The vast majority of requests (97.3%) was directly supplied by the first library that was
tried. Only 8 requests altogether could not be satisfied with the first application; 2.4%
of requests were satisfied after one further application, and 0.7% after two. Three
applications for one request were the longest it took for the material to be supplied (see
Appendix F, Table 8 for the table of frequencies).

This proved that the location tools give accurate information about the locations of the
requests. Thus most of them could be satisfied by a direct approach and without further
delays.
8.9. Speed of supply

For the calculation of the speed rate, the days between date of transmission and date of receiving the item were counted, the latter meaning the date when the material was prepared for the requester by 'officially' receiving it. Only working days in the week were counted to get an accurate idea how long a reader had to wait for the request to come through (Figure 5).

![Graph showing percentage of requests satisfied in the time period](image)

Figure 5: Percentage of requests satisfied in the time period

The average supply time was 27 - 28 days (see Appendix F, Table 9 for the table of frequencies). As most of the requests are supplied by direct ordering, this time is slow. One result of the study in Konstanz was that the average supply time has increased from 18 to 20 days in the last 15 years. The supply time for direct ordering of 15 days was already in 1992 criticised as too slow. In another interlending study, the speed of supply, calculated as the time period from first application to notifying the reader, was 29.14 days - similar to the Bremer results.

Nonewhilesthecriticism, it seems that the speed of supply has not improved. Quite the contrary, it has worsened for service in Bremen. As already pointed out in Chapter 7.3.1, the internal procedures in Bremen are partly responsible for delays that lead to these slow supply times. The fastest time of supply was six working days from a university library in Baden-Württemberg and the longest 132 days (from October 1995!)
from the Central Library for Medicine in Cologne, which is known for being too slow in supplying requests.\textsuperscript{8}

If the speed of supply can be used as an indicator for the efficiency of the interlibrary loan service as a whole, it can be concluded that an average supply time of 4 weeks is insufficient. As it is pointed out in the IFLA manual: "A slow service cannot satisfactorily supplement access to local holdings, and it certainly cannot serve as a substitute for local access. ... A service that is slow lacks credibility and deters demand\textsuperscript{9}. This can also indicate that the satisfaction level for the individual requester is not very high. User interviews or questionnaires would be the appropriate means to further analyse this problem.

\textbf{8.9.1. Speed of supply by format of received item}

Several factors are important for the supply speed (Figure 6).

\begin{center}
\textbf{Figure 6}: Dependency of speed of supply on format of received item
\end{center}

The supply of photocopies is faster for the first 25 days. Then the supply of monographs for loan is above the average supply time. The fast supply of photocopies for the first 25 days is due to the fact that they seem to be easier to supply and to involve less administrative work (see Appendix G, Table 1 for the frequencies of crosstables).
However, in the case of Bremen it cannot be generalised that the supply of photocopies is faster than the supply of monographs for loan, similar to the results of the 1985 study in the UK where this tendency was obvious.\(^9\)

### 8.9.2. Speed of supply by final location tool

It is interesting to observe the relation between the final location tools and the supply speed.

![Figure 7: Dependency of speed of supply on final location tool](image-url)

The choice of location tool does not seem to have a major influence on the speed of supply (Figure 7). The above average supply time for items located in the ZDB corresponds with the one in Figure 6, as the ZDB is the location tool for serials. The supply time of items located in the DBI-VK is below average for the time span 'within 40 days'. This can be connected with the fact that the DBI-VK does not include the loan status of the monograph as it is presently only available in microfiche form. As serials are usually for use in the library only, it is easier to locate them when requested than monographs which could be out on loan.

The location tools that are summarised under the category of 'other' include the printed bibliographies and PICA. Generally items that could be verified only in the
bibliographies, but not located in the various tools, take longer to be supplied than items that have been located. While over 85% of the items located in the DBI-VK and the ZDB are supplied within 40 days, only 64% of the material recorded in the bibliographies are supplied in the same time period. This shows how important the use of the location tools is for the speed of supply. Without a fixed location, the request has either to be passed through the regional catalogues, which is a cumbersome procedure, or sent to libraries with suspected holdings, which is uncertain. Both these routes obviously take longer than the direct approach to a known location (see Appendix G, Table 2 for the frequencies of crosstables).

8.9.3. Speed of supply by type of library

The main suppliers in the case of Bremen are the university libraries and the Special Subject Libraries (Figure 8).

However, the fastest suppliers are the other libraries, i.e. the special and institute libraries, that supply the requests always above the average time. These libraries usually do not have special interlending responsibilities and thus are able to handle the requests straightaway. The slowest supplier is the Central Regional Library which in the
time span of 30 days supplies clearly below the average rate. The average supply time for this library is 29.8 days, with the fastest supply being 19 working days. Another major supplier, the State and University Library Göttingen, supplies the request in the average time of 35.4 days, the fastest being 16 days and the longest 126 days. The latter was an exception as it was a request without fixed location that was sent through the regional system before it was passed on to Göttingen in its Special Subject coverage. The supply from the military library in Hamburg, which frequently gets requests from Bremen, takes on average 17.3 working days. This fits in with the observation that the supply from libraries without specific interlending responsibilities is generally quicker than the supply from libraries with such special task (see Appendix G, Table 3 for the frequencies of crosstables).

8.9.4. Speed of supply by region of supply

For the analysis of the relation of speed of supply with region of supply, the number of regions were limited to the main six regions that supply most of the requests for Bremen (Figure 9).

![Figure 9: Dependency of speed of supply on region of supply](image)

The supplying regions can be clearly divided in two groups: those who supplied above the average time and those who supply below. The ones whose supply time is above the
average are the two other states that belong to the Northern Region (Hamburg and Schleswig-Holstein) and Baden-Württemberg. Surprisingly, the supply rate of the immediate neighbour, Niedersachsen, is slightly below the average. Therefore, a certain influence of the regional proximity is detectable, but the general assumption that regional proximity equals faster supply cannot be established (see Appendix G, Table 4 for the frequencies of crosstables).

Interestingly, the one request in this study that was supplied on the basis of international lending by the BLDSC was available for the requester within 29 days. The supply by the BLDSC for international loan was, therefore, faster than the supply from other German libraries in the national lending scheme.
References


3 Ibid., p. 108.


5 Kuon, Lehmler & Mühle, ref. 2, p. 105.


10 White, ref. 1, p. 28.
9.1. Short history of the library

Leicester University began as Leicester University College in 1921. The library at that time was based on a gift to the College by Thomas Hatton. By 1922, 6,000 volumes had been amassed and catalogued. The students at the university were registered as external students of London University until 1957, when the university received its charter and therefore its independent status. The university and its library have experienced phases of expansion since then, and interlibrary loans have increased gradually. In 1960/61 the total number of interlibrary loans was 495 while in 1981/82 it had increased to 16,036.

The library operates on three sites: the Main Library is located on the central campus, the Education Library on the School of Education campus and the Clinical Sciences Library in the Royal Infirmary. The main library opened its present building in 1974, covering the space of 5 floors with a floor area of over 7,000 m².

9.2. Background information and statistics

Leicester University Library serves the students and staff of Leicester University. In 1995 there were 11,460 students and 2,673 members of staff. The stock in the main library includes periodicals and other media and amounts to 907,700 items. Including the material in the two branch libraries, Leicester University Library has a stock of 1,124,700 volumes. All three sites supply an individual service. Accordingly there are three interlibrary loan departments, one for each branch.

The interlibrary loan department of the Main Library was chosen for the study as it handled about the same number of requests as SuUB Bremen. Four people work presently at the department - one full-time and three half-time. In 1994-95 the Main Library handled 19,150 interlibrary loan requests. Readers are entitled to a certain number of requests depending on their academic status. These numbers have been reduced from the beginning of May 1996 to control the increasing demand. The
numbers now vary from three at the time and not more than 20 in the term for undergraduates to 15 and 250 for academic staff. At the moment the interlibrary loan service is free of charge but the introduction of a fee is being discussed. A new fine for not collected interlibrary loan requests has just recently been introduced. As the library has to pay for each interlibrary loan, non-collected items are regarded as waste of money and staff time. Thus it has been made compulsory to collect the material that has been requested.

