

# **NESLi2 analysis of usage statistics**

## **Summary report**

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## **1. Introduction**

This report presents a summary account of the analysis of usage statistics of journals available through NESLi2, the National E-journals Initiative, ([www.nesli2.ac.uk](http://www.nesli2.ac.uk)) conducted by evidence base at the University of Central England (UCE) on behalf of the Joint Information Systems Committee (JISC). The study was completed in December 2004 and a confidential report presented to the JISC Journals Working Group (JWG) in January 2005.

In order to respect confidentiality agreements with those publishers and libraries who took part in the study, the detailed findings will not be made public. This summary has been prepared by the authors of the report to provide an overview of the approach taken and the methodology employed. It also presents an account of the conclusions of the study and the main recommendations made to JISC.

Pete Dalton, Director of evidence base, directed the study, working alongside Dr Angela Conyers, Senior Research Fellow at evidence base. In addition the following provided consultancy to the study: Dr Peter Shepherd, Director of Project COUNTER; Dr Hazel Woodward, University Librarian, Cranfield University; Simon Bevan, Information Systems Manager, Cranfield University; Professor Charles McClure, Francis Eppes Professor of Information Studies at the School of Information Studies, Florida State University.

## **2. Aims and objectives of the study**

The principal aim of the study was to provide the JISC Journals Working Group (JWG) and its Negotiating Agent with accurate and up-to-date data on national use of journals available through the NESLi2 initiative. The study was intended to inform the JISC in future negotiations and to assist institutions in assessing value for money.

The study had the following objectives:

- to conduct an in-depth analysis of usage data from 4 NESLi2 publishers using a representative sample of very large, large, medium and small libraries in JISC-supported institutions in order to gain a national overview
- through this detailed analysis, to present an account of how journals in the NESLi2 initiative are being used within institutions and how that usage relates to costs, institution profile and subject spread
- to consider how usage data shows the extent of use of all titles within a 'big deal', including those previously unsubscribed titles which come as part of e-access as well as low and zero use titles.

## **3. Methods**

The main focus of the study was conducting in-depth analysis of usage data from four NESLi2 publishers, using a sample of very large, large, medium and small libraries in JISC-supported institutions. The data provided a snapshot over a six-month period (January-June 2004) and used comparative data from 2003 where appropriate. In addition case studies were conducted with a sample group of libraries in order to provide more in depth information to support the data analysis. The selected publishers were also asked to comment on the results of the study.

The key stages of the methodology were:

- Selection of publishers and libraries
- Data collection
- Analysis of data from each publisher deal

### **3.1 Selection of publishers and libraries**

#### **a. Selection of publishers**

Publishers were selected for the following reasons:

- They were already supplying usage statistics which were COUNTER compliant (<http://www.projectcounter.org/>) and therefore were understood to be able to provide consistent data for comparative purposes (COUNTER compliance is a requirement of the JISC Model Licence).
- They published a large number of journals that covered a broad range of subjects so that comparisons could be drawn across different institutions and between broad subject areas
- Take-up of these publisher offers through NESLi2 and its predecessors covered the range of small, medium, large and very large higher education (HE) libraries, with usage statistics being available for the period studied.

#### **b. Selection of libraries**

In total, 17 libraries participated in the study. The study team selected 3 libraries in each of the JISC bands A –E and one library in each of JISC Bands F-G.

Care was taken to ensure that, in addition to JISC bands, libraries selected also covered large/very large old (pre-1992) universities, medium old (pre-1992) universities, large/medium new (post-1992) universities and medium/small university colleges/colleges of higher education. Seven case study libraries were selected, one each from JISC Bands A-G.

### **3.2 Data collection**

#### **a. Obtaining data from publishers**

Publishers were asked to provide:

- usage statistics for full-text article requests (COUNTER JR1 report) for January –December 2003 and January-April 2004. This was later updated to cover January-June 2004.
- details of library subscriptions.

Additional information on the NESLi2 offer, titles included in the deal, list prices and subject categories (where available) were obtained through the NESLi2 secure area and the publishers' web-sites.

Those taking part in the study were given assurances on the confidentiality of information provided for this study.

