

The Benefits Of Sharing

Summary Report





Executive Summary

The Benefits Of Sharing (TBOS) project was funded by Jisc and ran from July 2012 to January 2013. Led by the Universities of Edinburgh and Stirling and backed by the Scottish Confederation of University and Research Libraries (SCURL), the project focused on investigating one question:

"How would a shared Library Management System (LMS) improve services in Scotland?"

This question was investigated through four work packages. The key benefits and requirements for successful shared LMS services are:

1. The Library Management System and Staff

- 1.1 There was a significant level of support from Scottish LMS staff to work with a shared LMS. This would be vital for the success of such a system.
- 1.2 Discussions identified specific areas of work such as technical development, technical support and bibliographic data where Scottish LMS staff present on the day indicated their willingness to collaborate. This would play a significant part in implementing and maintaining the system.

2. Key Benefits for Users:

- 2.1 Improving the user experience by providing greater visibility of, and the ability to, search across Scottish collections.
- 2.2 By sharing the costs of support and development, institutions benefit from more stable environments and from developments that, working alone, may be prohibitive to fund.
- 2.3 Improving efficiencies for staff users through collective procurement, benefiting from greater bargaining power in supplier negotiations.
- 2.4 An ability to provide a greater choice; the option of using an open source system becomes a more viable alternative to 'off the shelf' solutions due to the combined expertise and support available.
- 2.5 Allowing smaller institutions to expand the range and quality of services they offer to their users.
- 2.6 Sharing of staff knowledge and expertise among members in terms of support, upgrade and development is invaluable.

3. Key Benefits for Content:

- 3.1 Costs savings on subscriptions and purchases of e-content through SHEDL.
- 3.2 Maximising the amount of e-content available to the users of all Scottish HE libraries.
- 3.3 Improving the discovery and delivery of all available econtent for library users.
- 3.4 Managing a shared ecollection from a single ERM across the sector, saving duplication of effort.
- 3.5 Sharing of knowledge and expertise on metadata and cataloguing practice.
- 3.6 Greater efficiency of records management.
- 3.7 Potential for sharing staff resource for a range of tasks from licensing e-resources to retrospective cataloguing.
- 3.8 Exploitation of currently un-catalogued collections in individual libraries by all.
- 3.9 The possibility of finding material, print and electronic across the sector, easily and quickly via a single search.

4. Key Benefits for Systems:

- 4.1 Sharing of technical expertise and knowledge across institutions to give greater efficiencies and cost savings in the areas of staffing, maintenance, on-going development, and reduced duplication of staff effort.
- 4.2 Sharing technical expertise and staffing means that Open Source software, which a single institution may struggle to implement and maintain, is a viable option for consideration for a Scottish LMS.
- 4.3 Procurement and purchasing gives greater leverage to a consortium over an individual institution.
- 4.4 The consortial leverage also affects the on-going development of a system, whether within an Open Source software community or as a customer of a commercial supplier.

5. Key points for success common to shared LMS projects were identified as:

- 5.1 Designing a sharing model that suits the needs of members.
- 5.2 A flexible model that is able to adapt to changing needs easily over time.
- 5.3 The interests of all stakeholders (users, institutions and libraries) are represented equally in the structure.
- 5.4 Decisions being made with regard to whether policies, work practices and bibliographic records will be standardised among members or remain individual.
- 5.5 Good communication and knowledge sharing practices developed to suit members' needs.

Based on the key findings and benefits, the project makes the following eight recommendations for further work or study:

6. Recommendations

- 1. If there is appetite within Scotland to continue discussions regarding the potential for a shared LMS, then a group such as SCURL should put a process in place for this to happen.
- 2. It would be prudent to conduct an in-depth survey and gap analysis on e-content across all Scottish HE libraries nearer to the time of implementation if a shared LMS was undertaken. The TBOS E-Content report is a sound basis to build on, but for e-content sharing to succeed, more in-depth and current information would be needed, including a current assessment of KB+, mentioned in the report as a potential solution to handling a shared collection.
- 3. SHEDL has made good progress in co-operative working for tender and procurement across libraries. Before progressing to a shared LMS, a review and gap analysis of governance, policies, pricing structure, and terms of membership would be useful as a means of informing the on-going co-operation needed for such a project.
- 4. A key discussion point at the LMS Day was the need for senior management and institutional support for any shared services. Questions such as branding (shared or individual), policies and terms of membership were identified as requiring agreement between institutions at the highest level before any practical work could begin. These areas were also identified as potentially time consuming to agree upon, and it was strongly suggested that discussions should start as early as possible if a shared LMS was to go ahead in the future.
- 5. Further discussion about the kind of model for a shared bibliographic database would be needed. The bibliographic database, regardless of the model selected, would be the foundation upon which any shared LMS was built, so it is important to agree on a workable solution for all members.
- 6. Policies on access to records and content as well as policies on cataloguing standards and

creation and maintenance of records would also need to be agreed among participating libraries. The possibility of shared physical access, either from the start or further down the line of a shared LMS, was highlighted as an important area for further discussion.