The interlibrary loan statistics for Leicester are presented in Table 2 and 3.

Table 2: The requesting rate in Leicester

<table>
<thead>
<tr>
<th>Year</th>
<th>Requests</th>
<th>Cancelled</th>
<th>Approved</th>
<th>Supplied</th>
<th>Loans</th>
<th>Retention Copies</th>
<th>Success rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992/93</td>
<td>19,833</td>
<td>4,318</td>
<td>19,080</td>
<td>15,498</td>
<td>5,552</td>
<td>9,946</td>
<td>81.2%</td>
</tr>
<tr>
<td>1993/94</td>
<td>21,794</td>
<td>3,338</td>
<td>19,419</td>
<td>17,157</td>
<td>6,243</td>
<td>10,914</td>
<td>88.3%</td>
</tr>
</tbody>
</table>

Table 3: The supplying rate in Leicester

<table>
<thead>
<tr>
<th>Year</th>
<th>Requests received</th>
<th>Supplied</th>
<th>Loans</th>
<th>Retention Copies</th>
<th>Success rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992/93</td>
<td>2,098</td>
<td>946</td>
<td>909</td>
<td>37</td>
<td>45.1%</td>
</tr>
<tr>
<td>1993/94</td>
<td>2,378</td>
<td>937</td>
<td>895</td>
<td>42</td>
<td>39.4%</td>
</tr>
</tbody>
</table>

In contrast to the SuUB Bremen, Leicester University Library is clearly a netlender and only supplies a minimum number of items to other libraries. The number of requests made either on the library’s own or remote terminals has increased over the last years (Table 2). The number of cancelled requests has decreased in the same time. Thus more requests have been approved and sent to the BLDSC. The majority of requests are supplied by the BLDSC (94.3% in 1992/93 and 93.7% in 1993/94). The overall success rate has increased from 81.2% to 88.3% during the last year.

The supply rate is very low. This is because the library is mainly approached as suspected location, there being no comprehensive national location tool. The majority of requests that are received from other libraries are for monographs (Table 3).
total number of requests from other libraries has increased but the success rate has decreased in the same time.

9.2.1. The LIBERTAS system

The LIBERTAS system was introduced in Leicester University Library in 1988, replacing a shared system using remote computers at Bristol. LIBERTAS is an integrated library automation system from SLS. The interlibrary-loan module is fully integrated with the other modules of LIBERTAS making use of the circulation, cataloguing, acquisitions and public access functions. The librarian keeps full control over the requests. The progress of the requests can be tracked easily. Notices and Reports can be generated with special codes. The systems also provides the communication means to other libraries, the SLS database and JANET, ARTTel. Online access to the library OPAC is available via the library based terminals or by linking other computers to the campus network.

The systems has recently been updated to Version 6.5. Presently there are approximately 572,000 items catalogued on-line. The remaining items are in the old card catalogue.

9.3. The present procedure

The flow chart of the current procedures (see Appendix H) illustrates the steps that are taken from making the requests to notifying the reader.

Step 1:
The reader selects the interlibrary loan module on the terminal, using the library and the pin number. The LIBERTAS menu offers options for four kinds of requests: books or theses, periodical articles, conference proceedings and papers, reports or patents. By choosing the appropriate one the reader gets a fixed form to complete with the bibliographic details.
Step 2:
The requests are printed out every morning together with the other section heads, i.e. overdues and chasers. All new requests are checked on the LIBERTAS catalogue that incorporates material published after 1984. For material published before 1984 the card catalogue also has to be checked. Official publications have to be checked in a separate catalogue. If the requested item is found in any of the catalogues, the request is cancelled and the reader notified that the material is in stock.

Step 3:
If the requested material is not in the stock of the library, the request is amended to include the requirements (for example, 'P/C' for Photocopy) and the type of search. The standard search is the "y-search" that indicates a search on the national level. A voucher number is allocated next. One voucher pays for the supply of a book or a photocopy that does not exceed a length of 50 pages. Two vouchers are needed for theses or photocopies that exceed 50 pages. Finally, the request is approved. Thus the request is consigned for transfer to the BLDSC.

Step 4:
The requests are transferred overnight via ARTTel to the BLDSC. There the requests are automatically linked with the classmark and location in the building. The BLDSC sends a list of notices via the INTRAY which was introduced in 1989 to allow customers who use ARTTel to access replies to their requests online. These replies are coded messages about the state of the requests. The most common ones are that the item is in use, on a waiting list, on order, cannot be traced with the quoted information or alternative locations are provided.

If the BLDSC can provide the request immediately no messages will be sent via the INTRAY. The requested items are sent to Leicester via the van service when the books have been processed and the photocopies have been made. The van calls in at Leicester on each working day of the week.

If the BLDSC cannot trace the material with the information quoted, a message is sent to Leicester via the INTRAY. Then a standard report for the requester asking for the source of reference is initiated. If this has been supplied, it is sent again to the BLDSC where further searches will be made. It will then be decided if the item is within the
scope of the BLDSC collection and consequently be ordered. For non-British material that cannot be traced within the UK a "z-search" on international level is possible.

In some cases the BLDSC cannot provide the material but offers alternative locations. These can be either definite locations which are recorded in the various union catalogues or suspected locations due to subject specialisation.

Step 5:
If the requested material can be provided by either the BLDSC, a backup library or other libraries, it is sent to Leicester University Library either via the van service or the post. The request is then received on LIBERTAS and processed. A message for the reader that the request has arrived is initiated. The requester than collects the material as either a normal loan or a retention copy; for the latter, a copyright declaration form has to be completed.

If the requested material cannot be provided by any of the libraries, it can be transformed into an international request or has to be cancelled.

9.3.1. Problems of the study and general delays in handling the requests

The one major problem in Leicester was the breakdown of the communication link to the BLDSC in the second part of the study. This required that the requests had to be stored on disc and sent via the van service each day to the BLDSC. As the usual overnight transfer was not possible the transmission of requests was delayed for a day.

A general point of delay in the current procedure is that if the BLDSC is unable to trace the item, the requester is asked to send in the source of reference. Then Leicester has to reapply with this further information. Therefore, some time passes before an in-depth search can be undertaken to verify the bibliographic details. Some people do not react after this notice, so the request is cancelled after a certain time period.
References


Chapter 10: The performance measurement study in Leicester

The data from the study in Leicester is analysed in this chapter. Comparison with the data from Bremen and other libraries is made when appropriate. As with the analysis of the results from Bremen, the sections below follow the order on the form and specific dates are not included.

10.1. Type of material requested

The categories for the type of material correspond with the ones in Bremen (Figure 10). The requests in both libraries show the clear predominance for journal articles, with the rate in Bremen being only slightly higher than in Leicester.

![Figure 10: Type of material requested in Leicester and Bremen](image)

The general tendency in the type of material coincides with the interlibrary loan statistics from 1992/93 (64.1% monographs and 29.8% serials) and 1993/94 (63.9% monographs and 37.8% serials) in Leicester (see Appendix I, Table 1 for the table of frequencies).

The BLDSC statistics for the demand 1995/96 show a similar share for the type of material: 68.4% English language serials (plus 3.6% serials in foreign language), 18% monographs and 10% grey literature.
The general tendency for serial articles is unambiguous. The number of serials, especially in the field of science and technology, is constantly increasing. The statistics of the BLDSC show that 69% of the requests are in the subject of science and technology.¹

Libraries have acknowledged this trend. Several projects for electronic journals have been set up, aiming to provide the full-text version of the journal. Therefore, direct access to the journal and downloading of the article without relying on interlibrary loans is possible. The Internet could also be seen as an alternative. Several journals are available in electronic form via the Net. Access can be restricted so that the interested person has to register and thus has to pay for the use.