## **b. Obtaining data from gateways and aggregators**

Several libraries in the study provided access to their e-journal collections through intermediary services provided by aggregators or gateways. In order to obtain a reliable count of usage, it was necessary to find out whether there were any instances in which additional usage (over and above that recorded by publishers) was occurring. The study team identified two main aggregators and gateways providing usage statistics which, for certain publishers, needed to be added to publishers' usage statistics to gain a complete record of use. Both these services provided usage statistics for the study.

## **c. Obtaining data from libraries**

Usage statistics and lists of subscribed titles were initially obtained from five libraries. Preliminary analysis of the data was carried out on this sample in order to verify data and refine the approach to the collation and analysis of the data. It was also used to verify information later supplied by publishers on usage and subscribed titles.

Forms were sent to the named contacts at each participating library requesting information on the NESLi2 deals for the four publishers and on costs for 2003 and 2004, broken down into costs of subscribed titles, e-access fees, backfile purchase etc. Libraries were in some instances also asked to supplement information provided by publishers on usage statistics and details of subscribed titles.

Contextual information on institutions (for 2002-03) was obtained from the Higher Education Statistics Agency (HESA) website and library information from the Society of College, National and University Libraries' (SCONUL) annual library statistics.

Case studies were conducted either by telephone or face-to-face with named contacts. They sought to obtain the following information to supplement the analysis of usage statistics:

- Reasons for taking a particular deal
- Assessment of whether the usage in each deal represented value for money
- Current use and understanding of usage data
- Reactions to the analysis of usage data
- Suggestions for future NESLi2 deals.

In addition the case studies provided the research team with a further means of validating the data analysed.

## **3.3 Data analysis**

The following data sets covering usage and costs were analysed for each publisher deal:

## Usage

- Total, average and maximum number of requests over the period January 2003-June 2004, illustrating trends and growth
- Number of full-text article requests per FTE (full time equivalent) user
- Number of requests and number of titles by usage range
- Distribution of titles by price band and usage range
- Distribution of titles by subject category and usage range
- Most requested titles in the deal
- Number of subscribed and unsubscribed titles
- Distribution of subscribed and unsubscribed titles by price band
- Distribution of subscribed and unsubscribed titles by subject category
- Average number of requests for subscribed titles
- Number of requests and number of subscribed and unsubscribed titles by usage range

## Costs

- Average cost per title and average cost per issue (where available)
- Cost per full-text article request
- Costs as percentage of library serials budget
- List prices of subscribed and unsubscribed titles
- Yield per £ based on costs of e-access fee and list prices of unsubscribed titles
- Cost per full-text article request for subscribed and unsubscribed titles

**Usage statistics** were received from the publishers or the libraries in Microsoft Excel format and Excel was used for analysis. List prices and subject categories were transferred from publisher websites using Microsoft Access. Information on subscribed titles was entered manually.

All usage analysis was based on the number of successful full-text article requests (COUNTER Journal Report 1 (JR1) reports; see Appendix). Clearly the COUNTER JR1 report developed through the considerable efforts of Project COUNTER provided a degree of consistency in usage data reporting between publishers compliant with the COUNTER Code of Practice. Such efforts contributed to making this study possible. Although all publishers claimed to provide COUNTER compliant reports for both 2003 and 2004, some discrepancies in figures suggested the need for caution where COUNTER compliant figures had been applied retrospectively to 2003 data.

**Cost analysis** was based on cost information provided by libraries for 2003 and 2004 and also on publishers' list prices for 2004. Costs were also presented as a percentage of the library's total spend on serial subscriptions for 2002/3 as reported to SCONUL.

Every effort was made to obtain accurate information from libraries on the actual costs paid for each publisher's deal in 2004 and (where appropriate) 2003. In many cases, discrepancies in the figures provided showed up under the analysis and some libraries had to be contacted several times before it could be reasonably certain that the figures given were complete.

Although all libraries were able to accurately record the 'e-access' fee or equivalent for their JISC band as stated in the offer document, several originally gave this figure as the total cost of the deal. The cost of print subscriptions that had to be maintained proved in many cases more difficult to track down. This was often because print

subscriptions were dealt with in a different department from electronic access. Although library staff had clearly spent a good deal of time trying to identify the titles included in the deal, the link between costs for e-access and the maintenance of print subscriptions was not always explicit. Use of subscription agents also meant that costs for a particular deal could not easily be separated from titles held on individual subscription. A few libraries had to refer back to the subscription agent for a breakdown of costs relating to a particular deal. Some libraries helpfully separated out costs, for others costs had to be extracted. Costs given for libraries for both 2004 and 2003 related to the total number of subscriptions held; this often included multiple copies of print subscriptions, departmental subscriptions and other costs which had to be maintained as the base price of the deal. Some libraries had negotiated adjustments to the final invoices, generally relating to overpayments in previous years.

