Questionnaire surveys to discover academic staff and library staff perceptions of a National Union catalogue

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**Abstract** During the feasibility study into a National Union catalogue for the UK (UKNUC), a questionnaire survey was undertaken of the needs of both academic staff in higher education and library staff. A response rate of 40-50 per cent was achieved, 846 questionnaires being returned for academics and 724 for librarians. The analysis suggests that a UKNUC would be highly valued and heavily used by all categories. Academics felt it would have a positive effect on their information searching, and wished to include the holdings of the British Library, and libraries of both the major research universities and the “traditional” universities. They wanted it to be comprehensive and easy to use, to include locations of both books and journals, and to facilitate subject collection searching. Library staff have similar priorities to academics, although there are more variations by sector and a recognition of a UKNUC’s value as a potential source of bibliographic records.

**Introduction**
The increased use and development of Z39.50 technology in recent years has stimulated interest in distributed searching and re-opened the arguments about the pros and cons of union catalogue creation. In particular, discussions have contrasted the ease of searching of monolithic “physical” union catalogues and their perceived high set-up and maintenance costs with the possibilities of utilising comparatively low-cost Z39.50 distributed solutions to create “virtual” union catalogues established at the time of search (see for example Cousins, 1999).

In UK higher education (HE) both catalogue models have been supported and financed nationally, particularly through HE, the Joint Information Systems Committee (JISC) of the Funding Councils. The COPAC service: [http://www.copac.ac.uk](http://www.copac.ac.uk) – is a physical union catalogue hosted and managed by Manchester Computing and providing a single point of access to catalogue records of the libraries of the (UK) Consortium of University Research Libraries...
(CURL) (Field, 1999). And from 1998 to 2001, the UK Electronic Libraries Programme (eLib) funded four projects to investigate the issues surrounding the creation of virtual union catalogues, or “clumps” (see for example, Brack \textit{et al.}, 2001). Other substantial catalogues exist outside the HE sector but are of use to academics and students, the most obvious being that of the British Library (available at: \url{http://www.bl.uk/catalogues/blpc.html}).

This was the background in early 2000 when a feasibility study into a National Union catalogue for the UK (UKNUC) was established with the aim of making explicit recommendations on how to proceed: virtual, physical or a mixed catalogue environment. The study reviewed the key issues that impinge on the creation of a National Union catalogue for monographs and serials, with the primary focus being UK HE and national library catalogues and collections. The study was funded jointly by JISC, the Research Support Libraries Programme (RSLP) and the British Library’s Co-operation and Partnership Programme. It was undertaken by a consortium led by the University of Sheffield Library and including the University of Glasgow Library, Crossnet Systems and CURL. The final report was presented to the funders in April 2001 (Stubley \textit{et al.}, 2001a) and specific aspects of the investigation have also been documented (Stubley \textit{et al.}, 2001b, c).

A key component of the feasibility study was an understanding of user perceptions of a National Union catalogue and this current paper presents some of the work undertaken to gauge these. It details the analysis of two questionnaire surveys conducted on impressions of a UKNUC, the first with academic staff, postgraduates and researchers, the second with library staff.

\textbf{The questionnaire surveys}

\textit{Aim of the surveys}

The aim of the questionnaire surveys was to collect data on the information needs of two user groups – library users and librarians – and assess, by asking questions on potential facilities and services, how successful the UKNUC might be in satisfying these needs. From a survey of the literature, it does not appear that much practical research of this nature has been carried out previously in the UK, or indeed elsewhere.

Users were chosen from academic staff, researchers and postgraduate research students across UK HE because it was felt that they represented a pro-active group with experience of searching library catalogues borne out of wide-ranging and demanding information requirements, substantial knowledge of differing information resources and related library services such as interloans. For these reasons it was argued that they would be in a position to contribute in an informed way to the UKNUC discussions. It was recognised that this was not the sole group that could provide useful input, but it was important that the resource committed to the survey be finely focused for optimal results.
Design of the surveys
It was recognised early in the feasibility study that specialist expertise in the design and analysis of questionnaire surveys would be required and this was achieved by enlisting the services of The Survey Team at the University of Edinburgh.

Also, from informal discussions with academic staff in a range of institutions it became clear that, while the concept of a union catalogue was generally understood, the terminology was foreign, being a particular product of the library and information profession. Any attempt to obtain useful and meaningful results would thus require a clear explanation and a questionnaire that progressively outlined issues and led the respondent through the principles involved (Crawford, 2000; Gorman and Clayton, 1997).

The number of questions and the desire to obtain as much useful data as possible had to be balanced with the ever-expanding size of the questionnaire and the attendant risk that the time required for completion would reduce participation. Accordingly, a number of questions that “would have been nice to ask” were excluded on purely pragmatic grounds, to ensure that all relevant questions could, in fact, be included. As one would expect, there were some differences of emphasis between the questionnaires for academics and librarians. For example, a (deliberately) provocative question was asked of librarians about the funding of a UKNUC (question D), but this was excluded from the academic questionnaire on the grounds that it would interfere with the specific and primary aim of gathering data on usage and needs.

A draft outline of the questionnaire was tested with academics and librarians which was followed by an iterative process of refinement as the survey team took this raw data and developed it into a usable and professional survey document. After piloting, the final questionnaires were distributed in September 2000.

While some different questions were required for academics and librarians, the questionnaires shared a common four-part structure:

1. Section A: information about you.
2. Section B: your current use of library catalogues.
3. Section C: features of a National Union catalogue.
4. Section D: in conclusion.

The questions primarily consisted of tick-boxes, in most instances inviting the selection of one box from four graded on a scale of “frequently”, “occasionally”, “rarely” or “never”, or similar wording depending on the question (Pors, 2001). Ranking into a priority order was requested as an alternative response on several occasions. A final sheet provided space for free-text comments. Different modes of response and interpretation were quite deliberately included in an attempt to prevent an “automatic” approach to all questions. The questionnaire distributed to academic staff is included as Appendix 1, Figure A1 and that distributed to library staff as shown in Appendix 2, Figure A2.
**Sampling frameworks**

*The sampling framework for the questionnaire to academics*

Advice on sample sizes and the sampling framework was obtained via STATLAB, the statistical consultancy service of the University of Edinburgh. The sampling framework itself was derived from two factors that were felt could influence the uptake and use of a UKNNUC: proximity of major collections and institutional research strengths.

It was felt that if libraries in a particular region had strong collections users may show little interest in exploring further afield and this could result in a lukewarm attitude to the idea of a UKNNUC. The impact of proximity might be influenced by such issues as the overlap of research and teaching areas between institutions, collection strengths and the effectiveness of the local transport infrastructure. However, for simplification, the starting point was taken as the availability of three or more university libraries in a single city or urban conurbation. This produced two lists of institutions: one in “conurbations”, the other in “non-conurbations”.

The indicator of research strengths was based on the size of research income in all institutions (universities and colleges) supported by the UK HE funding councils, the output being split into three groups, or “tertiles”. The combination of this with the “conurbations/non-conurbations” lists provided a matrix of six strata. A working sample size of 1,000 was agreed to be appropriate which, with an anticipated response rate of 50-60 per cent, required the distribution of around 1,700 questionnaires. With the advice of STATLAB, 26 UK HE institutions were chosen (out of a total of 154) and the sampling matrix developed as indicated in Table I.

Choice of institution was made by selection of institutions with probability proportional to the number of staff from the total in each stratum; the subsequent identification of academic staff was achieved by systematic sampling of staff in each institution from institutional lists and Web pages. It had been hoped that postgraduates could be identified in the same way but this proved to be extremely difficult as most institutions do not list names of students on publicly-available pages. As a result, postgraduates were identified wherever possible on university Web pages and a convenience sample of postgraduates was selected covering all major disciplines and from a range of institutions.

It was recognised that there are differences in information need and use across subject areas and an attempt was made to collect data on three subject areas.