10.1.1. Cancelled requests

The checking of the catalogues resulted in the cancellation of 23 requests. Surprisingly only 34.8% of these were monographs. Some of the monographs published before 1984 are recorded only in the card catalogue. Usually the requester only checks on LIBERTAS and neglects the card catalogue, but the additional checking of the catalogues occasionally reveals that the material is in the stock of the library. However, some of the requests can be found in LIBERTAS so that it can be stated that not all readers check thoroughly.

The majority of requests that had to be cancelled were serials which are completely recorded in the OPAC. This can only imply that the requester had problems using the catalogue or could not locate the appropriate volume in the catalogue. It is common practice in Leicester to include the classmark on the cancel notice to simplify the search for the requester.

Further nine requests had to be cancelled in the course of the study as the material could not be supplied or the requester did not want to wait for an international interlibrary loan.
10.2. Response from the BLDSC

Replies from the BLDSC (Figure 11) were required for 78 of the remaining requests. In general it can be said that if the BLDSC has some kind of problems with the request a reply for the INTRAY is initiated, thus delaying the supply of such a request.

![Figure 11: Responses from the BLDSC](image)

The most common message was that the BLDSC could not supply the item itself but could offer alternative locations (a quarter of these are just suspected locations) or passed the request on to the backup libraries. At the end of the study seven of the 20 requests that had been past on to alternative locations had been supplied and two had to be cancelled as the alternative could not supply the item either because it was not in stock or was lost (see Appendix I, Table 2 and 2.1 for the table of frequencies).

The problem in providing the alternative locations is the lack of a comprehensive union catalogue comparative to the DBI-VK in Germany. The BLDSC does not have access to all the different location tools that exist in the UK. For example, it does not have access to the SLS database which records locations of libraries that use the LIBERTAS system. The access to other location tools is also limited and thus the request for material that might be in a library in the same region or even town might cause unnecessary delays. As there is not a catalogue for the national holdings, such a request might even be transformed into an international one.
The second most common report was that the BLDSC could not trace the item with the information supplied. Requesters had to supply their source of reference so that Leicester could reapply. Nine requesters did not react to the note asking for the source of reference. Presumably they are not interested in that request anymore. If the source of reference is sent, the BLDSC then searches again. If no location can be traced, it is decided if the material is within the scope of the BLDSC service and, therefore, acquired or not. This procedure causes delays in the supply. In contrast the German practice to verify the bibliographic details before the requests are transmitted ensures that the information on the request form is always sufficient.

If the requested material proves to be within the subject area of the BLDSC, but so far it is not included in its stock, and a certain level of demand can be expected, it is ordered and the requests are put on the waiting list. This was the case for eight of the 26 requests that could not be traced with the first application. This also causes delays as the requester has to wait till the material is received and processed in the BLDSC. There is no other possibility to obtain the book from an alternative library. One of the 26 requests was transformed into a "z-search" and seven had to be cancelled as they are not in scope of the BLDSC and could not be supplied by other locations.

Some requests are naturally in high demand and out on loan when they are requested, so that they too have to be put on the waiting list. The interlending demand concentrates on the one major supplier and thus materials in high demand can take some time till they are supplied. For the seven requests that were in use at the time of the first application in this study, the average supply speed was 18 days, almost three times slower than the normal average. The requester again has no alternative but to wait for the material to be returned from the other libraries to the BLDSC.

Originally 13 requests were selected by the BLDSC for ordering without asking for source of reference as they were not yet included in the stock but further demand was to be expected. Three of these were supplied from the Centre in the average time of 16,3 days, one was already in demand so that the request from Leicester had to be put on a waiting list. Another request had to be cancelled as the requests proved to be out of scope; one request was for material that is not yet published and the remaining seven were still waiting for supply.
For five of the requests from Leicester a "z-search" was offered. This was confirmed for three requests by the individual requesters. These were supplied in the average time of 27.6 days after the first transmission to the BLDSC.

The other replies of the BLDSC included that the request is not within its subject area and therefore had to be cancelled, that another voucher was needed, that the material was not available within the UK but a "z-search" could be undertaken.

10.3. Final location tool

At the end of the study not all requests had been supplied or cancelled; 48 requests were still waiting to be satisfied, either because the requester had not returned to the library for reapplication or the BLDSC/alternative location had not supplied the item within the allocated time.

Leicester University Library relies heavily on the provision of literature from the BLDSC as the vast majority of requests are supplied from there. So far 95.5% of the 222 requests that had been received were supplied by the BLDSC. The direct approach without using a location tool is the common one for Leicester. In the recent years over 93% of the supplied material has been received from the Centre. This illustrates the important role of the BLDSC as central supplier and the dependence on this by the other libraries.

All requests are sent to the BLDSC first, apart from the two cases where the requests were directly sent to a library with suspected holding. This is the only exception and is usually limited to British theses (see Appendix I, Table 3 for the table of frequencies).

10.4. Method of transmitting requests

As pointed out above the vast majority of requests are passed on directly to the BLDSC via the automated system. Only direct requests are sent via mail (see Appendix I, Table 4 for the table of frequencies).
In the White survey of 1985 it was found that the majority of requests were transmitted via post. Automated systems were not so elaborate at that stage and only in the beginning phase of being implemented in libraries. The LIBERTAS system was only introduced in 1988 in Leicester and the different modules were completely integrated at later stages. The fastest request transmission in 1985 was via telex or telephone. These methods are now rarely used. The BLDSC receives nearly two thirds of the requests via ARTTel (59.6%), 22% via post and only 1.0% via telex. The use of ARTTel as a means of transmission to the BLDSC has increased over the last years while postal requests have declined.

If the request has to be passed on to an alternative location, the BLDSC sends the form back to Leicester so that it can be sent from there via the post to the first location. This also causes delays as the interlibrary loan department in Leicester has to wait for the form to be returned before the request can be passed on to the alternative locations.

The breakdown of the communication link can also be a problem and cause additional delays as experienced during the second part of the study.

10.5. Method of receiving material

As there is a good organised van transport scheme in England which covers the majority of academic and public libraries, nearly all requests are supplied via the van service. Only four items were sent through the mail. In the 1985 survey it was reported that the BLLD, as the BLDSC was called at that time, sent 58% of its material via the van service. A further result was that transport via the van service was faster than via mail. Since then this service has improved and is widely used. As Leicester University Library receives most of its interlibrary loans from the BLDSC and both libraries are
fully integrated in the regional transport scheme, this is definitely the best method for the supply of requests (see Appendix I, Table 5 for the table of frequencies).

10.6. Successful route and source of supply

Due to the centralised system in the UK and the common practice in Leicester to send nearly every request to the BLDSC first, it is not surprising that the BLDSC is the main supplier for Leicester University Library. In the 1985 survey the BLD supplied 72% of the requests, and in 1995-96 the BLDSC satisfied 89% of the requests, with 3.6% being supplied by alternative locations and 2.2% by backup libraries.

The results of this study in Leicester so far correspond with this trend. From the remaining 222 requests that were supplied in the time of the study, 212 were supplied by the BLDSC. Twenty requests were passed on to alternative locations. By the end of the study two of the three requests were passed on to backup libraries, five of the requests sent to alternative locations and all three requests that were converted to international requests were supplied (see Appendix I, Table 6 and 7 for the table of frequencies).
10.7. Format of received item

Corresponding with the type of material requested, the comparison of Leicester and Bremen again shows clear similarities (Figure 12). The majority of requests are supplied in material for retention, in form of photocopies.

![Figure 12: Format of received item in Leicester and Bremen](image)

In the 1985 survey, the proportion of loan and retention material was almost equal, but since then the emphasis clearly has shifted towards photocopies. This is obviously connected with the increase in requests for journal articles that are usually supplied in the form of photocopies. Microforms, either for loan or for retention, form only a very small proportion of the supplied material.