- 7. User engagement and input emerged as a key component of any successful shared system and service. The TBOS User Survey began this work, and also identified some of the gaps in user awareness of library systems and services. This work could be expanded upon and developed, on-going, to ensure that users have input into a shared LMS and engage with the benefits on an on-going basis.
- 8. From a systems perspective, sharing technical infrastructure and support structures would offer benefits of economies of scale, with more efficient use of staffing and greater expertise than any single library could offer. System options such as Open Source (OS) alternatives to 'off the shelf' commercial products could, therefore, become viable. It is recommended that at the tender and procurement phases of a shared LMS, all options, including OS systems, are reviewed and assessed.

Acknowledgements

This summary report was edited by Steph Taylor (<u>Critical Eye Communications</u>), and co-authored by Stuart Lewis, Angela Laurins, Colin Sinclair, and Colin Watt.

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Introduction

The Benefits Of Sharing (TBOS) project was funded by Jisc and ran from July 2012 to January 2013. Led by the Universities of Edinburgh and Stirling and backed by the Scottish Confederation of University and Research Libraries (SCURL), the project focused on investigating one question:

"How would a shared Library Management System (LMS) improve services in Scotland?"

This question was investigated through four work packages. The first work package delivered an LMS Day, where 40 staff were brought together to discuss library management systems. The second work package focused on users, reviewing the current landscape for consortia library services within Scotland and surveying users to determine how they perceive the current services currently on offer. The third work package focused on systems, reviewing the systems already in use within Scotland and investigating the current and forthcoming options available within the LMS marketplace. The fourth work package focused on content, specifically the e-content already available to users and a survey of bibliographic data deployed within Scottish HE libraries.

It should be noted that the project did not set out to make the case for a shared LMS, nor to look at specific systems with a view to procurement. Instead it limited its sights on investigating and describing the benefits of such a system. These particular aspects have been covered by other projects such as BLMS – Bloomsbury LMS, and the WHELF shared LMS project, which is part of the Jisc 'Future of Library Systems' programme

The question of the benefits that a shared LMS would bring to Scotland needs to be set within the current landscape of consortia activities and sharing within the country. Two of the project work packages, Users and Systems, delivered landscape reports which give a valuable overview of the many shared services within Scotland. Some of these initiatives, such as the Scottish Higher Education Digital Library (SHEDL) and the Scottish Digital Library Consortium² (SDLC) provide structures that could potentially be used, or copied, as a basis for developing a shared LMS, as they are directly concerned with Scottish HE libraries cooperating for purchasing and sharing services. Others, such as Glasgow Colleges and SEDAR³, illustrate how shared systems and services can benefit libraries within Scotland, although in different sectors. The Content work package produced a report which identified both current and possible future sharing in the areas of econtent and bibliographic data.

As a whole, the reports produced by TBOS all demonstrate that Scottish libraries already co-operate successfully and have a strong background of sharing resources, services and systems. This is a strong indicator that the potential benefits could be reaped from a shared LMS within Scotland.

¹ SHEDL: http://scurl.ac.uk/what-we-do/procurement/shedl/

² SDLC: <u>http://www.sdlc.ed.ac.uk/</u>
³ SEDAR: http://sedar.org.uk/

The LMS Day

The LMS day was an opportunity for the project to explore how, one of the critical components for successful sharing, the library staff, viewed the possibility of sharing an LMS in Scotland. The project brought together forty staff to discuss library management systems, along with two facilitators. The day was divided into three sessions, with each session focusing on a general question:

- 1. What do we need from an LMS?
- 2. What are the benefits and drawbacks to sharing?
- 3. Would a shared LMS work for Scotland?

Participants contributed many useful thoughts, identified areas for further investigation and debated the pros and cons of both library management systems in general, and as a shared service in particular. Full details are available in the LMS Day write up⁴. At the end of the day, all remaining participants were asked to vote anonymously on two questions:

- 1. Do you want a shared LMS for Scotland?
- 2. Do you think a shared LMS for Scotland would work?