<table>
<thead>
<tr>
<th>Table I. The sampling matrix for the questionnaire to academics</th>
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<tbody>
<tr>
<td><strong>Conurbations</strong></td>
</tr>
<tr>
<td>Research income upper tertile</td>
</tr>
<tr>
<td>Research income middle tertile</td>
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<tr>
<td>Research income lower tertile</td>
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bands: arts and humanities; social sciences; and science, technology and medicine (STM).

The sampling framework for the questionnaire to library staff
The intention in this questionnaire was that it should focus – as did the feasibility study itself – on the views of librarians working in HE and the three national libraries while still covering other sectors. A working sample size of 1,000 was planned and, drawing from the experience of the academics questionnaire, and to reduce the time taken in searching for individual names, batches of questionnaires were dispatched to directors of library services, with a request to distribute among their staff. It was hoped that a good cross-section of professional responsibilities would be covered but this was not pursued systematically within the sampling framework.

The research tertiles were used to select universities, although the sampling rate was higher than for the academics questionnaire and the conurbation/non-conurbation split was ignored, being considered artificial in relation to library services. A total of ten questionnaires each were dispatched to 102 HE institutions: 58 in the upper tertile, 32 from the middle tertile, and 12 from the lower tertile. In the case of the national libraries, 50 questionnaires were sent to the British Library, and 25 each to the National Libraries of Scotland and Wales.

For public libraries, following consultations with the Society of Chief Librarians, questionnaires were distributed to groups based around:

- regional public library centres;
- London boroughs;
- metropolitan districts;
- unitary authorities;
- rural authorities;
- Northern Ireland authorities;
- Scottish authorities; and
- Welsh authorities.

A sampling of 25 per cent was used, except in the case of the regional centres where a 50 per cent sample was taken reflecting the greater importance of their holdings; 54 public library authorities were contacted in total.

To complete the picture, the libraries of ten further education (FE) colleges and 20 research councils were also sent copies of the questionnaire.

Distribution and response
Consideration was given to the circulation of the questionnaires by e-mail but this was not pursued for two reasons. First, the response rate for e-mail questionnaires is believed to be substantially lower than for postal questionnaires. Second, on a purely pragmatic note, it proved extremely
difficult to obtain the e-mail addresses of individuals, even when they had been identified from Web pages.

The number of questionnaires returned from academics, together with the percentage response rate, is shown in Table II.

For the librarians survey, the final response figures are indicated in Table III.

In comparison with other questionnaires, the response rates of 48 per cent and 43 per cent respectively are considered to be good, while falling short of the 50-60 per cent anticipated at the design stage. However this response rate, coupled with the care taken in the sampling framework and the questionnaire design, means that the data gathered can be approached with reasonable confidence.

**Analysis of the questionnaire to academics**

*Question A: information about you*

**A1 Which best describes you?** As a result of the approach taken to sampling and the difficulty of obtaining contact names for postgraduates, it is not surprising to find a preponderance of academic staff: strata 4, 5 and 6 containing no postgraduates and a single researcher (in stratum 4) while strata 1, 2 and 3 contain 80-85 per cent academic staff, a sprinkling of postgraduates and 10-15 per cent researchers. Clearly, the input into this survey is substantially from UK HE academic staff.

**A2 What is your broad discipline/faculty?** The split across the three disciplines varied quite markedly, as shown in Table IV.

<table>
<thead>
<tr>
<th>Stratum</th>
<th>Total returned</th>
<th>Per cent returned</th>
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<tbody>
<tr>
<td>1</td>
<td>243</td>
<td>48.0</td>
</tr>
<tr>
<td>2</td>
<td>243</td>
<td>54.7</td>
</tr>
<tr>
<td>3</td>
<td>155</td>
<td>41.3</td>
</tr>
<tr>
<td>4</td>
<td>84</td>
<td>41.6</td>
</tr>
<tr>
<td>5</td>
<td>30</td>
<td>37.0</td>
</tr>
<tr>
<td>6</td>
<td>38</td>
<td>50.0</td>
</tr>
</tbody>
</table>

**Table II.**

<table>
<thead>
<tr>
<th>Librarians</th>
<th>Total returned</th>
<th>Per cent returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>HE</td>
<td>481</td>
<td>47.2</td>
</tr>
<tr>
<td>Public libraries</td>
<td>172</td>
<td>31.9</td>
</tr>
<tr>
<td>National libraries</td>
<td>46</td>
<td>46.0</td>
</tr>
<tr>
<td>Research councils</td>
<td>18</td>
<td>90.0</td>
</tr>
<tr>
<td>FE colleges</td>
<td>7</td>
<td>35.0</td>
</tr>
<tr>
<td>Total</td>
<td>724</td>
<td>42.6</td>
</tr>
</tbody>
</table>

**Table III.**

<table>
<thead>
<tr>
<th>Librarians</th>
<th>Total returned</th>
<th>Per cent returned</th>
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</table>

Returns from the questionnaire to librarians
**Question B: Your current use of library catalogues**

**B1 How often do you use the library catalogue/OPAC of home and other institutions?** The range of questions included here radiated from use of the catalogue within the individual’s institution to those within the same city, the same region, within the UK and internationally.

A minimum of 90 per cent of respondents in all strata (including postgraduates) use the catalogue of their home institution. However, the use of other catalogues drops markedly from this high with, for example, 49 per cent of stratum 1 saying they use catalogues of institutions within the same city while the use of other catalogues (in the same region, within the UK and internationally) is 25 per cent or less. In comparison with the 49 per cent of stratum 1 who use catalogues of institutions in the same city, only 27 per cent of stratum 2 similarly explore, suggesting that, at least at this level, there is a difference between “conurbation” and “non-conurbation” institutions; similar results were seen between strata 3 and 4 and 5 and 6. Use of existing union catalogues is low, rising to a high of 1820 per cent in strata 1, 2 and 6.

Variations were detected between disciplines. In stratum 1, while 90 per cent of all academics make use of local catalogues, catalogues elsewhere in the UK are consulted by 67 per cent of arts and humanities respondents, and by just 18-19 per cent of social scientists and scientists. Similarly, 48 per cent of arts and humanities academics have used an existing union catalogue compared with 18 per cent of social scientists and 11 per cent of STM academics.

In summary, existing catalogue use is:

- very high for the home institution;
- moderate or low for local, regional, national and international catalogues; and
- substantially higher – in all categories – by arts and humanities academics.

**B2 How often do you search library catalogues to ...** From the seven possibilities presented, it was clear that the greatest use of existing library catalogues lies in confirming the existence of a book, a feature that scored a consistently high mark across all strata, from 77 per cent in stratum 2 to 96 per cent in stratum 4. The use of catalogues for checking citation details appears to be a similarly well-established activity across most institutions (around 65 per cent).

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<th>PG</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<tbody>
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<td>Arts and humanities</td>
<td>8</td>
<td>32</td>
<td>54</td>
<td>12</td>
<td>20</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Social sciences</td>
<td>12</td>
<td>85</td>
<td>48</td>
<td>47</td>
<td>28</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>STM</td>
<td>31</td>
<td>126</td>
<td>137</td>
<td>92</td>
<td>33</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>243</td>
<td>239</td>
<td>151</td>
<td>81</td>
<td>28</td>
<td>38</td>
</tr>
</tbody>
</table>

**Table IV.**

Returns from academics by broad discipline
In using catalogues for finding “the latest books on your subject”, stratum 1 and stratum 2 score around 60 per cent (20 per cent below the responses to “confirming existence of a book”), stratum 3 scores a similar 71 per cent, but the scores for strata 4, 5 and 6 are a perplexing 90 per cent, 38 per cent and 95 per cent respectively. One might suspect that searching for the latest books in a catalogue requires a substantial library collection with associated good continuation funding, or access to library catalogues outside one’s home institution. For strata 4 and 6 neither of these criteria would appear to be satisfied to the extent indicated by the 90-95 per cent support for this question. This is not to criticise the libraries or institutions concerned, but takes account of the answers from these strata to question B1 where libraries outside one’s own institution were not well supported. Perhaps library budgets in these institutions are sufficient to support immediate teaching (and moderate research) needs and the academics are responding to the local holdings so created.