The study team considered how to relate a full year's costs for 2004 to usage statistics for January-June 2004. Methods of predicting growth were attempted, but abandoned as being too unreliable given the lack of any usage data outside the 18 month period January 2003-June 2004, the lack of 2003 statistics for some libraries, and the consequent difficulty of predicting trends. It was decided therefore when looking at costs of requests to halve the library's annual cost for 2004 and use this figure to determine costs per use for the period January-June 2004.

**Subject analysis** was based on two broad subject categories (HSS – Humanities and Social Sciences and STM – Science, Technology and Medicine), using where possible subject headings given for each title on the publisher's website.

Analysis of **subscribed and unsubscribed titles** was based on lists provided either by the publisher or the library. Reconciling lists of subscribed titles with publishers and libraries proved difficult in some cases. Analysing the titles to which libraries had print subscriptions was an important element of this study, as the pricing structure of all deals is built around the maintenance of existing subscriptions.

Establishing definitive lists of subscribed titles proved a difficult exercise. Several libraries had lists readily available and were helpfully able to distinguish on copies of invoices between subscribed and 'non-subscribed' titles, while others had difficulty either in locating the list or in understanding what was required, sending instead a list of total titles in the deal. As with costs, the division between electronic and print subscriptions in the library structure was generally responsible. The information was held somewhere in the library system, but the link with the publisher deal was not always maintained.

**Contextual and situational differences** between institutions provided limitations in the interpretation of usage data presented. For example, differences in collection development policies, students' information needs and the way in which access to electronic journals is provided and the extent to which they are promoted can result in differences in usage between institutions.

While the case studies allowed some of these contextual factors to be identified, this research did not undertake an in-depth study of the possible range of effects of such factors on usage.

## 4. Conclusions

The study has contributed to the development and testing of a methodology for the analysis of usage statistics for the NESLi2 publisher deals. This methodology could be applied to the assessment of usage of other publisher deals and could assist libraries in analysing their own usage data.

The study team has successfully collected and validated a considerable set of journal usage, subscription and cost data and has assisted in the testing and validation of the 'successful full-text article request' (COUNTER JR1 report) as a possible unit of measurement of 'usage' that can be applied consistently and reliably across all publishers.

### 4.1 Methodological issues

The study has identified a number of issues and limitations that need to be considered in conducting future studies and qualifies the data collected:

- Undertaking this level of data collection, analysis and reporting entails considerable **time and staff skills**.
- The **structure and organisation of particular library service departments** can act as a barrier to obtaining accurate cost information. In many cases different departments deal with print and electronic subscriptions and often this can lead to a library service making no link between costs for e-access and print access with the overall cost of a deal therefore not always calculated.
- The **use of subscription agents** by some libraries can make the identification of costs of components of a deal more difficult, for example where an agent is only involved in dealing with a print subscription.
- Usage statistics from **third party aggregators** sometimes need to be added to particular publishers statistics. It is not always clear to libraries where additional data needs to be added.
- **Terminology** is not always consistent between NESLi2 publisher deals. For example the terms unsubscribed and subscribed may be used in different ways by publishers.
- Publishers website lists do not always provide accurate up to date information about **titles included in particular deals**.
- Certain publishers have **back file collections** which are available for separate purchase and frequently go back to volume 1, number 1. As digitisation advances, more such collections are likely to become available. Usage statistics for titles in these back file collections may be aggregated with those for usage of the current title in the usage statistics given to libraries. This can make it difficult for libraries to assess the usage of current titles.
- Publishers' and libraries' understanding of **which titles are subscribed** do not always tally. In some cases libraries reported a delay in negotiating specific details of **subscribed titles**. This can result in some of the titles that

appear as subscribed titles in lists not actually being available for use until well into the year. This is a consideration when looking at usage of subscribed titles.