The results were as follows:

- 1. 29 people wanted a shared LMS for Scotland, 3 people didn't, and one person didn't vote on this question.
- 2. 24 people thought a shared LMS for Scotland would work, 9 people didn't think it would work.

This result demonstrates strongly the will of staff working in Scottish libraries to engage with the work that would be needed to implement and maintain a shared LMS. Furthermore it shows that staff view sharing as beneficial to their users, their institution and themselves.

Key benefits (LMS Day):

- There was a significant level of support from Scottish LMS staff to work with a shared LMS. This would be vital for the success of such a system.
- Discussions identified specific areas of work such as technical development, technical support and bibliographic data where Scottish LMS staff present on the day indicated their willingness to collaborate. This would play a significant part in implementing and maintaining the system.

⁴ The LMS Day: http://libraryblogs.is.ed.ac.uk/benefitsofsharing/the-lms-day/

Users Work Package

Scotland's Consortia Landscape Report

The TBOS project User work package investigated the current consortia landscape of Scotland, seeking to identify and assess existing models currently in use within the country. Five relevant initiatives that currently deliver shared LMS services were highlighted in the report⁵:

- 1. Scottish Digital Library Consortium
- 2. Glasgow Colleges
- 3. Rowan Partnerships
- 4. SEDAR Consortium
- 5. Find a Book

The five initiatives work on different models, but all demonstrate that sharing an LMS is achievable and has consistent benefits for libraries and users in Scotland. Although operating in different sectors, (HE, FE and local authority) the initiatives were all driven by the need to find a solution for imminent systems migration issues and to find cost savings. All of the five groups, regardless of sector, chose working collaboratively to procure, implement and maintain a shared LMS as the most efficient solution.

For the SDLC and Glasgow Colleges Consortium, the most mature services, the models are based on central support and development but use separate client databases with OPACs being customized on an individual basis. It is not obvious to users that their institutions are part of a consortium. In addition, although support is centralised, work practices and policies remain individual to each member.

SEDAR and the Rowan Partnership, both more recently founded, have further developed their model to include the actual sharing of an LMS rather than only a commonly hosted product. This was achieved by deciding before procurement to select an LMS that would both support the needs of the consortia and also allow other members to join over time. To facilitate this, shared bibliographic records policies and practices are an integral part of some models.

Key points for success common to all the projects were identified as:

- Designing a sharing model that suits the needs of members.
- A flexible model that is able to adapt to changing needs easily over time.
- The interests of all stakeholders (users, institutions and libraries) are represented equally in the structure.
- Decisions being made with regard to whether policies, work practices and bibliographic records will be standardised among members or remain individual.
- Good communication and knowledge sharing practices developed to suit members' needs.

User Experience and Understanding Survey

Underpinning all the reasons for exploring the benefits of a shared LMS are improved services to library users, whether by direct means such as better search and retrieval of material, through online access, or by indirect means, such as improved technologies and greater cost efficiencies. As part of the TBOS project, a survey was carried out among library users to better understand their perception of existing services. Full

⁵ Scotland's consortia landscape: http://libraryblogs.is.ed.ac.uk/benefitsofsharing/users/consortialandscape/

details of the survey methodology, questions, responses and in-depth analysis can be found in the User Experiences and Understandings Report⁶. Overall, several important themes emerged from the user survey:

- The Library catalogue is the most familiar resource (although the term OPAC is not widely used or recognized).
- Key requirements for systems were consistently given as easy to use, quick, and that find the results the users need.
- There was little awareness of existing services that provide aggregated searching of catalogues and collections outside of the local library catalogue.
- Although users indicated that they viewed search results that returned links/information to material they couldn't access electronically as unsatisfactory, around two-thirds of users said they would be willing to travel to another library outside of their own institution to access material.

The user survey gave a snapshot of attitudes among a sample of library users. Although not extensive, it shows the importance and value of talking to users on an on-going basis about development of library services. The benefits of developing a shared LMS will, ultimately, aim to develop and support improved services for library users. This includes the 'back room' developments such as financial savings, technical improvements and more efficient working practices, which don't directly interface with the user as well as the more user-focused benefits such as: improved user interfaces, a wider range of searchable resources and improved access to resources.

Although the TBOS survey responses were weighted to the views of undergraduate and postgraduate students, they clearly demonstrate that users have useful input to contribute to the development of services and to the functional requirements of systems. The TBOS survey has opened a potential dialogue with users, and has highlighted areas such as user priorities with regard to both services and system functionality. It has also identified some areas where further work on user awareness could prove to be beneficial, such as the lack of general knowledge among the user sample, of some services made available through the library, such as, WorldCat and COPAC. Building on this dialogue into the future could provide input that would be invaluable to ensure that users engage with any new developments and services, and so reap the full benefits of a shared LMS.