The use of library catalogues in creating and updating reading lists follows a similar pattern with support in stratum 1 and stratum 2 being identical at 60 per cent, stratum 3 (and stratum 5) rather higher at 72 per cent but strata 4 and 6 higher still at 80 per cent and 95 per cent respectively. This could be explained by the higher proportion of academics’ time devoted to teaching rather than research in these last two strata. The use of catalogues to determine locations of books and journals varies between 50 per cent and 60 per cent across most strata while the use to “find all the books on a subject” receives the lowest score of all, around 45 per cent.

Some differences between the disciplines might have been predicted, the most obvious being the utilisation of catalogues in the creation and updating of reading lists where, in stratum 2, this is supported by 80 per cent of arts and humanities respondents, 81 per cent of social scientists, but only 44 per cent of scientists. The trend here is the same for all other strata. Another response similarly consistent across strata 14 is the search for a location of a book, where (stratum 2 figures) 81 per cent of arts and humanities academics expressed interest, compared to 52 per cent of social scientists and 44 per cent of scientists.

In summary, no difference was apparent in the reasons for the use of catalogues in stratum 1 and stratum 2; catalogues are currently used for the following key purposes (in order of importance):

1. confirming existence of a book;
2. checking or obtaining citation details;
3. finding the latest books on a subject;
4. creating/updating reading lists; and
5. finding locations of books and journals.
**B3 How useful are each of the following when you are searching for information?**

This question aimed to determine the importance of library catalogues to academics relative to five other methods of information retrieval:

1. discussion with colleagues;
2. World Wide Web;
3. electronic discussion lists;
4. journals database services; and
5. online full-text services.

The figures for stratum 1 and stratum 2 are extremely close for all these questions and fairly consistent in their support for all options bar one. Over 80 per cent of respondents were positive about discussion with colleagues, library catalogues, the World Wide Web (Herring, 2001), and journals database services; around 75 per cent of respondents were equally positive about online full-text services. By contrast, electronic discussion lists were supported by only 35 per cent of academics. The responses were very similar across the other strata.

Similarly, the variations between disciplines that do occur do not alter the positive light in which catalogues are viewed. For example, in stratum 2, scientists make substantially more use of online full-text services (86 per cent) and journals databases (93 per cent) than arts and humanities people (45 per cent full-text and 57 per cent databases) and though their catalogue use sits at a reduced 75 per cent (compared to 98 per cent for arts and humanities), this is still a very respectable figure. Trends across disciplines in stratum 1 are similar.

**Question C: features of a National Union Catalogue**

**C1 Which three of the following library catalogues do you think should be included in a UKNUC?** Across all strata the first three choices were (virtually) unanimous, and in this order:

1. the British Library;
2. libraries of major research universities; and
3. libraries of traditional universities.

Variations to this rule were stratum 4, where libraries of new universities just pushed traditional universities into fourth place – perhaps not surprisingly as the institutions in this stratum are themselves all new universities – and stratum 5 where the National Library of Scotland achieved a similar result. Apart from this, there appeared to be little interest in national libraries outside of the British Library, and public libraries remain an under-appreciated, and possibly under-utilised, resource. Research Council libraries appeared in fourth place in strata 1, 2 and 3 and for postgraduates.
C2 For searching purposes, you may prefer to break down the large-scale catalogue into recognisable, smaller chunks that represent your particular needs on different occasions. How useful would it be to search a UKNUC in each of the following ways? In this question, it was hoped to gain an insight into the preferences users might have for accessing such a large database. While there is an interest across all strata in searching the UKNUC as a single catalogue—varying from a support of 59 per cent in stratum 5 to 70 per cent in stratum 2—the question that received greatest support was “by selecting libraries with strong collections in your subject area(s)”: 87 per cent for strata 1 and 2 rising to 97 per cent for stratum 6. A similar, though in general 10 per cent lower, response was given to the idea of searching by strong collections and in a particular geographical area. In contrast to these highs, the ideas of searching by library type, by geographical region, or by city received only moderate support: around 50-60 per cent.

Some variations across disciplines occurred within a single stratum (one of the more obvious examples was from stratum 1 where 93 per cent of arts and humanities academics reacted favourably to searching the whole catalogue, in comparison to just 58 per cent of scientists) but for the two collection strength questions that found universal support there was virtually no difference.

In summary, the highest scores were obtained by:

- selecting libraries with strong collections in your subject area(s);
- selecting libraries with strong collections in your subject area(s) and in a particular geographical area; and
- the whole catalogue.

C3 How often do you think you would want to use a UKNUC to . . . Perhaps not surprisingly, all five possible uses received support, indicated by positive responses from over 50 per cent of the academics and postgraduates who completed questionnaires. In other words, a UKNUC will not be used for a single purpose but for all those itemised, and for still more as the resource becomes established.

Of the listed uses, the idea of locating all journals in a particular subject area achieved the highest score in most strata, with support ranging from a low of 72 per cent (stratum 2) to a high of 95 per cent (stratum 6). Only just pushed into second place was the use of the UKNUC to “locate all books in a particular subject or by a particular author” (75 per cent in stratum 2 to 94 per cent for postgraduates). It is interesting to contrast the responses to this question and question B2, where existing use of library catalogues to “find all the books on a subject” was the lowest-scoring option. Rather than view these as being incompatible responses, it is preferable to consider them as complementary, additional services being provided through a UKNUC that are not seen as viable, or possible, at the present time.

The third high-scoring application was the checking of citation details, varying from 65 per cent in stratum 4 to 86 per cent in stratum 6. Interestingly,
Perceptions of a National Union catalogue

within strata 1 and 2 the support for this use was higher than for “locating all journals” and so interest in citation checking spans institutions at both ends of research funding. Questions relating to the locations of known items (whether books or journals) scored less well, though still circled around a respectable 60 per cent.

In summary, the highest scores were received for:
- Locate all journals in a particular subject.
- Locate all books in a particular subject or by a particular author.
- Check citation details.

C4 Which of the following characteristics would be of most importance to you in a UKNUC? Two characteristics vied with each other for top place across all strata: comprehensive coverage, and the need for a user-friendly interface. Strata 1 and 2 clearly favoured comprehensiveness whereas all other strata voted for a user-friendly interface. The postgraduate group showed a slight variation, giving pride-of-place to comprehensive coverage with “integrated search with journals database” and the ability to combine the results from several searches both scoring above a user-friendly interface. This is perhaps explained by the specific research focus of postgraduates and the fact that they have more time than academics to get to grips with a variety of interfaces. At the same time, it must be recognised that the postgraduates and strata 1, 2 and 3 all prioritised the same four characteristics but in slightly different order.

It would appear that experience with journal databases has raised expectations with regard to the use of “sets” and requirements to combine keywords and results – although interestingly the “ability to sort or otherwise manipulate results” did not score highly, and neither did the requirement to download results into a reference software package. Users are also asking for an integrated search facility for books and journals, under the impression perhaps that this will considerably save time. However, this appeared to be favoured primarily by STM academics rather than be a universal demand.

C5 If the following search methods were available, how often would you use each to search a UKNUC? At total of 13 non-exclusive access points for searching were listed and the responses might suggest that exhaustion set in before the end was reached, the top eight being widely supported whereas the lower five proved unpopular. An alternative view – and hopefully the correct interpretation – is that users are viewing access to the UKNUC in a similar way to how they approach existing catalogues or article databases, and will continue to use the standard access points of author, title, subject and keyword. Thus, 95 per cent in all strata will use author as a search term, 90 per cent in all strata will use title and 82.95 per cent will search using journal title. While article level descriptions are not expected to be a part of a UKNUC, at least in the early stages, this was included as an option and, understandably, bearing in mind the positive response to an integrated search with journals databases in C4 above, received a vote between 83 per cent and 97 per cent across the strata.
Subject and keyword search were both popular and the possibility of combining keywords was well-supported varying from 75 per cent in stratum 1 to 86 per cent for postgraduates.