- There was evidence of a number of **journal titles changing publisher** and therefore having only limited availability within the deals studied. This happened particularly with learned society journals

## 4.2 Usage statistics

This study examined four of the NESLi2 publisher deals and provided a snapshot of use over a six month period (January-June 2004), using data from 2003 for comparative purposes where available. It provided information on usage relating to 17 libraries to demonstrate some possible scenarios concerned with usage in particular institutions. However, the data does not enable generalisation across all institutions in the higher education sector. Case study information and interaction with libraries in the data collection phase of the study has provided some limited contextual information to support the usage statistics obtained. In addition, within the period covered by the study, it has not been possible to undertake a longitudinal study or statistically predict future trends. With the above limitations on the interpretation of the data and the amount of generalisation that is possible from a sample of this size, the following conclusions arise from an analysis of the usage statistics:

### *Full text article requests*

- **The number of full text article requests in the large old universities in bands A-B in this study is considerably higher than for the other institutions.** This group also has the largest number of subscribed titles and therefore the highest costs. However, as costs are matched by higher usage, the average cost per request is similar to that of other institutions.
- Apart from lower overall number of requests and lower costs due to a smaller number of subscribed titles, **there is no clear pattern of usage to distinguish libraries in the study, either by JISC band or by type of institution.** For some deals, old universities in bands C-E had higher costs due to number of subscribed titles, but the pattern of use was similar to other libraries in these bands. The two smaller libraries in bands F-G had generally lower costs, but not always lower use.
- **The number of requests in all deals has increased in January-June 2004 compared to January-June 2003**, in some cases to a considerable extent. A longer time period for analysis is needed to predict the pattern of future growth.

### *Cost per use*

- **The balance of usage and costs generally resulted in a similar range of costs per request across all libraries in the study for both subscribed and unsubscribed titles.** Outside the band A-B large old universities, there was more variation in usage patterns, with some libraries having comparatively high use and others a lower number of requests leading to higher usage costs.

- The study has demonstrated that for most libraries the **average cost per request is low in relation to the cost of an inter-library loan** (£4.99 for the form alone) and normally considerably lower than pay per view on the current models (currently around £18-22 per request). The average cost of a request from an unsubscribed title through the e-access fee is generally much lower than that for a subscribed title. This would suggest that greater take-up of NESLi2 and similar offers should reduce overall costs of inter-library loans in individual libraries.

### ***High and low use***

- A **comparatively small percentage of titles generated high usage** (100 requests or over) across all institutions.
- **Titles receiving nil or low use** (under 10 requests) in the band A-B old universities **were mainly drawn from the unpriced and low price (under £200) range**. This indicated good use of most of the titles in the deal, including unsubscribed titles. Other institutions had higher numbers of nil and low use titles and in some case study examples this was a cause of concern. On the other hand, access to all titles within a deal at comparatively low cost was seen as a positive benefit and helps promote the 'access for all' approach. For this reason, it is not felt that nil or low use should be seen as a reason for negotiating different deals with different types of library, especially as negotiations over subscribed titles are already time-consuming.
- **High use titles (100 requests and over) are predominantly those in the high (£400-999) and very high (£1000 and over) price bands**. Unpriced and low price (under £200) titles are found mainly in the nil and low usage bands (under 10 requests) and very few have high use.

### ***Use by subject***

- **Titles in the STM subject category are the most heavily used overall**. This is especially apparent in the highest usage ranges (1000 requests and over), where all but one or two titles are STM.
- The study demonstrates considerably **lower use of HSS titles** than those in the STM area, especially in the higher usage ranges (100 requests and over). There are a number of possible reasons for this: inappropriateness of titles in the deals; lack of interest in e-journals by HSS students and academic staff lack of back files etc.

### ***Subscribed titles***

- **Subscribed titles were used more heavily than unsubscribed titles across all institutions** and very few appeared in the nil and low usage ranges (under 10 requests), indicating that such titles had been well chosen by the individual libraries. Given the much larger number of unsubscribed titles, numbers of requests often exceeded those for subscribed titles, though actual usage per title was generally at a lower level. These statistics showed that a range of unsubscribed titles were being used across all institutions.