Even though the proportion of requests for serial articles was higher in Bremen than in Leicester, both libraries received over 70% of their request as material for retention, in Leicester slightly more than in Bremen (see Appendix I, Table 8 for the table of frequencies).
10.8. Number of applications

The majority of requests have been supplied directly by the BLDSC. Two applications were necessary for requests that were passed on to the alternative locations. The two requests that have been supplied by the Backup libraries did not need a second application as they are directly transferred from the BLDSC to the backup library. One request already has been tried at two alternative locations (both stated that the material is not available as it seems to be lost) but could not be supplied within the allocated time (see Appendix I, Table 9 for the table of frequencies).

10.9. Speed of supply

As in Bremen, the supply time was calculated by the period from the date of the first application to the date of receipt of material, only counting the working days and starting at the date after transmission (Figure 13).

Whereas the speed of supply in Bremen was measured in steps of ten days, in Leicester the steps can be limited to single days. This already indicates the great difference in the speed of supply, with the average time being 6.1 days. This is a huge contrast to the average of 29 days in Bremen. Over a quarter of the requests were supplied in three
days and over 90% after nine days. This clearly shows the efficiency and effectiveness of the central system. However, a number requests were not satisfied within the time of the study. These requests were mainly those that had been passed on to alternative locations and that obviously causes delays (see Appendix I, Table 10 for the table of frequencies).

It has to be noted that the different means of transmitting the requests also influences the speed of supply. A direct comparison is difficult as the transmission via post can be slower than the one via an automated system. Using only the real elapsed time from transmission to receipt, this was taken into account. Nevertheless, the difference between the German and the English average speed of supply is remarkable. The BLDSC as main supplier has a collection that serves interlending purposes only and thus the problems of local use versus interlending access does not exist. The whole stock of the BLDSC and the handling procedures are designed for quick access and processing of photocopies and monographs.
10.9.1. Speed of supply by Format of received item

Contrary to the results in Bremen, in Leicester material for loan was supplied faster in the beginning but after four days its supply rate fell below the average (Figure 14). The supply of photocopies was below average at the beginning phase but changed to above average after four days (see Appendix J, Table 1 for the frequencies of the crosstables).

![Figure 14: Speed of supply by Format of received item in Leicester](image)

The majority of requests for serials were supplied by the BLDSC whereas a share of requests for monographs had to be passed on to alternative locations. Thus the supply of monographs was delayed and slightly below the average on the whole. The statistics from the BLDSC show that the satisfaction rate for serials is high (over 90%) while only about 70% of requests for monographs have been satisfied from the BLDSC stock and 15% had to rely on alternative locations. The supply from alternative locations naturally takes longer as they involve more applications.
10.9.2. **Speed of supply of the BLDSC**

As the BLDSC is the majority supplier for Leicester University Library, the speed of supply is similar to the average supply speed (Figure 15). The BLDSC supplies the requests slightly above the average supply rate (see Appendix J, Table 2 for the frequencies of the crosstables).

![Figure 15: Speed of supply of the BLDSC](image)

Requests that have been passed on to alternative locations naturally take longer as the first application went to the Centre and only after they could not be satisfied from their stock, alternative locations were supplied. Then the request was sent back to Leicester to be passed on to the first noted location. This procedure inevitably causes delays. If the item is to be supplied by an alternative location, the same problems that exists in Germany apply. The library has to decide whether local use is not limited by the interlending access. The libraries have different lending policies. There is also a great variety in funding and staffing in the different libraries. These problems do not apply to the BLDSC as a central provider. Another advantage of this central system is that the BLDSC can monitor the demand and use this knowledge to adapt the acquisition policy accordingly, avoiding overlap and gaps in collection. However, with the reduced acquisition budget, the collection policy has to be revised and the position of a comprehensive central collection is weakened.
References


3 British Library Document Supply Centre, ref. 1, p. [1]


5 White, ref. 2, p. 48.


7 British Library Document Supply Centre, ref. 1, p. [4].

8 White, ref. 2, p. 62.

9 British Library Document Supply Centre, ref. 1, p. [4].
Chapter 11: Decentralised versus Centralised: Conclusion & Arguments

In the previous chapters the different interlending systems in Germany and England have been analysed. As pointed out in the introduction, these two systems can be seen to represent the two extremes for interlending on a national level. Both systems have advantages and disadvantages that will be analysed in this chapter, using the data from the performance measurement study as illustration when appropriate.

11.1. Extent of provision

The general statistics for Leicester and Bremen show the same average success rate - about 80%. In England the majority of requests are sent to the British Library Document Supply Centre. The Centre is specially designed for interlending purposes and thus acquires a comprehensive collection. However, with the increase in world-wide publication output and inadequate acquisition budgets, the acquisition policy of the BLDSC had to be revised. Especially the acquisition of monographs has been cut. Due to this reduction at the BLDSC, the supply of monographs for interlibrary loans will rely increasingly on alternative locations. The lack of adequate funding in the centralised principle causes severe problems, as the libraries rely heavily on the one central provider. Theoretically the alternative locations only serve as backup, but with the present developments they have to take on more and more responsibility. This can prove difficult due the lack of a comprehensive national union catalogue.

Libraries in a decentralised system also have to adapt to inadequate funding, but the results of cuts in acquisitions are not so far-reaching as the system is not designed around only one library. It is easier to divide the vast number of publications into small parts for various libraries, so that the responsibility and the work are shared. However, it is not easy to clearly delimit the responsibilities for the different science areas, so the risk of gaps or duplication is high. With the changes in the sciences, the whole system and the allocation of funds have to be revised. The acquisition policies in the different libraries vary so that collection of material on a national basis does not have the same levels of intensity and quality. In a decentralised system the participating libraries always have to weigh up local access with interlending access. Some material is for
local use only or cannot be located within the library as it is on loan or in use, so the request cannot be satisfied even though the location is recorded in the catalogue. However, the union catalogue provides the accessibility and possibility of availability for most of the national stock, which, while belonging to a single library, is nevertheless available for all libraries through interlibrary loans.

11.2. Cost of provision

The initial costs for setting up a central collection are very high. They are immensely high for the first years of the service if the collection must be built up from scratch. The acquisition must include not only recent publications, but a policy for retrospective acquisition must also be defined. Thus extensive national funding is required. In the development of the British interlending system, this proved to be a problem at the beginning as it was only with the British Library Act of 1972 that the responsibility for the British Library, including the then Lending Division, was passed on to the government. With the central collection of material, a certain amount of overlap with the stock of the other libraries is unavoidable. This seems to be a waste of funds at first: as the material is already in stock of some libraries, why has it to be duplicated in another? However, the aim was to build a collection solely for interlending purposes. The overlap in acquisitions covers mainly material that is commonly wanted and is, therefore, in high demand for interlending. Once the central lending library has been established, the costs are comparatively small and clearly defined as all requests are directly sent to one centre. Thus the total annual costs can be calculated by this one centre.

A decentralised system is built on existing strengths and collections. Thus local knowledge and expertise for specific subjects are used for national literature provision. This is useful for interlending purposes if a location cannot be traced in the different catalogues. In a decentralised situation interlibrary loan requests must be satisfied from several individual collections that are not specifically designed for interlending. The collections already existed in the libraries. With the regional acquisition scheme in Germany, funding for the special subject libraries is provided from an institute that is not controlled by the state. However, the allocation of funds is difficult as the sciences
vary in the form of the most common form of material, language and country of publication. Therefore, finding the right basis for the allocation of funds is difficult. As the stocks of a number of libraries are used for the interlending, a comprehensive location tool is vital. The setting up and maintenance of these kinds of catalogues are expensive. Due to variations in the cataloguing rules and different library automation systems, the collection of data proved to be difficult. In this study, the majority of requests was recorded in the two national location tools, illustrating their comprehensiveness. However, not all libraries are included in these, so the regional catalogues cannot be considered obsolete. Thus the number of catalogues that are important for interlending is quite high, but their compilation increases the total costs. The hidden costs for staff, staff time, not only of the interlibrary loan department but also of the librarians for checking the requests, are high and cannot be easily calculated.  

11.3. Speed of supply

The most remarkable result of the study in Bremen and Leicester concerns the criterion of speed of supply. Even with regard of the different methods of transmission and the variations in the handling of the requests, the differences in the speed of supply are enormous.