Key Benefits for Users:

- Improving the user experience by providing greater visibility of, and the ability to search across, Scottish collections.
- By sharing the costs of support and development, institutions benefit from more stable environments and from developments that, working alone, may be prohibitive to fund.
- Improving efficiencies for staff users through collective procurement, benefiting from greater bargaining power in supplier negotiations.
- An ability to provide a greater choice; the option of using an open source system becomes
 a more viable alternative to 'off the shelf' solutions due to the combined expertise and
 support available.
- Allowing smaller institutions to expand the range and quality of services they offer to their users.
- Sharing of staff knowledge and expertise among members in terms of support, upgrade and development is invaluable.

⁶ User experiences and understandings: http://libraryblogs.is.ed.ac.uk/benefitsofsharing/users/consortialandscape/

Content Work Package

E-Publications Report

The E-Content Report' shows that E-publications held by the various research libraries surveyed currently have significant overlap. The SHEDL initiative and the NESLi deals taken up by libraries in Scotland are the two most significant indicators of such overlap. The SHEDL initiative has had an impact in procurement already, not only in the cooperative nature of tendering, supplier selection and procurement, but also in creating an environment of some sharing of e-journals across member libraries. SHEDL has successfully delivered content from a range of key publishers and represents around 15% of the spend of HE libraries in Scotland. There is other evidence of significant sharing among the Scottish HE libraries via the NESLi deals, with a critical mass of Scottish HE libraries taking up two key packages: Elsevier Freedom Collection (13 libraries) and Wiley Online Library (11 libraries). Another six NESLi deals are taken up by between 6-8 libraries, an important indicator of the potential for a Scotland-wide shared collection. Data gathered for SCURL indicates that some additional packages, outside SHEDL and NESLi, have significant numbers of subscribers within Scottish HE libraries, for example at the highest end, three packages have 12-13 subscribers.

The movement towards Open Access (OA), by which scholarly content is made freely available to all, is another area of potential sharing. There is strong government backing for the Finch report (published July 2012), for example by the Research Councils UK (RCUK), which urges making more content available on an OA basis. As all OA content is free at the point of use, the material is, by default, a shared collection. The E-Content report contains a specific breakdown of the OA collection of one university library within Scotland. In addition, there are several sources of e-books available free via initiatives such as GoogleBooks, Project Gutenberg, the Hathi Trust and the Directory of Open Access ebooks. All this material has the potential for inclusion in a shared collection between Scottish HE libraries. Such a shared collection has the potential for being managed from a single ERM. Knowledge Base+ (KB+) has been explored as a possible ERM solution, with full details available in the E-Content report.

The TBOS E-Content Report gives full details an analysis of the specific overlap in e-content within Scotland. The findings indicate that there is a strong basis on which to build a shared LMS from the content perspective. In addition, the work done by SHEDL indicates that not only the content itself but a framework for co-operation on tendering and procurement exists and is viable among Scottish HE libraries.

Managing a shared collection could potentially bring benefits in the following areas:

- · Costs savings on subscriptions and purchases of e-content
- Maximising the e-content available to the users of all Scottish HE libraries
- Cost and efficiency benefits through sharing of knowledge and staff expertise
- Improving the discovery and delivery of all available content for library users

Bibliographic Data Survey

The Bibliographic Data Survey⁸ aimed to determine the potential scale of a shared LMS in terms of bibliographic records, patron/user records and the scope for including currently un-catalogued content in a shared LMS. The report also investigated if there was a preference among interested parties for one of two models:

- · A single bibliographic database with multiple holdings
- A shared infrastructure but with completely separate data sets

⁷ E-Content report: http://libraryblogs.is.ed.ac.uk/benefitsofsharing/content/e-content-report/

⁸ Bibliographic data survey: http://libraryblogs.is.ed.ac.uk/benefitsofsharing/content/bibliographic-data-survey/

As a base from which to develop this area within a shared LMS, Scottish institutions already have a track record of carefully managed metadata. The increasingly complex licensing information which needs to be managed for e-content would both benefit and support the shared purchasing/e-content potential outlined above. Two major questions elicited a positive response from the survey: whether there is enough overlap among Scottish HE libraries to warrant sharing bibliographic data, and whether a combined LMS system (of either model) would scale to the degree required.