Access points that proved decidedly less popular were publisher (17.6-19.7 per cent for strata 13 and 27.38 per cent for strata 46), ISBN (generally around 22 per cent rising to 40 per cent for strata 5 and 6) and ISSN (the poorest score of the lot: 15 per cent for stratum 1 rising to 31 per cent for stratum 5).

Very little difference is apparent between disciplines, particularly for the preferred access points. Thus, in stratum 1, author was supported by 100 per cent of art and humanities respondents, by 94 per cent of social scientists and 95 per cent of scientists. The one place where a difference did arise was in support for a combination of keywords – e.g. stratum 1: 55 per cent arts and humanities; 71 per cent social sciences; 83 per cent sciences – perhaps indicating the greater familiarity with and use made of article databases by STM academics.

In summary, the greatest support was received for access to a UKNUC by:

- author;
- title;
- journal title;
- subject;
- keyword; and
- combined keywords.

There was little support for:

- publisher;
- ISBN;
- ISSN;
- collection; and
- location.

_C6 If you found items of interest in a UKNUC, how likely is it that you would use the following methods of consultation?_ Two related, although rather different, elements, were included in this question. The first asked users if the citation information found in a UKNUC would be sufficient, the second about preferred modes of access/consultation.

Citation details are not broadly seen as an end result of the search, with only 15-17 per cent from strata 1-4 indicating that these would be sufficient and around 22 per cent in strata 5 and 6. In stratum 1 and stratum 2 there was virtually no difference in the responses across the three broad discipline areas.

In terms of access, as might be expected, there was overwhelming support for obtaining items identified through a UKNUC search by inter-library loan, around 70 per cent for all strata. Equally, visits to libraries in the same city
were perhaps acknowledged as necessary on occasion, receiving support from 65 per cent of respondents. By contrast, there was no interest whatsoever in visiting libraries outside the home city, irrespective of proximity: only 10 per cent of stratum 1 and 14 per cent of stratum 2 said they would be very likely to visit libraries within a radius of 80km, while the figures reduced to 5 per cent and 7 per cent respectively outside this distance. This contrasts somewhat with the data gathered for the RSLP access scheme, where Milne and Davenport (1999) identified those libraries that were consulted by researchers; it will be interesting to see what the use of the scheme is in practice. The take-up of the UK Libraries Plus scheme for access to university libraries indicates that there is some demand for this facility (Edwards, 2000) although this is focused on part-time and distance learning students rather than academic staff. The option of purchasing items found through a UKNUC equally did not find favour, the “very likely” scores being 18 per cent in stratum 1 and 15 per cent in stratum 2.

Arts and humanities academics in stratum 1 and stratum 2 indicate that, while they still prefer to obtain items on inter-library loan, they are much more willing to travel to gain access to what they need than their science or even their social science counterparts. Within the same city, 76 per cent of arts and humanities respondents said they would be very likely to visit other libraries compared to 57 per cent of scientists and 54 per cent of social scientists (stratum 1) and 70 per cent of social scientists (stratum 2). While they are not enthusiastic about travelling in an 80km radius – only 25 per cent voted for this – or over 80km – support of 17 per cent – arts and humanities people are still willing to consider the possibility much more than the other two disciplines. This willingness in the arts and humanities to try other options to interloans is also noticeable in the question on purchasing with 25 per cent (stratum 1 and stratum 2) saying they would be very likely to buy an item compared to 22 per cent in the social sciences and just 11 per cent in STM.

In summary:

- citation details were not seen as the end product of a UKNUC search;
- inter-library loan was seen as the primary route for access to items;
- academics were willing to visit in the same city but in general will go no further afield; and
- there is little support for purchasing items found in a UKNUC search.

**Question D: in conclusion**

*Compared with existing services, how much would a UKNUC improve the quality of your searches for information?* After all the other questions, this was an attempt to gather feedback about the potential usefulness of a UKNUC. In order to gain an idea of its impact, respondents were asked to tick one box from six:

1. “enormously”;
2. “to a great extent”;
(3) “moderately”;
(4) “to a small extent”;
(5) “not at all”; and
(6) “not sure”.

To encourage respondents to be positive or negative, a five-point scale with a convenient mid-point box was deliberately not used. Accordingly, a tick in any of the top three boxes could be taken as a positive vote and received support of 81 per cent from both strata 1 and 2. Strata 3, 4, 5 and 6 and the postgraduates provided similar data, with the “positive” responses being above 83 per cent in all cases. This would appear to be a vote of confidence for a UKNUC from all HE institutions in the UK.

Viewed across disciplines the figures – strata 1: 94 per cent support from arts and humanities academics; 78 per cent from STM – did not show the variations that had been identified in earlier questions. In other words, there was good support irrespective of discipline.

**Question E: other issues (free-text responses)**

One page was available for free-text comments and was completed by 138 respondents, 16.3 per cent of the total. Thus, while many useful comments were provided, a relatively small proportion of potential users actually completed this section. A number of enthusiastic responses were typified by:

An indication of the great benefits that are at stake here is the improvement in academic research that has resulted from COPAC. I actually find it more useful now than I do [my local] OPAC (which used to be my prime source of information). Is it possible for UKNUC to be an extended COPAC?

Several trends became apparent, with four areas in particular bringing forth comments: full text; links to other resources; interface issues; and reliability.

**Full text.** A total of 25 respondents specifically requested links to full text, particularly to journal articles, or emphasised the importance, ease of access and problems associated through licensing in their subject areas. In several instances the questionnaire appeared to be an opportunity to allow these respondents to express their particular views about full text rather than necessarily putting them in the context of a UKNUC. At the same time, access to full text is obviously an important issue to academics, as evidenced by the support for the question on integration of UKNUC with journals databases. A piquant quote was received:

PUBMED has made the book almost obsolete ... What I need is better online access to full text to print out the sections I need. The best approach would be to scrap library collections altogether and use the money to fund online access to full text.

**Links to other resources.** A total of 21 respondents emphasised the need to look outside the UK, link to other library catalogues across the world, or look to other resources such as DNB, bulletin boards, Web sites, World Bank data, and established databases such as Web of Science. A single but strong plea was
made for a direct link to translations of foreign language material. One academic caught this overall mood very well:

It would be of great importance if a National Union catalogue for the UK was then connected/networked with other EU countries’ NUCs. Has anybody thought that we do not live alone in this world?

**Interface issues.** A total of 19 comments were received on user-friendliness, ease-of-use, and the requirement for good help screens, including two from visually impaired users, all supporting the importance attached to a “user-friendly interface” in question C4.

**Reliability.** A total of 16 respondents emphasised the importance of reliability, stability, the need for platform independent Web access, open protocols and general accessibility from all places not just from on-campus, e.g.:

I think this is a very good idea but it would need to be properly resourced so that it is up to date and the electronic service is very fast ... It would be important to specify system requirements at the high rather than average level.

**Analysis of the questionnaire to library staff**

**Question A: Information about you**

A1 *Which one of the following best describes your current place of work?* The response rates were 47.2 per cent for HE, 46 per cent for National Libraries and 31.9 per cent for public libraries.

A2 *What is the emphasis of your job?* A fairly even split here led to about a quarter of the respondents placing themselves under each of “general library management” (29 per cent), “enquiry work/reader services” (25 per cent), and “cataloguing/classification/technical services” (24 per cent). Interlibrary loans account for 11 per cent, electronic information services for 6 per cent, leaving just 5 per cent in “other”.