The BLDSC is the major supplier for Leicester. The internal procedures of handling requests in the Centre are designed for speed and efficiency. The supply time is very fast - four to five days on average. The BLDSC has to cope with supplying items only and not with requesting. The reciprocal principle does not apply in a centralised system. It does not have to take local use into account as the collection is set up only for interlending.

In contrast, the system in Germany relies on a number of libraries and the principle of regional self-sufficiency. However, as noted by Maurice Line, this principle is only feasible for local proximity:

...the theory of regional self-sufficiency appears to be based on the curious idea that it is easier to obtain a book by post from 50 miles away than from 250 miles: an idea which might have been reasonable before 1850.  

81
Accordingly, it cannot be generalised from the study results that there is an immediate connection between the regional proximity of the supplier and the speed, although the partners in the region were amongst the fastest suppliers.

### 11.4. Ease of use

As Stephen Vickers concluded, the approach to interlending has to be systematic as well as structured.\(^4\) In both selected countries interlending was not systematically planned at the beginning but emerged due to immediate needs. However, with further developments the systems were planned and systematically structured.

The forms used in the British system are standardised on the basis of BLDSC forms and vouchers. The users in Leicester fill in the mask on LIBERTAS which then is transmitted via ARTTel to the BLDSC. Thus only a minimum number of steps must be taken until the request arrives at the supplying library. The requesting library always has control over the process of the requests.

In a decentralised system, a number of steps have to be taken before the request is passed on to the first location as there are more libraries involved in the whole process. The form used is also standardised to simplify the process.

A good interlending system has to have the robustness and flexibility to adapt to changes in demand or procedures. In both selected libraries the introduction or the increase of fees for requests is discussed as a means of slowing down the further growth in demand. The BLDSC is seen as an example for robustness.\(^5\) However, unexpected peaks in demand can be dealt with more easily in a decentralised system as the pressure is not concentrated on a single library.

### 11.5. Ability to monitor the system

The system has to recognise changes in demand and adapt accordingly when the emphasis in science and research changes as it has so many times during the development of interlending.
In a centralised system the monitoring is easy as the one main supplier can determine the trends by constant analysis of the request patterns. Thus the supply can be matched to the demand.

In contrast, monitoring the pattern of requests in a decentralised system is difficult as every library only receives a percentage of the requests and so cannot analyse the general trends of demand. Thus changes in demand will not be immediately recognised and adapting of procedures and stock policy to these changes is delayed.

11.6. **Outlook for the future**

Open access to information is and will continue to be increasingly important for modern research. This includes access to materials not only limited to a local library but using the entire national supply system. A library can no longer aim at self-sufficiency in a closed access stock but has to encourage an open access policy. With the problems in funding, co-operation of libraries is increasingly important for the provision of good information services.

Both systems have advantages and disadvantages as outlined above. The centralised solution in Britain and the decentralised one in Germany are now well established in both countries so that a change from one to the other would not be feasible. However, the question for the dissertation was if the right system has been established. The political structure in Britain allowed the creation of a central lending division that was initially set up by an independent body. With the changes in the funding of this central body, alternative suppliers, especially for monographs, have to take on more and more responsibility. Peter Smith\(^6\) suggests as a possible solution for the future that LASER takes on the role of supplier for monographs. Therefore, the regional solution for monographs as a sophisticated backup service to the BLDSC would be introduced. The BLDSC in return would concentrate on the supply of serial articles. The further implementation of OSI standards as communications protocols improve the automated transmission of requests. The increased use of alternative locations requires comprehensive union catalogues that are so far not available on a national level. Some libraries have access to a better variety of location tools than the BLDSC. Thus it is
necessary to compile a union catalogue on a national basis as comprehensive location tool.

The political structures of Germany and the historical developments precluded a centralised system. There never has been only one library responsible for national literature provision. Nevertheless, the decentralised solution is criticised for its various disadvantages which result in a long supply time. It is expected that with the introduction of fully automated systems this time will decrease. Ordering with an automated system would make some of the present, time-consuming, steps while handling the request obsolete: the requests would not have to be typed, the transmission of requests would no longer rely on the post, the requesting library would keep control over the progress of the requests, online union catalogues enable the requester to check the loan status before sending out a request. Thus the main problems that cause delays would be solved. However, the conflict between local use and interlending access still exists as it is rooted in the nature of the decentralised system. Several projects in Germany analyse the use of new technologies and international standards for improved communications. The favoured model is one using the ILL-protocol based on OSI standards.

The future for interlending will be influenced by modern communication technology. The possibility of electronic document delivery has to be further analysed and included in interlending services. Several projects on a national as well as an international basis are concerned with electronic document delivery directly to the requester. The requesting library's role as an intermediary would cease to apply. Thus requests could be satisfied by using electronic journals and the Internet - they do not have to be sent via the usual interlending channels. This direct requesting, however, leads to other problems, such as charging and copyright issues.
11.7. Suggestions for further research

There is much scope for further research in the area of interlending. National surveys in both countries can provide information about the present interlending situation. The last national survey in Britain was in 1985. Since then new developments have influenced the handling of interlibrary loan requests. These need to be further analysed. There has not been a similar survey on a national basis in Germany but it seems desirable to analyse the effectiveness of the whole system.

Another interesting aspect would be to analyse the connection between the contents of the material requested, such as year and country of publication, subject, with speed of supply. This would help to monitor the demand of the present and the anticipated demand for the future.

It has to be seen what impact the Internet will have for interlending on a national and an international basis. The implementation of the standard protocols and the results of the numerous interlending projects will also affect future developments, but these still have to be examined.
References


6 Smith, Peter. Discussion session following the paper "Open Systems and VISCOUNT". In: Robin Green, ed. Interlend '90, 1991, p. 41.
Bibliography


Bunn, R.M. How it all began. BLL Review, 1974, 2(3), 75-78.


SLS Libertas (URL: http://www.sls.se), 08 Aug. 1996.


<table>
<thead>
<tr>
<th>Survey number</th>
<th>Voucher number</th>
<th>Type of material requested*</th>
<th>Date of first application</th>
<th>Response from BLDSC</th>
<th>Date of receipt of material</th>
<th>Final location tool * (only if not from BLDSC)</th>
<th>Method of transmitting request*</th>
<th>Method of receipt *</th>
<th>Successful route</th>
<th>Format of received item*</th>
<th>Source of supply *</th>
<th>Number of applications</th>
</tr>
</thead>
</table>

* coded fields, see separate Explanations sheet for the appropriate codes
Appendix A

Explanation for the survey sheet

If a request has been tagged with a combination of *RE...* and a three digit number, this means that it has been selected for my study of the interlibrary loan systems. This number refers to the appropriate column on the survey sheets. If you come across a tagged request, please let me know or fill in the missing bits on the survey sheet. The voucher number is also included to provide a further control tool for the checking of the request stages.

The fields marked with an * are coded fields, that means you don’t have to fill in words or phrase but certain numbers that represent the answers. The appropriate codes for the different rows are listed underneath.