- **Costs of unsubscribed titles** for each institution varied according to the conditions of each deal and the JISC band or other grouping used by the publisher. Overall, these costs **were considerably below list prices**, as was demonstrated by the yield figure for unsubscribed titles devised by the study team.

#### ***Cost per full time equivalent***

- **Costs per FTE user and number of requests per FTE user provided some indication of the link between institution size and number of requests.** However, different categories contained within the FTE user figure, both in terms of students and academic staff and subject interests, and the fact that the latest FTE figures available from HESA were 2001/02, made further analysis based on FTE user impracticable.

### **4.3 Factors affecting usage statistics**

Although FTE user was one of the basic measures used in the study in relation both to usage and costs, there were important differences between institutions which affect the analysis of usage statistics on an FTE basis. Analysis was therefore given on the number of undergraduate and postgraduate students, and numbers on humanities and social science, and science, technology and medicine courses in each institution.

Case studies and interactions with libraries throughout the study provide examples of factors which may affect usage statistics:

- Peaks in usage tend to coincide with times students are doing dissertations (as is the case for inter-library loans)
- Changes in the way journals are linked/accessed may have affected usage levels e.g. Metalib, SFX, adding links from web-based catalogue
- The structure of academic year i.e. semesters or terms affects usage patterns
- Some titles only being made available late on in the study period due to prolonged negotiations with the publisher
- Journals discontinued and new titles added by publishers
- Promotional activities within the library
- Initiatives to restrict access to print titles may affect usage of electronic titles
- Familiarity with accessing titles online
- The development of a larger critical mass of e-journal titles

### **4.4 Cost and usage data**

- Many aspects of the data collection stage of the study suggest that some libraries may not currently be using cost and usage information in the management of their journal subscriptions. This seems to be for a number of reasons including: lack of time and skills to undertake detailed analyses;

difficulty in unravelling details of publisher offerings; the split between the management of print and electronic resources in some institutions.

- Library staff would welcome support with the collection of data and analysis of data in relation to publisher deals. Staff who had been involved in initiatives such as the e-measures Project were generally more geared up to assisting in the data collection for the study

#### **4.5 The NESLi2 deals**

- The NESLi2 deals were felt by libraries, in some instances, to be extremely complex. This acted as a barrier to understanding the offering, tracking what titles were included, providing access to titles and in some cases taking a deal. There was also consensus amongst library participants that some of the costing models were unclear. This resulted in considerable additional time and effort for libraries in evaluating and negotiating the specific details of a publisher deal and in subsequent management of titles.
- Deals where cancellations were limited or prohibited were unpopular with libraries and created problems in negotiating prices and in agreeing the actual titles to be included as 'subscribed' within the deal.
- Multi-year deals were less popular with libraries than annual deals which allowed more flexibility with budgeting.
- In many cases there was a willingness to move towards more e-only deals, however cost was the primary consideration in doing so. This could also include the indirect costs of maintaining print collections.
- In cases where print was still retained the following were considerations for doing so:
  - increase in cost as e-only subscriptions attract VAT
  - reluctance of users to sacrifice print
  - lack of confidence in digital archiving and preservation techniques
- For case study libraries cost was a key feature in assessing the attractiveness of a deal. Subject coverage was also a key consideration. There was evidence that libraries adopted different approaches and strategies to the NESLi2 deals, such as getting access to titles where the print subscription had previously been cancelled to save costs or to obtaining a wide coverage of titles at a low cost
- Although some case study libraries felt that the relative cost of the NESLi2 deals was increasing at a higher rate than library budgets, generally the deals were considered to represent good value for money. Questions were raised by some respondents about the implications of having to cancel individual subscribed titles in order to take up the 'big deals'.
- Libraries appreciated the standard JISC licence and the central negotiation undertaken through NESLi2 on their behalf.

## **5. Recommendations**

### **General recommendations for JISC**

#### ***Recommendation 1***

By setting up national deals, JISC JWG is already adding value by cutting down on the need for individual negotiation. JISC JWG should continue to work towards making NESLi2 deals clearer and more transparent for both librarians and publishers. This should include reviewing the current pricing system based on historic print spend and the current cancellations policy.

One possibility would be for the JWG to examine ways in which NESLi2 deals can be negotiated as one single national deal with a single list of titles available to all libraries wishing to purchase journals from a specific publisher. This would involve moving from the current loose consortia model to a closed consortia model. Such a move would have the added benefit of providing the Negotiating Agent with a stronger negotiating position.