Most respondents from research councils and FE libraries identified themselves as general library management (89 per cent and 71 per cent respectively). Both public and the national libraries had more technical services respondents than any other category (28 per cent, 26 per cent), while they also had more ILL librarians (16 per cent, 15 per cent) responding than other sectors. HE libraries included more electronic information services staff (8 per cent) – just 2 per cent from public libraries – while the national libraries had 17 per cent designating themselves as “other”.

**Question B: Your current use of library catalogues**

B1 *Please indicate your main reason for using existing union catalogues.* With the fairly even split of respondents to the categories of general management, reader services and technical services, it was interesting that the use of catalogues from the current question was rather different: 46 per cent of replies selected “enquiry work”; 23 per cent “bibliographic record supply” (Nicholas...
et al., 2001); and 18 per cent “ILL/document delivery”. Just 6 per cent ticked “collection development” and 5 per cent “research”.

B2/3 How often do you use the following union and large-scale catalogues? Given 16 catalogues to choose from, the BL OPAC is currently by far the most popular, with 70 per cent consulting it frequently or occasionally. The COPAC/CURL database claimed second place with 58 per cent but other catalogues were substantially less used, indicating their regionality or piecemeal take-up:

- WorldCat (28 per cent);
- Talis (24 per cent);
- London Union List of Serials and M25 Link (both 17 per cent);
- National Library of Scotland (16 per cent); and
- Research Libraries Group (14 per cent).

The clumps, other than M25 Link, do not have a large current use (CAIRNS and RIDING – both 5 per cent, Music Libraries Online – 3 per cent), although of course their constituencies are small.

By sector, HE makes particular use of the BL OPAC and COPAC/CURL (about 75 per cent each, although CURL/COPAC is used a little more “frequently” than the BL OPAC), followed by WorldCat (39 per cent) and Talis (31 per cent). Public libraries also consult the BL OPAC (64 per cent) while also using Unity stand-alone (38 per cent; UnityWeb had yet to be released) and V3.Online (30 per cent).

In question B3, librarians were asked to indicate the two catalogues they consulted most frequently and, perhaps unsurprisingly, a similar picture emerged with the BL OPAC (50 per cent) and COPAC/CURL (40 per cent) some considerable way ahead of their closest rivals.

B4 Thinking of these two catalogues, how would you rate each of the following properties? This question asked respondents to consider the two union catalogues they consulted most frequently and to rate them on a range of qualities, such as “comprehensive coverage”, “speed of response” and “quality of bibliographic records”.

Most of the chosen catalogues were rated very highly for comprehensiveness of monographs coverage. Of the two most popular, the BL OPAC fared well in most respects, except for its poor rating by HE librarians for links to document delivery, its (lack of) user-friendly interface, and its currency. National library respondents were less critical of these areas. COPAC/CURL was viewed in a positive light, particularly by HE librarians, though it was marked down – unsurprisingly – on its links to document delivery and to some extent on its coverage of serials, its user-friendly interface, and its currency.

Question C: features of a National Union Catalogue
C1 Which three of the following library catalogues do you think should be included in a UKNUC? Respondents were asked to rate catalogues as first, second, third choice: options available included the British Library, libraries of
major research universities, libraries of “new universities”, libraries of “traditional universities”, National Library of Scotland, National Library of Wales, public libraries and research council libraries. The responses showed the British Library to be first choice in all sectors followed by “major research universities” in all sectors but public libraries who, unsurprisingly, favoured their own catalogues. “Traditional universities” also scored well, particularly among HE librarians.

C2 Which facilities of a UKNUC would enable your library to provide improved services to its users? In each sector, the top requirement was “comprehensive coverage of bookstock across all libraries in the UK”, followed by “comprehensive coverage of both print and electronic serials holdings in the UK”. There are also some interesting sector variations. “Widening of co-operative borrowing policies” is important for public libraries, the research councils, and FE colleges, but less so for HE and, unsurprisingly, the national libraries. “Ability to identify holdings by region/city” is rated third most important by HE librarians, and is also valued by public librarians, FE colleges, and the national libraries. “Ability to identify holdings by collection strength” is the third priority for national libraries, but is rated of medium to low helpfulness in other sectors.

“Links from serial holdings to full text” is of medium importance to many (although lowest priority in public and national libraries). It may be that library staff recognise that this is an important desideratum, but perhaps not one likely to be easily pursued via a union catalogue mechanism. A “facility for library users to select a library from which to obtain an ILL” and the “selective coverage of important collections in the UK” were not highly rated.

The answers to this question were also analysed by “job emphasis”. In each category comprehensive bookstock coverage remained the top priority, although librarians rating this as first choice ranged from 65 per cent for ILL/document delivery staff to 40 per cent for those working in electronic information services. Comprehensive print and electronic serials coverage was the second most popular choice for general library management, technical services, and ILL staff, while electronic information and enquiry staff chose “ability to identify holdings by region/city”.

It is clear that librarians feel that a UKNUC would enable them to offer improved services to users: only 15 staff, or 2 per cent, felt that a UKNUC “would have few advantages for users”.

C3/4 Which facilities of a UKNUC would improve the efficiency of your own work? In this case, respondents were first asked to tick as many of 11 possible advantages as they thought would apply to them, and then to rank the top three. “A one-stop shop for all bibliographic queries” was definitely the most popular option here, being ticked by 88 per cent of respondents, and coming top in every sector. “Comprehensive locations for books across the UK” was supported by 70 per cent, and came second in the rankings. On the other hand, “Comprehensive locations for serials across the UK” was deemed to be of only moderate importance in HE, and not of much use in any other sector, reflecting
perhaps the relative ease of obtaining copies of most serial articles from
established sources. “Access to high-quality bibliographic records” was ticked
by 64 per cent, and received the third highest rating across academic, public
and national libraries, an interesting finding given the conventional wisdom
that libraries have their established record sources.

Collection development/collection description facilities were not thought
useful, nor were any ILL system improvements, nor interface issues concerning
search terms and result set manipulation.

The results were further analysed by “job emphasis”, with the “one-stop
shop” option being very popular with all types of staff (with 84-94 per cent
support), although it was edged out of first place for ILL staff by
“comprehensive locations for books”: their 98 per cent support for this option
compared with 83 per cent for “comprehensive locations for serials”. Technical
services staff rate “access to high-quality bibliographic records” very highly
but most staff gave “comprehensive locations for books” second place.

Once again, there was very strong – 98 per cent – support for
implementation of a National Union catalogue.

C5 If the following search methods were available, how often would you use
each to search a UKNUC? Title, author and keyword proved the most
popular access points, with support from 90 per cent or more of respondents.
There was also very strong support for journal title, combined keyword,
ISBN and subject searching (over 70 per cent); 67 per cent of library staff
would search frequently/occasionally by article title, if available. Lowest
scores were given for searching by publisher, collection by subject and
geographical location.

While the most highly rated search keys did not vary much from sector to
sector, serials scored more highly in academic than public libraries. Journal title
had a 95 per cent rating from HE, but 76 per cent from public libraries; article
titles scored 76 per cent in HE, 68 per cent in public libraries; and ISSNs had 62
per cent from HE and 47 per cent from public libraries. The position was
reversed for ISBNs, with 78 per cent from HE and 92 per cent from public
libraries. Subject searching was also more popular in public than academic
libraries (86 per cent to 76 per cent), as was searching by publisher (49 per cent
to 39 per cent).