Type of material requested:
1 = Serial
2 = Monograph or Theses
3 = Conference/Proceeding
4 = Patent

Response from the BLDSC:
Put in whatever reply from BLDSC came for this request

Date of receipt of material:
Fill in the date in form of DD/MM/YY when the material was received or cancelled

Final location tool:
i.e. how you located a library to which the final application was made, whether successful or not.
Only to be filled in if the item hasn’t been supplied by BLDSC
1 = Alternative locations supplied by BLDSC
2 = Educated guess for direct approach
3 = Other

Method of transmitting request:
i.e. how you sent the request
1 = Automated systems
2 = Post
3 = Van Services
4 = Other

Method of receipt:
i.e. the method by which the item was dispatched to you by the supplying library
1 = Van Services
2 = Post
3 = Other
Successful route the request took
*i.e. the interlending channel through which the request was routed*
only to be filled in if not supplied from BLDSC
1 = Backup libraries
2 = Direct from other academic libraries
3 = Regional
4 = Other

Format of received item:
1 = item for loan
2 = item for retention
3 = microform for loan
4 = microform for retention

Source of supply:
*i.e. the library from whose stock the item came*
1 = BLDSC
2 = Backup libraries
3 = Other academic libraries
4 = Overseas
5 = Other

Number of applications:
If you know how many applications were made either by yourself or by an
intermediary (i.e. BLDSC) on your behalf, please enter the *number*. This could be the
total number of libraries you tried before the request was satisfied or abandoned.
Map of Germany

Source:
Appendix C

Map of Britain

Source:
British Library Document Supply Centre. Directory of library codes. Boston Spa:
Flow chart of the interlibrary loan procedure in Bremen

Reader types request form

Checking of the bibliographic details with the various location tools and own catalogue

Not in stock

In stock

→ back to reader

with locations

without locations

Other libraries

* Special Subject
* Copyright

Central Regional Library

finds location

cannot find a location within the region

through further three regional catalogues

Library can supply the request

Library cannot supply the request

further locations

no further locations

Library sends material to Bremen

receive material

notify reader

Cancelled

International Interlibrary loan request
Table of Frequencies for Bremen

<table>
<thead>
<tr>
<th>Type of material</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serials</td>
<td>198</td>
<td>67.8%</td>
<td>67.8%</td>
</tr>
<tr>
<td>Monographs or Theses</td>
<td>92</td>
<td>31.6%</td>
<td>99.4%</td>
</tr>
<tr>
<td>Conference Proceedings</td>
<td>1</td>
<td>0.3%</td>
<td>99.7%</td>
</tr>
<tr>
<td>Reports</td>
<td>1</td>
<td>0.3%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>292</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Frequencies for Type of material requested

<table>
<thead>
<tr>
<th>Final location tool</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBI-VK</td>
<td>83</td>
<td>28.4%</td>
<td>28.4%</td>
</tr>
<tr>
<td>ZDB</td>
<td>184</td>
<td>63.0%</td>
<td>91.4%</td>
</tr>
<tr>
<td>PICA</td>
<td>3</td>
<td>1.0%</td>
<td>92.4%</td>
</tr>
<tr>
<td>Printed bibliographies</td>
<td>15</td>
<td>5.2%</td>
<td>97.6%</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>2.4%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>292</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Frequencies for Final location tool

<table>
<thead>
<tr>
<th>Form of order</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct to a fixed location</td>
<td>283</td>
<td>96.9%</td>
<td>96.9%</td>
</tr>
<tr>
<td>Via the Central Regional Libarry</td>
<td>3</td>
<td>1.0%</td>
<td>97.9%</td>
</tr>
<tr>
<td>Suspected Location</td>
<td>1</td>
<td>0.3%</td>
<td>98.2%</td>
</tr>
<tr>
<td>Educated Guess</td>
<td>5</td>
<td>1.8%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>292</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Frequencies for Form of order

<table>
<thead>
<tr>
<th>Method of receipt</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Van Service</td>
<td>288</td>
<td>98.7%</td>
<td>98.7%</td>
</tr>
<tr>
<td>Mail</td>
<td>3</td>
<td>1.0%</td>
<td>99.7%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0.3%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>292</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Frequencies for Method of receipt
### Appendix F

<table>
<thead>
<tr>
<th>Successful Route</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Library</td>
<td>113</td>
<td>38.7%</td>
<td>38.7%</td>
</tr>
<tr>
<td>Special Subject Library</td>
<td>85</td>
<td>29.1%</td>
<td>67.8%</td>
</tr>
<tr>
<td>Other Library</td>
<td>44</td>
<td>15.1%</td>
<td>82.9%</td>
</tr>
<tr>
<td>Central Regional Library</td>
<td>26</td>
<td>8.9%</td>
<td>91.8%</td>
</tr>
<tr>
<td>Central Library</td>
<td>24</td>
<td>8.2%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>292</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Table 5: Frequencies for Successful route (Descending ranking)

<table>
<thead>
<tr>
<th>Supplier code</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamburg</td>
<td>46</td>
<td>15.8%</td>
<td>15.8%</td>
</tr>
<tr>
<td>Schleswig-Holstein</td>
<td>42</td>
<td>14.4%</td>
<td>30.2%</td>
</tr>
<tr>
<td>Niedersachsen</td>
<td>103</td>
<td>35.3%</td>
<td>65.5%</td>
</tr>
<tr>
<td>Hessen</td>
<td>12</td>
<td>4.1%</td>
<td>69.6%</td>
</tr>
<tr>
<td>Berlin</td>
<td>12</td>
<td>4.1%</td>
<td>73.7%</td>
</tr>
<tr>
<td>Rheinland-Pfalz</td>
<td>1</td>
<td>0.3%</td>
<td>74.0%</td>
</tr>
<tr>
<td>Nordrhein-Westfalen</td>
<td>44</td>
<td>15.1%</td>
<td>89.1%</td>
</tr>
<tr>
<td>Baden-Württemberg</td>
<td>14</td>
<td>4.8%</td>
<td>93.9%</td>
</tr>
<tr>
<td>Saarland</td>
<td>7</td>
<td>2.4%</td>
<td>96.3%</td>
</tr>
<tr>
<td>Bayern</td>
<td>7</td>
<td>2.4%</td>
<td>98.7%</td>
</tr>
<tr>
<td>Former GDR</td>
<td>3</td>
<td>1.0%</td>
<td>99.7%</td>
</tr>
<tr>
<td>International</td>
<td>1</td>
<td>0.3%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>292</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Table 6: Frequencies for Supplier code

<table>
<thead>
<tr>
<th>Format of received item</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material for loan</td>
<td>82</td>
<td>28.1%</td>
<td>28.1%</td>
</tr>
<tr>
<td>Material for retention</td>
<td>210</td>
<td>71.9%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>292</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Table 7: Frequencies for Format of received item
### Number of applications

<table>
<thead>
<tr>
<th>Number of applications</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>One, Direct supply</td>
<td>284</td>
<td>97.3%</td>
<td>97.3%</td>
</tr>
<tr>
<td>Two</td>
<td>7</td>
<td>2.4%</td>
<td>99.7%</td>
</tr>
<tr>
<td>Three</td>
<td>1</td>
<td>0.3%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>292</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Table 8: Frequencies for Number of applications

### Speed of supply

<table>
<thead>
<tr>
<th>Speed of supply</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>within 10 days</td>
<td>4</td>
<td>1.4%</td>
<td>1.4%</td>
</tr>
<tr>
<td>within 20 days</td>
<td>101</td>
<td>34.6%</td>
<td>36.0%</td>
</tr>
<tr>
<td>within 30 days</td>
<td>79</td>
<td>27.0%</td>
<td>63.0%</td>
</tr>
<tr>
<td>within 40 days</td>
<td>68</td>
<td>23.3%</td>
<td>86.3%</td>
</tr>
<tr>
<td>within 50 days</td>
<td>26</td>
<td>8.9%</td>
<td>95.2%</td>
</tr>
<tr>
<td>over 50 days</td>
<td>14</td>
<td>4.8%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>292</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Table 9: Frequencies for Speed of supply
Crosstables for Bremen

<table>
<thead>
<tr>
<th>Speed of supply</th>
<th>Photocopy</th>
<th>Monograph for loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>within 10 days</td>
<td>4 (1.9%)</td>
<td></td>
</tr>
<tr>
<td>within 20 days</td>
<td>100 (47.6%)</td>
<td>5 (6.1%)</td>
</tr>
<tr>
<td>within 30 days</td>
<td>125 (59.5%)</td>
<td>59 (72%)</td>
</tr>
<tr>
<td>within 40 days</td>
<td>175 (88.3%)</td>
<td>77 (94%)</td>
</tr>
<tr>
<td>within 50 days</td>
<td>199 (99.7%)</td>
<td>79 (96.4%)</td>
</tr>
<tr>
<td>over 50 days</td>
<td>210 (100%)</td>
<td>82 (100%)</td>
</tr>
<tr>
<td>Total</td>
<td>210</td>
<td>82</td>
</tr>
</tbody>
</table>