#### ***Recommendation 2***

JISC should make payment for NESLi2 deals easier and more transparent for both libraries and publishers. It is recommended that JWG work with the new JISC content procurement company on making one single payment to publishers on behalf of all UK libraries participating in a particular NESLi2 deal.

### **Usage statistics recommendations for JISC**

#### ***Recommendation 3***

JISC should consider setting up a portal site for NESLi2 publishers to deposit their national NESLi2 COUNTER compliant usage statistics. This would facilitate the regular monitoring of the statistics. The portal could also provide a single gateway for libraries to access their individual library COUNTER statistics from publishers and aggregators.

#### ***Recommendation 4***

Libraries would benefit from support in monitoring of their usage statistics. JISC should examine the possibility of funding the creation and ongoing support of a usage statistics toolkit for librarians to assist in the management and analysis of pricing and usage data. This might be supported by online tutorials and UK wide workshops.

#### ***Recommendation 5***

JISC JWG to recommend to COUNTER that the Code of Practice (i) clarifies the situation regarding aggregator statistics and (ii) requires that publishers state clearly which aggregators they work with and which aggregator statistics need to be added to their own statistics.

#### ***Recommendation 6***

JISC JWG to recommend to COUNTER that the Code of Practice requires publishers who sell or licence discrete digital back files, to produce separate usage statistics for back file use.

### ***Recommendation 7***

In order for titles within a deal to remain constant and usage statistics comparable, JISC JWG should request its Negotiating Agent to discuss the possibility of NESLi2 publishers retaining back files when journals change publisher, at least for the duration of the deal.

### **Recommendation for further research**

### ***Recommendation 8***

Whilst this research has provided a valuable picture of journal usage on a scale not attempted before in the UK, there are a number of areas in which further research could be valuably undertaken:

- Building on the methods developed through this study, a study of the usage of publisher deals over a longer timescale to provide trends over time and changes in usage patterns
- Qualitative research to provide in depth information on user behaviour in relation to NESLi2 deals and to explore contextual factors affecting usage of titles in the deal including steps libraries are taking to make titles in NESLi2 collections available to their users
- Research into the effects of libraries moving to e-only with comparative costs of maintaining print subscriptions
- Further work on the use of journals by subject discipline
- Further work on the correlation between journal usage and journal impact factor

### **Recommendations for libraries**

### ***Recommendation 9***

JISC to discuss with appropriate professional organisations, for example SCONUL, ways in which libraries can be supported in taking a more joined-up approach to the management of print and electronic journal resources. Evidence gained through this research suggests in many cases organisational structure can result in lack of communication and difficulty in building up a full picture of expenditure on journal subscriptions. Libraries should review organisational structures to take account of the shift from print to electronic delivery and ensure the need for appropriate systems for monitoring expenditure and usage.

### ***Recommendation 10***

JISC to discuss with appropriate professional organisations, for example SCONUL, ways in which libraries can be assisted in ensuring that sufficient internal resources are available to manage and analyse quantitative measures of performance, such as usage data and ensure that appropriate systems for monitoring usage are in place.

## Glossary

In order to analyse the data a number of assumptions were made and a number of definitions provided for the various data elements.

### Unit of measurement relating to 'usage'

All usage statistics used in the study were derived from the publisher reports of successful full-text article requests. All statistics were COUNTER compliant and based on the COUNTER JR1 report (see Appendix).

Successful full-text article requests are defined in the COUNTER code of practice as follows:

*Full-text article: The complete text, including all references, figures and tables, of an article, plus links to any supplementary material published with it.*

*Successful request: For web-server logs successful requests are those with specific return codes, as defined by NCSA*

COUNTER code of practice. ([www.projectcounter.org/code\\_practice.html](http://www.projectcounter.org/code_practice.html))

These usage statistics were referred to as 'full-text article requests' or 'requests'. Calculations described as 'cost per use' referred always to full-text article requests.