C6 Which three of the following do you think are most important to include in
a UKNUC, in addition to books and monographs? Serials was the clear front
runner in every sector, by a margin of around two to one. Grey literature is the
second most cited format. FE librarians gave electronic subscription-based
resources second place (third in HE), while the national library staff chose early
printed materials. Archives are the third most popular format among public
librarians, and moving images are quite well thought of in a number of sectors.
There is little demand for the inclusion of computer software, images, or even
maps (except in public libraries).
Question D: In conclusion
D1 The economic models for a UKNUC have yet to be established, though the costs for creation are likely to be substantial. What priority should be given to the creation of a UKNUC in comparison with the options below? This question was an attempt at discovering the value that librarians might attach to a UKNUC in comparison to other information resources or funding streams. The options offered for comparison were deliberately diverse and intended to include some of the current major concerns of the profession: the creation of more digital material; establishing regional resource sharing arrangements (e.g. clumps); more money going into one’s own institution or authority (but not necessarily into the library); provision of a greater number or wider range of full text electronic journals; and subscription to more major bibliographic databases.

UKNUC creation came first in this question, with 33 per cent selecting it as their first choice; it was followed by full text electronic journals with 24 per cent of first choices. By sector, these percentage figures were substantially reversed for HE librarians, with 32 per cent wanting more electronic journals and 25 per cent opting for UKNUC. In public libraries, on the other hand, there was a 59 per cent first choice vote for UKNUC (against 18 per cent for “more money going into your own authority”), and UKNUC had 39 per cent of first choices in the national libraries (27 per cent wanted more money).

To gauge support at different levels of staff, and to consider the responses of those engaged in different activities, answers to this question were also analysed by job emphasis. Every category of staff gave top priority to UKNUC creation, except for “electronic information services” staff, who put more electronic journals, and better bibliographic database provision, ahead of UKNUC. For “general library management” – the most numerous respondents – UKNUC shared first place with electronic journal provision. “Establishing regional resource sharing arrangements” was, not surprisingly, the second priority of ILL/document delivery staff.

Although there is perhaps a tendency, on completion of a questionnaire, to give a higher priority to the subject of that questionnaire, these answers are encouraging. While it is true that it remains to be seen what response there would be to any actual demands for hard cash, or other resources, to enable the implementation of a UKNUC, it seems that there is a wide level of support for the concept.

Question E: other issues (free-text responses)
Comments were received from approximately 25 per cent of the sample – 178 library staff across the sectors – with most being broadly in favour of the concept, although there were a good number of reservations on the grounds of (im)practicality, maintainability, value for money, comprehensiveness, and achievability.

Many comments on the importance of good interface design were received, together with the need for helpful search facilities and the provision of information on the access policies of individual libraries. In terms of content,
many respondents felt that a UKNUC must strive for comprehensiveness and a few linked this with retrospective conversion; there were a number of comments on both the quality and the need for downloading of bibliographic records. Another commonly-raised issue was access to electronic full text and other resources (Byrum and Myers-Hayer, 2000) which was usually coupled with a concern over authorisation and authentication issues for electronic access.

CURL/COPAC received comments both favourable (“CURL’s mix of user friendly OPAC and record supply service is very appealing”) and less so (“Avoid multiple records for same item at all costs: CURL is a bad example”).

Typically, the comments on the proposed resource varied from the cynical through the cautious to the enthusiastic:

It would be a very useful service, especially in the light of different modes of study, such as distance learners, part-time students and mature students. If we are to move forward towards an era of access versus holdings, we need such a service to start with. As more and more students demand a widespread access to information, a National Union catalogue is the answer.

Discussion
Discussion of academics questionnaire
The responses to the first set of questions on existing catalogue use indicated that the design target audience had in fact been hit. With a minimum of 90 per cent of respondents from all strata making use of the catalogues of their home institutions, and around 85 per cent valuing library services as highly as discussion with colleagues and use of the Web, as well as utilising journals databases and online full-text services, these are experienced information seekers and library users who have an understanding of how to use catalogues and what they can get out of them. Even so, existing experience of union catalogues was low, apart from the 44.8 per cent of arts and humanities academics in the research-led universities of stratum 1 and stratum 2. This relative inexperience with the type of resource being investigated makes the positive outcome of the survey particularly encouraging.

The sampling framework was designed to test the ideas that relate to a UKNUC at various levels of research activity and also to see whether this might be influenced by the location of library collections in the same city. This gave rise to the strata 1 to 6. Within the framework, the decision was taken to oversample the research-led universities, primarily because their demand for information is particularly intense and because major bibliographical resources similar to a UKNUC will generally be readily available via nationally-negotiated arrangements. The research-led institutions were sampled as two groups – stratum 1 and stratum 2 depending on their proximity to urban centres – but there was very little difference between the two in responses across the whole questionnaire. It is therefore concluded that a major catalogue such as a UKNUC would find favour irrespective of the proximity of some institutions to major library collections.
Certain similarities were noticed between strata 1-3 and 4-5 which was surprising at first. However, stratum 3 is double the size of stratum 4 and includes a wider range of institutions than just the three new universities in stratum 4. An early consideration of these differences might have led one to expect that stratum 3 might “lean” towards strata 1 and 2, although this was not realised until some of the responses pointed in that direction. It must also be remembered that strata 5 and 6 comprise just two institutions each. This was intentional to ensure that focus was on the information-heavy users of strata 1 to 4 but for this reason only limited interpolation – and to some extent interpretation – can be applied to the results from strata 5 and 6: a few more votes at certain points could easily have swung the figures another way. While, inevitably, there were differences in the responses across strata, these were primarily ones of magnitude rather than viewpoint.

The differences that exist between broad subject areas were also tested but within the strata themselves rather than as part of the sampling framework. Broadly, there was little difference in the responses across the arts and humanities, the social sciences and the sciences when considering the potential make-up and design of a UKNUC. Examination of the existing use of catalogues did produce some marked differences where it was clear that arts and humanities academics make much greater use of a wide range of catalogues than do social scientists or scientists. Similarly, when looking at the utilisation of catalogues in research-led, non-conurbation, universities, the creation and updating of reading lists is supported by 80 per cent of arts and humanities respondents, 81 per cent of social scientists, but only 44 per cent of scientists. In this same section, the use of catalogues for finding a location of a book were supported by 81 per cent of arts and humanities academics, 52 per cent of social scientists and 44 per cent of scientists. This links up with the willingness of arts and humanities academics to consider travelling to libraries outside of their own city to locate items that they would find through a UKNUC, whereas the other two subject groups appear to be quite against this. At the same time, all groups would prefer to obtain any materials that are identified through a UKNUC by inter-library loan. The option of purchasing items did not find favour, although, once again, arts and humanities and social sciences academics expressed more interest in this than scientists. Interestingly, a number of written comments from the STM area suggested that this was not the type of resource that would meet their needs but, in the final analysis, 75-8 per cent of this group in the research-led universities were positive about the creation of a UKNUC.

The responses to the various questions about the checking of citation details bear consideration because reference was made to these at three points during the questionnaire: in the current use of library catalogues (B2); the potential use of a UKNUC (C3); and the outcomes of a UKNUC search (C6).

Comparison between current use (the B2 question) and potential use (the C3 question) suggests that the considerably improved possibilities for citation
checking via a UKNUC were recognised by respondents (for example, in stratum 1 the support in B2 was 68 per cent compared to 78 per cent in C3; in stratum 2, B2 support was 62 per cent and C3 support 74 per cent). This represents a recognition among users that improved service provision could be made through a UKNUC. To some degree the responses to question C6 might be viewed as pulling the rug out from under these assumptions as only 15 per cent in stratum 1 and stratum 2 indicated that “citation details would be enough” of an end product from a UKNUC search. However, in C6 this question was set in the context of others relating to access via visit or inter-library loan and was very probably completed with these alternatives in mind. In this sense it is not felt to undermine overall support for a UKNUC as a major potential tool for citation checking.

A clear steer was received for integrating UKNUC search facilities with journals databases and while primarily coming from the STM area, this did receive some support from social scientists. While a number of comments were made about the importance of full-text to today’s researchers, there was a definite feeling that hobby-horses were being ridden and that some comments did not fall within the ambit of a UKNUC. Having said that, the strength of feeling suggests that this is a feature that should be considered within UKNUC design, if not immediately then for a later date and notwithstanding the fact that differences in specificity between the terminology used in books and journals may make its successful implementation difficult.