Table 1: Frequencies for speed of supply by format of received item

<table>
<thead>
<tr>
<th>Speed of supply</th>
<th>DBI-VK</th>
<th>ZDB</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>within 10 days</td>
<td>1 (0.5%)</td>
<td>3 (12.0%)</td>
<td></td>
</tr>
<tr>
<td>within 20 days</td>
<td>10 (12.0%)</td>
<td>86 (46.7%)</td>
<td>9 (3.6%)</td>
</tr>
<tr>
<td>within 30 days</td>
<td>57 (58.6%)</td>
<td>112 (60.8%)</td>
<td>15 (60.0%)</td>
</tr>
<tr>
<td>within 40 days</td>
<td>75 (86.3%)</td>
<td>161 (86.6%)</td>
<td>16 (64.0%)</td>
</tr>
<tr>
<td>within 50 days</td>
<td>80 (92.3%)</td>
<td>174 (94.5%)</td>
<td>24 (95.0%)</td>
</tr>
<tr>
<td>over 50 days</td>
<td>83 (100%)</td>
<td>184 (100%)</td>
<td>25 (100%)</td>
</tr>
<tr>
<td>Total</td>
<td>83</td>
<td>184</td>
<td>25</td>
</tr>
</tbody>
</table>

Table 2: Frequencies for speed of supply by final location tool

<table>
<thead>
<tr>
<th>Speed of supply</th>
<th>Central Regional Library</th>
<th>Special Subject Library</th>
<th>Central Library</th>
<th>University Library</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>within 10 days</td>
<td>2 (7.7%)</td>
<td>26 (30.6%)</td>
<td>9 (37.5%)</td>
<td>44 (39%)</td>
<td>24 (54.5%)</td>
</tr>
<tr>
<td>within 20 days</td>
<td>16 (61.5%)</td>
<td>56 (65.3%)</td>
<td>15 (62.5%)</td>
<td>65 (57.6%)</td>
<td>32 (72.7%)</td>
</tr>
<tr>
<td>within 30 days</td>
<td>22 (84.6%)</td>
<td>71 (82.9%)</td>
<td>19 (79.2%)</td>
<td>102 (90.3%)</td>
<td>38 (86.3%)</td>
</tr>
<tr>
<td>within 40 days</td>
<td>25 (96.1%)</td>
<td>80 (93.5%)</td>
<td>22 (91.7%)</td>
<td>109 (96.5%)</td>
<td>42 (95.4%)</td>
</tr>
<tr>
<td>within 50 days</td>
<td>26 (100%)</td>
<td>85 (100%)</td>
<td>24 (100%)</td>
<td>113 (110%)</td>
<td>44 (100%)</td>
</tr>
<tr>
<td>over 50 days</td>
<td>26</td>
<td>85</td>
<td>24</td>
<td>113</td>
<td>44</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>85</td>
<td>24</td>
<td>113</td>
<td>44</td>
</tr>
</tbody>
</table>

Table 3: Frequencies for speed of supply by type of library
### Speed of Supply by Region

<table>
<thead>
<tr>
<th>Speed of Supply</th>
<th>Hamburg</th>
<th>Schleswig-Holstein</th>
<th>Nieder-sachsen</th>
</tr>
</thead>
<tbody>
<tr>
<td>within 10 days</td>
<td>19 (41.3%)</td>
<td>22 (52.4%)</td>
<td>27 (26.2%)</td>
</tr>
<tr>
<td>within 20 days</td>
<td>34 (73.9%)</td>
<td>27 (64.3%)</td>
<td>62 (60.2%)</td>
</tr>
<tr>
<td>within 30 days</td>
<td>42 (91.3%)</td>
<td>40 (95.2%)</td>
<td>87 (84.5%)</td>
</tr>
<tr>
<td>within 40 days</td>
<td>45 (97.8%)</td>
<td>41 (97.6%)</td>
<td>100 (97.1%)</td>
</tr>
<tr>
<td>within 50 days</td>
<td>46 (100%)</td>
<td>42 (100%)</td>
<td>103 (100%)</td>
</tr>
<tr>
<td>over 50 days</td>
<td>46 (100%)</td>
<td>42 (100%)</td>
<td>103 (100%)</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>42</td>
<td>103</td>
</tr>
</tbody>
</table>

### Speed of Supply by Region

<table>
<thead>
<tr>
<th>Speed of Supply</th>
<th>Berlin</th>
<th>Nordrhein-Westfalen</th>
<th>Baden-Württemberg</th>
</tr>
</thead>
<tbody>
<tr>
<td>within 10 days</td>
<td>1 (8.3%)</td>
<td>14 (31.8%)</td>
<td>3 (21.4%)</td>
</tr>
<tr>
<td>within 20 days</td>
<td>5 (41.6%)</td>
<td>23 (52.3%)</td>
<td>8 (57.1%)</td>
</tr>
<tr>
<td>within 30 days</td>
<td>8 (66.6%)</td>
<td>33 (75%)</td>
<td>12 (85.7%)</td>
</tr>
<tr>
<td>within 40 days</td>
<td>39 (88.6%)</td>
<td>14 (100%)</td>
<td>13 (92.8%)</td>
</tr>
<tr>
<td>within 50 days</td>
<td>44 (100%)</td>
<td>44 (100%)</td>
<td>14 (100%)</td>
</tr>
<tr>
<td>over 50 days</td>
<td>12 (100%)</td>
<td>44 (100%)</td>
<td>14 (100%)</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>44</td>
<td>14</td>
</tr>
</tbody>
</table>

Table 4: Frequencies for speed of supply by region of supply
Flow chart of the interlibrary loan procedure in Leicester

User fills in the mask on LIBERTAS

Printout of the section heads the next day

Checking of the new requests on the catalogues
- LIBERTAS
- Card Catalogue
- Official Publications

Not in catalogue
- Amend bibliographic details
- Allocate voucher number
- Approve for transfer to BLDSC

In own stock

Overnight transfer

Cancel

BLDSC has got the material

• Send books for loan
• Photocopies for retention via the van service

Response in INTRAY

BLDSC does not have the item

• offers alternative locations
• send requests to these/change the lender
• cannot trace the item
• contact reader for source of reference

can provide the item

cannot provide

• check the voucher number
• process the item
• initiate message for requester

International approach
**Table of Frequencies for Leicester**

<table>
<thead>
<tr>
<th>Type of material</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serials</td>
<td>188</td>
<td>62.2%</td>
<td>62.2%</td>
</tr>
<tr>
<td>Monographs or Theses</td>
<td>94</td>
<td>31.1%</td>
<td>93.3%</td>
</tr>
<tr>
<td>Conference Proceedings</td>
<td>18</td>
<td>6.0%</td>
<td>99.3%</td>
</tr>
<tr>
<td>Reports</td>
<td>2</td>
<td>0.7%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>302</strong></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Frequencies for Type of material requested

<table>
<thead>
<tr>
<th>Response from the BLDSC</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative location</td>
<td>20</td>
<td>25.6%</td>
<td>25.6%</td>
</tr>
<tr>
<td>Not traceable</td>
<td>26</td>
<td>33.3%</td>
<td>58.9%</td>
</tr>
<tr>
<td>On waiting list</td>
<td>7</td>
<td>9.0%</td>
<td>67.9%</td>
</tr>
<tr>
<td>On order</td>
<td>13</td>
<td>16.7%</td>
<td>84.6%</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>15.4%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>78</strong></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Frequencies for Response from the BLDSC

<table>
<thead>
<tr>
<th>Not traceable</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancelled</td>
<td>7</td>
<td>26.9%</td>
<td>26.9%</td>
</tr>
<tr>
<td>On order</td>
<td>8</td>
<td>30.8%</td>
<td>57.7%</td>
</tr>
<tr>
<td>Transformed to z-search</td>
<td>1</td>
<td>3.8%</td>
<td>61.5%</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>7.7%</td>
<td>69.2%</td>
</tr>
<tr>
<td>No reaction</td>
<td>8</td>
<td>30.8%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>26</strong></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 2.1: Frequencies for Response "Not traceable with information supplied"