### Usage range

The following usage ranges and subdivisions devised by the study team, based on a preliminary analysis of usage statistics, were used to measure the number of full-text article requests and the distribution of titles over nil, low, medium and high use categories:

- Nil and low range (under 10 requests)
  - Nil use
  - 1-4 requests
  - 5-9 requests
- Medium range (1-99 requests)
  - 10-49 requests
  - 50-99 requests
- High range (100 and more requests)
  - 100-499
  - 500-999
  - 1000-9999
  - 10,000 +

### Price band

Using the list prices provided by the publisher, journal prices were divided into the following five categories:

- unpriced: those for which no price could be found
- low price – under £200

- medium price – £200-399
- high price - £400-999
- very high price – over £1000.

These price bands were devised to be comparable over each of the four publisher deals.

Unpriced titles were those included in usage statistics but not in the publisher price lists; these were generally titles which had ceased publication or changed to a different publisher.

### **Subject category**

All titles were identified by one of the following broad subject categories:

- HSS – Humanities and Social Sciences
- STM – Science, Technology and Medicine

These categories were derived from subject headings used to identify titles on the publisher website, or where these were not available, added by the study team.

### **Cost of deal**

The total cost of each deal to the library was broken down into the following elements:

- Base price or content fee: the cost of subscribed titles which have to be maintained as part of the deal
- E-access fee: the cost of getting electronic access to all unsubscribed titles in the deal. This fee includes VAT.

### **Yield per £**

Yield per £ was a cost measurement devised by the study team to illustrate the cost of unsubscribed titles. It takes the cost of unsubscribed titles using list prices and the cost paid by the library for e-access to all titles in the deal. By dividing the latter figure by the former, the resulting 'yield per £' illustrates how much one pound will buy in relation to the actual cost of subscribing to these titles.

### **Library serials budget**

This is the total amount spent by the library on both print and electronic serials in the academic year 2002-3 as reported to the Society of College, National and University Libraries (SCONUL) for section 7b of the Annual Library Statistics:

7b is the expenditure on periodicals, including electronic resources. This may include organisational membership subscriptions taken out by the Library on behalf of the institution which include some periodical publications. It may include organisational membership subscriptions taken out by the University of behalf of libraries. Include Abstracting and Indexing databases.

*(SCONUL annual library statistics, 2002-2003)*

### **Subscribed and unsubscribed title**

The following definitions were used for the study:

- Subscribed title – a title to which the library has one or more subscriptions (either print or electronic) which have to be maintained as part of the deal, with the cost forming part of the base price of the deal. This may include cancelled titles where the deal requires that all subscriptions be maintained.
- Unsubscribed title – a title which is available electronically as part of the deal and to which the library does not hold a subscription

### **Full Time Equivalent (FTE) user**

A number derived by adding the number of FTE students and the number of FTE academic staff as given by SCONUL and taken from the Higher Education Statistics Agency (HESA) return for 2002-3. This was used in preference to FTE student in determining 'cost per FTE user' as it includes academic staff who are likely also be active users of e-journals.

## Appendix

### Journal Report 1: Number of Successful Full-Text Article Requests by Month and Journal

(Full journal name, print ISSN and online ISSN are listed).

<b>Journal Report 1</b>							
<Criteria>							
Date run: Yyyy-mm-dd							
	<b>Publisher</b>	<b>Print ISSN</b>	<b>Online ISSN</b>	<b>Jan-2001</b>	<b>Feb-2001</b>	<b>Mar-2001</b>	<b>Total</b>
<b>Total for all journals</b>				<b>6637</b>	<b>8732</b>	<b>7550</b>	<b>45897</b>
Journal of AA		1212-3131	3225-3123	456	521	665	4532
Journal of BB		9821-3361	2312-8751	203	251	275	3465
Journal of CC		2464-2121	0154-1521	0	0	0	0
Journal of DD		5355-5444	0165-5542	203	251	275	2978

*Note:*

1. For 'criteria' specify, for example, the organizational level to which the usage reports refer: eg 'Harvard University', 'Department of Chemistry'
2. the 'Total for all journals' line is provided at the top of the Table to allow it to be stripped out without disrupting the rest of the Table, as the number of journals included may vary from one month to another.
3. Journals for which the number of full-text article requests is zero in every month should be included in Journal Report 1, except where an aggregator or gateway is responsible for recording and reporting the usage (see Table 2 in Section 7 below).

The above report complies with the COUNTER Code of Practice for collection and reporting of usage data.