Finally, we are left with one question: “Is the concept of a UKNUC worth pursuing?” Any survey featuring a well-designed sampling framework, covering all HE institutions in the UK, and seeking responses from those designing and teaching courses and undertaking research up to the highest level should be treated as reliable and representative of its community. True, the FE community has not been included but this was due to the need to optimise the limited resource available for the survey. If a UKNUC is built, its creation based on the extremely demanding nature of the chosen sample will certainly make it amenable to a wider user population, not just to FE but including the users of public libraries and the research councils: a UKNUC based on HE demands should help to satisfy some of the requirements of FE but a UKNUC based on FE requirements could well prove to be inadequate for HE.

One might expect that, in the face of a new, unproven resource, users would be understandably reticent about making a commitment to the concept of a UKNUC. In fact, the reverse was true: a minimum of 81 per cent of all respondents indicated that a UKNUC would have a positive effect on their information searching. This impressive figure was obtained at the end of a detailed questionnaire at a point when the issues surrounding the new resource would have been obvious to all. Clearly, academics, postgraduates and researchers across UKHE see the potential of the UKNUC as a new large-scale database for undertaking existing information searches more efficiently and providing an opportunity for added-value services.
Discussion of library staff questionnaire
The general tenor of the replies to the questionnaire is positive. A UKNUC is given high priority, and as long as what is seen as a practical way forward can be found, with some central funding, there will be enthusiasm from the library community.

Among public libraries support was found to be high, although answers to several of the questions revealed quite different priorities of, and quite different services required and used by, this sector. HE librarians do not put quite the same priority on the creation of a UKNUC, giving a rather higher vote to the provision of more electronic journals. Looking positively at these results, it is encouraging that UKNUC creation has such a high priority in comparison with the other options listed – but nevertheless there is a suggestion in the responses that strong and convincing arguments will be required to further the concept. National library staff are solidly in favour of UKNUC although there is an accompanying concern on resource availability.

In terms of content, library staff are particularly keen that the British Library catalogue is included in any national provision, and the catalogues of the “major research universities” are of only slightly less importance. Beyond that, there is less unanimity – public libraries naturally support the inclusion of public library catalogues, the research council librarians wish to see “their” catalogues included, and “traditional universities” are also deemed important. There is also support for comprehensiveness, both in the answers to specific questions and in many of the free-text comments made. Comprehensiveness may not be immediately obtainable, but its desirability is evident. The questionnaire also reveals a strong interest in the retrieval of high-quality bibliographic records.

The survey revealed a strong, although not paramount, interest in serials information. Some unease was expressed concerning the ability of current union catalogues to give full and accurate information on serials titles and it was also suggested that, while serials are not as important as books, they are not too far behind, though comprehensive coverage and locations for serials is more important for users than for library staff as such. Coverage of both print and electronic holdings is judged to be vital, although several respondents comment on the problems of access that will arise from the presence of electronic holdings on a union catalogue. Searching for serial titles (and article titles if available) would be heavily used on a UKNUC, and serials are by far the most important format, in addition to books, that library staff think should be included.

Different catalogue use patterns across different sectors of the library world were revealed by the survey although all sectors make use of the British Library OPAC and perhaps the results are not all that surprising. HE libraries are very heavy users of the CURL database and COPAC, public libraries prefer Unity and V3. Online and the national libraries consult the National Library of Scotland and National Library of Wales catalogues. WorldCat, Talis and Research Libraries Group each received support from their members. This
diverse collection illustrates the different databases and organisations that may need to be party to a coming together to form a UKNUC which is of value to all. There are also interesting differences in the choice of formats favoured by different sectors. Books and serials are the first choices of all, but then grey literature, early printed materials, electronic resources, archives and moving images all have their supporters. This diversity may make it more difficult to make any obvious choices as a UKNUC expands to cover other formats, although grey literature does appear to be important. Electronic resources clearly have access and authentication problems identified by many respondents, though these should be considered a challenge, rather than a definitive reason for non-inclusion.

To sum up, 98 per cent of staff said that a UKNUC would improve services for users and would improve the efficiency of their own work. Provided that a practical way forward can be found, with some central funding, the Catalogue will be given high priority and can be expected to receive strong support from the library community.

Conclusion
The questionnaires were extremely useful in building up a picture of the way academics and library staff use catalogues at present and might use a UKNUC should it become available. A good picture was also obtained of how the UKNUC would look to satisfy both groups. It should:

- comprise the catalogues of at least the British Library, libraries of the major research universities, libraries of the traditional universities and, to a lesser degree, public libraries;
- be comprehensive in its coverage, have a user-friendly interface, enable several searches to be undertaken at once and, if possible, allow integrated searches with journals databases;
- include serials as well as books, with grey literature also a strong candidate;
- provide access via author, title, serial title, subject, keyword, and combined keywords;
- enable the location of all serials in a particular subject;
- permit the location of all books in a particular subject or by a particular author;
- enable the pre-selection of libraries with strong collections in subject areas and in geographical areas and the subsequent searching of these; and
- have a facility for the downloading of high-quality bibliographic records.

Whether all these requirements are practicable and affordable in any UKNUC that might be built is another thing!
References


Appendix 1

Feasibility Study into a National Union Catalogue for Libraries in the UK (UKNUC)

A. Information about you

1 Which best describes you?
   Please tick one box.
   1 Academic
   2 Postgraduate
   3 Contract Research

2 What is your broad discipline/faculty?
   Please tick one box.
   1 Arts and humanities
   2 Social sciences
   3 Science, technology and medicine
   4 Other (please specify)

B. Your current use of library catalogues

1 How often do you use the library catalogue/OPAC of...
   Please tick one box for each row.

   ...your own institution?
   Frequently 1   Occasionally 2   Rarely 3   Never 4

   ...other institutions in the same city?
   Frequently 1   Occasionally 2   Rarely 3   Never 4

   ...institutions in the same region/county?
   Frequently 1   Occasionally 2   Rarely 3   Never 4

   ...institutions in the same UK country?
   Frequently 1   Occasionally 2   Rarely 3   Never 4

Figure A1. Questionnaire survey as distributed to academic staff
Perceptions of a National Union catalogue

2. How often do you search library catalogues to...
   
   Please tick one box for each row.

<table>
<thead>
<tr>
<th></th>
<th>Frequently</th>
<th>Occasionally</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>...confirm the existence of a book?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>...find the latest books on your subject?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>...create/update reading lists?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>...find a library that holds a particular book?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>...find a library that holds a particular journal?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>...find all the books on a subject?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>...check or obtain citation details?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

3. How useful are each of the following when you are searching for information?
   
   Please tick one box for each row.

<table>
<thead>
<tr>
<th></th>
<th>Not at all useful</th>
<th>Not very useful</th>
<th>Fairly useful</th>
<th>Very useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussions with colleagues</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Library catalogues</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>World Wide Web</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Electronic discussion lists</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Journals database services (e.g. BIDS, Web of Science)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>On-line full-text services (e.g. on-line journals)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

C. Features of a National Union Catalogue

1. Which three of the following library catalogues do you think should be included in a UKNUC?
Please write ‘1’ by your first choice, ‘2’ by your second and ‘3’ by your third.

- British Library
- Libraries of major research universities
- Libraries of ‘new universities’
- Libraries of ‘traditional universities’
- National Library of Scotland
- National Library of Wales
- Public libraries
- Research Council libraries
- Other (please indicate a specific library or group of libraries)

2 For searching purposes, you may prefer to break down the large-scale catalogue into recognisable, smaller chunks that represent your particular needs on different occasions. How useful would it be to search a UKNCC in each of the following ways? Please tick one box for each row.

- By the whole catalogue
- By selecting libraries with strong collections in your subject area(s)
- By selecting libraries with strong collections in your subject area(s) and in a particular geographical area
- By selecting library type (i.e. university libraries, public libraries)
- By geographical region, county or UK country
- By town or city
- By another combination (please specify)

Figure A1.
3 How often do you think you would want to use a UKNUC to...