<table>
<thead>
<tr>
<th>Final location tool</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct to BLDSC</td>
<td>212</td>
<td>83.1%</td>
<td>83.1%</td>
</tr>
<tr>
<td>Alternative location, supplied</td>
<td>10</td>
<td>3.3%</td>
<td>87.1%</td>
</tr>
<tr>
<td>Suspected Location</td>
<td>2</td>
<td>0.7%</td>
<td>87.8%</td>
</tr>
<tr>
<td>Cancelled</td>
<td>31</td>
<td>10.3%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>255</strong></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Frequencies for Final location tool

(the remaining items were not supplied within the allocated time)
### Method of transmission

<table>
<thead>
<tr>
<th>Method of transmission</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTTel</td>
<td>275</td>
<td>91.1%</td>
<td>91.1%</td>
</tr>
<tr>
<td>Mail</td>
<td>4</td>
<td>1.3%</td>
<td>92.4%</td>
</tr>
<tr>
<td>Cancelled</td>
<td>23</td>
<td>7.6%</td>
<td>99.9%</td>
</tr>
<tr>
<td>Total</td>
<td>292</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Frequencies for Method of transmission

### Method of receiving material

<table>
<thead>
<tr>
<th>Method of receiving material</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Van Service</td>
<td>218</td>
<td>85.8%</td>
<td>85.8%</td>
</tr>
<tr>
<td>Mail</td>
<td>4</td>
<td>1.5%</td>
<td>87.3%</td>
</tr>
<tr>
<td>Cancelled</td>
<td>32</td>
<td>12.6%</td>
<td>99.9%</td>
</tr>
<tr>
<td>Total</td>
<td>254</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Table 5: Frequencies for Method of receiving material

### Successful route

<table>
<thead>
<tr>
<th>Successful route</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLDSC</td>
<td>214</td>
<td>96.4%</td>
<td>96.4%</td>
</tr>
<tr>
<td>Alternative location (Backup)</td>
<td>5</td>
<td>1.7%</td>
<td>98.6%</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>1.4%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>222</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Table 6: Frequencies for Successful route

### Source of supply

<table>
<thead>
<tr>
<th>Source of supply</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLDSC</td>
<td>212</td>
<td>95.5%</td>
<td>95.5%</td>
</tr>
<tr>
<td>Backup libraries</td>
<td>2</td>
<td>0.9%</td>
<td>96.4%</td>
</tr>
<tr>
<td>Other academic libraries</td>
<td>4</td>
<td>1.8%</td>
<td>98.2%</td>
</tr>
<tr>
<td>Overseas</td>
<td>3</td>
<td>1.4%</td>
<td>99.5%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0.5%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>222</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Table 7: Frequencies for Source of supply
### Appendix I

<table>
<thead>
<tr>
<th>Format of received item</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material for loan</td>
<td>59</td>
<td>26.6%</td>
<td>26.6%</td>
</tr>
<tr>
<td>Material for retention</td>
<td>161</td>
<td>72.5%</td>
<td>99.1%</td>
</tr>
<tr>
<td>Microfilm for loan</td>
<td>2</td>
<td>0.9%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>222</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Table 8: Frequencies for Format of received item

<table>
<thead>
<tr>
<th>Number of applications</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>One, direct supply</td>
<td>214</td>
<td>84.3%</td>
<td>84.3%</td>
</tr>
<tr>
<td>Two</td>
<td>8</td>
<td>3.1%</td>
<td>87.4%</td>
</tr>
<tr>
<td>Cancelled</td>
<td>32</td>
<td>12.6%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>254</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Table 9: Frequencies for Number of applications (the remaining items were not supplied within the allocated time)

<table>
<thead>
<tr>
<th>Speed of supply</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 3 Days</td>
<td>56</td>
<td>25.2%</td>
<td>25.2%</td>
</tr>
<tr>
<td>Within 4 Days</td>
<td>54</td>
<td>24.3%</td>
<td>49.5%</td>
</tr>
<tr>
<td>Within 5 Days</td>
<td>40</td>
<td>18.0%</td>
<td>67.6%</td>
</tr>
<tr>
<td>Within 6 Days</td>
<td>24</td>
<td>10.8%</td>
<td>78.4%</td>
</tr>
<tr>
<td>Within 7 Days</td>
<td>15</td>
<td>6.8%</td>
<td>85.1%</td>
</tr>
<tr>
<td>Within 8 Days</td>
<td>5</td>
<td>2.3%</td>
<td>87.4%</td>
</tr>
<tr>
<td>Within 9 Days</td>
<td>7</td>
<td>3.2%</td>
<td>90.5%</td>
</tr>
<tr>
<td>Within 10 Days</td>
<td>1</td>
<td>0.5%</td>
<td>91.0%</td>
</tr>
<tr>
<td>Within 20 Days</td>
<td>13</td>
<td>5.8%</td>
<td>96.8%</td>
</tr>
<tr>
<td>Within 30 Days</td>
<td>6</td>
<td>2.7%</td>
<td>99.5%</td>
</tr>
<tr>
<td>Over 30 Days</td>
<td>1</td>
<td>0.5%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>222</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Table 10: Frequencies for Speed of supply
Crosstables for Leicester

<table>
<thead>
<tr>
<th>Speed of supply</th>
<th>Photocopy</th>
<th>Monograph for loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>within 3 days</td>
<td>40 (24.8%)</td>
<td>16 (27.1%)</td>
</tr>
<tr>
<td>within 4 days</td>
<td>36 (47.2%)</td>
<td>17 (55.9%)</td>
</tr>
<tr>
<td>within 5 days</td>
<td>35 (68.9%)</td>
<td>5 (64.4%)</td>
</tr>
<tr>
<td>within 6 days</td>
<td>18 (80.1%)</td>
<td>6 (74.6%)</td>
</tr>
<tr>
<td>within 7 days</td>
<td>12 (87.6%)</td>
<td>3 (79.7%)</td>
</tr>
<tr>
<td>within 8 days</td>
<td>5 (90.7%)</td>
<td></td>
</tr>
<tr>
<td>within 9 days</td>
<td>5 (93.8%)</td>
<td>1 (81.4%)</td>
</tr>
<tr>
<td>within 10 days</td>
<td>1 (83.1%)</td>
<td></td>
</tr>
<tr>
<td>within 20 days</td>
<td>69 (97.5%)</td>
<td>7 (95.0%)</td>
</tr>
<tr>
<td>within 30 days</td>
<td>3 (99.4%)</td>
<td>3 (100%)</td>
</tr>
<tr>
<td>over 30 days</td>
<td>1 (100%)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>161</td>
<td>59</td>
</tr>
</tbody>
</table>

Table 1: Frequencies for speed of supply by format of received item

<table>
<thead>
<tr>
<th>Speed of supply</th>
<th>BLDSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>within 3 days</td>
<td>56 (26.4%)</td>
</tr>
<tr>
<td>within 4 days</td>
<td>110 (51.9%)</td>
</tr>
<tr>
<td>within 5 days</td>
<td>150 (70.8%)</td>
</tr>
<tr>
<td>within 6 days</td>
<td>174 (82.1%)</td>
</tr>
<tr>
<td>within 7 days</td>
<td>189 (89.2%)</td>
</tr>
<tr>
<td>within 8 days</td>
<td>194 (91.6%)</td>
</tr>
<tr>
<td>within 9 days</td>
<td>201 (94.1%)</td>
</tr>
<tr>
<td>within 10 days</td>
<td></td>
</tr>
<tr>
<td>within 20 days</td>
<td>209 (98.6%)</td>
</tr>
<tr>
<td>within 30 days</td>
<td>211 (99.5%)</td>
</tr>
<tr>
<td>over 30 days</td>
<td>212 (100%)</td>
</tr>
<tr>
<td>Total</td>
<td>212</td>
</tr>
</tbody>
</table>

Table 2: Frequencies for speed of supply by BLDSC