*Please tick one box for each row.*

<table>
<thead>
<tr>
<th>Question</th>
<th>Frequently</th>
<th>Occasionally</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>...locate all books in a particular subject or by a particular author?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>...locate all journals in a particular subject?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>...find all locations of a known book?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>...find all locations of a known journal title?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>...check citation details?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

4 Which of the following characteristics would be of most importance to you in a UKNUC?

*Please rank in order of priority from 1 to 10, where 1 is your first choice, 2 is your second and 3 is your third, etc.*

- Ability to carry out several searches and combine the results
- Ability to download search results into a reference software package such as EndNote
- Ability to sort or otherwise manipulate search results
- Ability to view and select terms from an index
- Comprehensive coverage
- Easy to understand selection of catalogues
- Initial ‘broad brush’ search facility
- Integrated search with journals database (e.g. BIDS, Web of Science)
- Results that precisely match your search terms
- User-friendly interface

5 If the following search methods were available, how often would you use each to search a UKNUC?

*Please tick one box for each row.*

<table>
<thead>
<tr>
<th>Search Method</th>
<th>Frequently</th>
<th>Occasionally</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Title</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Journal title</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Journal article title</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Subject</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Keyword</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

(continued)
6 If you found items of interest in a UKNUC, how likely is it that you would use the following methods of consultation?
Please give each a score out of 10, where 10 is ‘Very likely’ and 1 is ‘Not at all likely’.

☐ Visit the library, if it were in the same city
☐ Visit the library, if it were within an 80km (50mile) radius
☐ Visit the library, if it were further afield than an 80km (50mile) radius
☐ Use inter-library loans (ILL)
☐ Buy item(s) if available
☐ Take no action as citation details would be enough
☐ Other (please specify) ____________________________

D. In conclusion

1 Compared with existing services, how much would a UKNUC improve the quality of your searches for information?
Please tick one box.

☐ 1 Enormously
☐ 2 To a great extent
☐ 3 Moderately
☐ 4 To a small extent
☐ 5 Not at all
☐ 6 Not sure

(continued)
E. Other issues

In the space below, please indicate any particular features that you think should be included in the content or design of a National Union Catalogue for the UK.

Thank you for completing this questionnaire. Please return it in the Freepost envelope provided to the Survey Team at the University of Edinburgh who are conducting the survey on our behalf. Their address is:

The Survey Team
FREEPOST
The University of Edinburgh
Mackenzie House
34 West Richmond Street
Edinburgh EH8 0LW

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Appendix 2

Feasibility Study into a National Union Catalogue for Libraries in the UK (UKNUC)

A. Information about you

1. Which one of the following best describes your current place of work?
   *Please tick one box.*
   - [ ] Higher Education library
   - [ ] Public library
   - [ ] National library
   - [ ] Further Education library
   - [ ] Research Council library

2. What is the emphasis of your job?
   *Please tick one box.*
   - [ ] General library management
   - [ ] Cataloguing/classification/technical services
   - [ ] Electronic information services
   - [ ] Enquiry work/reader services
   - [ ] Inter-library loans/document delivery
   - [ ] Other (please specify) __________________________________________

B. Your current use of library catalogues

1. Please indicate your main reason for using existing union catalogues.
   *Please tick one box.*
   - [ ] Enquiry work: assisting end users with bibliographic/locational queries
   - [ ] Inter-library loan/document delivery
   - [ ] Bibliographic record supply

Figure A2.
Questionnaire survey as distributed to library staff

(continued)
2 How often do you use the following union and large-scale catalogues?
Please tick one box for each row.

<table>
<thead>
<tr>
<th>Catalogue</th>
<th>Frequently</th>
<th>Occasionally</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOPAC</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>British Library (OPAC97)</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CAIRNS</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>COPAC/CURL database</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Laser/V3 On-line</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>M25 Link</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Music Libraries On-line</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>National Library of Scotland</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>National Library of Wales</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>RIDING</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>RLG</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Talis database</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SALSER</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Union List of Serials (London)</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Unity</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>WorldCat (OCLC)</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

3 Now please write in the names of the two catalogues listed on the previous page which you use most often.
Please write in. If none, write 'none'.

Catalogue 1                                  Catalogue 2

4 Thinking of these catalogues, how would you rate each of the following properties?
Please tick one box for each row.

**Catalogue 1**

- Comprehensive coverage (books)
  - Very good: 1
  - Good: 2
  - Poor: 3
  - Very poor: 4

(continued)
C. Features of a National Union Catalogue

1 Which three of the following library catalogues do you think should be included in a UKNUC?

*Please write ‘1’ by your first choice, ‘2’ by your second and ‘3’ by your third.*

- British Library
- Libraries of major research universities
- Libraries of ‘new universities’
- Libraries of ‘traditional universities’
- National Library of Scotland
2 Which facilities of a UKNUC would enable your library to provide improved services to its users?

*Please rank in order of priority from 1 to 10, where 1 is your first choice, 2 is your second and 3 is your third, etc.*

- Ability to identify holdings by collection strength
- Ability to identify holdings by region and/or city
- Comprehensive coverage of bookstock across all libraries in the UK
- Comprehensive coverage of both print and electronic serials holdings in the UK
- Comprehensive coverage of print-only serials holdings in the UK
- Facility for library users to select a library from which to obtain an ILL
- Links from serials holdings to full text
- Selective coverage of ‘important’ collections or libraries in the UK
- Widening of co-operative borrowing policies
- Other (*please specify*)

Or tick here if you think...

- ...a UKNUC would have few advantages for users

3 Which facilities of a UKNUC would improve the efficiency of your own work?

*Please tick all that apply.*

- A one-stop shop for all bibliographic queries
- Comprehensive locations for books across the UK
- Access to high quality bibliographic records
- Access to bibliographic records irrespective of quality
- A wide range of search terms
- Ability to manipulate search results
- Optimising ILL procedures and services
- Comprehensive locations for serials across the UK
4 Now please go back and indicate the three facilities which would most improve the efficiency of your own work.  
Please write ‘1’ by the most important facility, ‘2’ by the second and ‘3’ by the third.

5 If the following search methods were available, how often would you use each to search a UKNUC?  
Please tick one box for each row.

<table>
<thead>
<tr>
<th>Search Method</th>
<th>Frequently</th>
<th>Occasionally</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journal title</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journal article title</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keyword</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part of keyword (e.g. when a full title or keyword is unknown)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Combining keywords with operators (e.g. ‘and’, ‘or’, ‘not’)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Publisher</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISBN (International Standard Book Number)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>ISSN (International Standard Serial Number)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Collection by subject</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geographical location</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure A2. (continued)
6 Which three of the following do you think are most important to include in a UKNUC, in addition to books and monographs?

Please write in ‘1’ by your first choice, ‘2’ by your second and ‘3’ by your third.

- Manuscripts
- Early printed materials
- Serials
- Maps
- Images
- Archives
- Grey literature
- Moving images (films and videos)
- Electronic subscription-based resources
- Computer software
- Other (please specify)

D. In conclusion

1 The economic models for a UKNUC have yet to be established, though the costs for creation are likely to be substantial. What priority should be given to the creation of a UKNUC in comparison with the options below?

Please rank in order of priority from 1 to 6, where 1 is your first choice, 2 is your second and 3 is your third, etc.

- Creating a UKNUC
- Creating more digital material
- Establishing regional resource sharing arrangements (e.g. clumps)
- More money going into your own institution or authority (but not necessarily into the library)
- Providing a greater number or wider range of full text electronic journals
- Subscription to more major bibliographic databases or datasets

There is space on the next page for your comments.
E. Other issues

In the space below, please indicate any particular features that you think should be included in the content or design of a National Union Catalogue for the UK.

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