The TBOS project found that shared bibliographic data could have benefits for both staff and users of libraries. For staff, the sharing of record maintenance and creation across specialised staff within each library could give many benefits, from sharing of knowledge and expertise through to greater on-going efficiency of records management. It could also, potentially, open up the possibility of retrospective cataloguing, with more staff to share the load, which could in turn, maximise the exploitation of currently un-catalogued collections in individual libraries by all. In addition, the practice of sharing patron records and the contents of archives and repositories would also be feasible.

For library users, a shared LMS would open up the possibility of finding material across the sector via a single search. TBOS investigated 'Find A Book'⁹, a service that grew out of the CAIRNS project and is set to launch in early 2013. Originally designed to support public libraries, the PTFS partnership and SLIC who will be delivering the service are keen to engage with the HE community to develop a service that would support HE users.

Finally, the survey provided no conclusive information about preferences for the two models for sharing bibliographic data. Comments from the survey (see the Bibliographic Data Report), highlighted the need for much more discussion to take place on this subject. Feedback also indicated that the policies around cataloguing, who could view records and access to the content itself would need to be agreed by all participating institutions for a shared bibliographic database to work in practice.

Key Benefits for Content:

- Costs savings on subscriptions and purchases of e-content through SHEDL
- Maximising the amount of e-content available to the users of all Scottish HE libraries
- Improving the discovery and delivery of all available econtent for library users
- Managing a shared ecollection from a single ERM across the sector, saving duplication of effort.
- Sharing of knowledge and expertise on metadata and cataloguing practice.
- Greater efficiency of records management.
- Potential for sharing staff resource for a range of tasks from licensing eresources to retrospective cataloguing.
- Exploitation of currently un-catalogued collections in individual libraries by all.
- The possibility of finding material, print and electronic across the sector, easily and quickly via a single search.

Find a book: http://www.findabook.org/

Systems Work Package

Shared Systems Options Report & Scottish Systems Landscape Report

The Shared System Options Report¹⁰ investigates the question of whether a shared LMS would provide a compelling and cost effective way forward from a systems perspective. The investigation assumed that each HE institution in Scotland will, in the next 18-24 months, be looking to procure a next generation LMS either triggered by their individual strategic planning and budgeting requirements or as a response to the end of life of their current system.

The concept of sharing a system across Scottish HE libraries does potentially affect some of the standard procurement procedures and longer term considerations. On the procurement/purchasing front, the combined purchasing power of the institutions could result in greater negotiation leverage and result in a better price. However, these potential benefits would need to be balanced by the challenges of how issues such as governance, ownership and responsibilities for such a system would be worked out among participating institutions. In addition, the priorities of individual institutions against the 'best fit' for sharing would need to be carefully considered and negotiated to find a solution that satisfies all parties. The System Options Report gives details of specific questions, both technical and financial, that would need to be considered in detail if a joint procurement and shared LMS were to go ahead.

The next generation LMS is still an immature market, with the majority of new products still unfinished and not ready to completely replace all functions of an existing LMS. Full details of the current status of the main vendors and their next generation systems can be found in the Scottish Systems Landscape report¹¹. Commercial vendors are taking one of two approaches to the development of these systems:

- Starting the product development from the ground up
- Retaining and re-packaging the core existing product whilst integrating new technologies and services

In addition, TBOS investigated the Open Source option for a shared LMS: that is, for institutions to buy into a 'build your own' system as a co-operative venture. Here, the benefits of sharing could mean that an expert team could be deployed across participating institutions, or the work packaged up, prioritised, and contracted out to third party developers. The sharing of skills and knowledge for installation and on-going maintenance could potentially make such a venture more viable than if each institution were to approach this option individually. Kuali Open library Environment (OLE)¹² already has an established community who develop and maintain this Open Source solution. The benefits of taking the Open Source approach, although not without risks, could result in a bespoke LMS that was able to not only provide solutions for individual libraries working together now, but also into the future, by providing participating institutions with on-going control and the opportunity to shape a flexible and responsive system.

The TBOS findings strongly indicate that Open Source is a viable option and should be investigated and considered along with commercial systems during any tendering/procurement phase for a shared LMS. As with the commercial systems, full details of advantages and disadvantages are given in the Shared System Options report.

To summarise, the current market in next generation for the LMS is not sufficiently mature to enable Scottish HE libraries to make an informed choice. Within the next 18-24 months, this situation is likely to be resolved. It is strongly recommended that a watching brief be kept on all options, both commercial and

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¹⁰ Shared system options: http://libraryblogs.is.ed.ac.uk/benefitsofsharing/systems/shared-system-options/

¹¹ Scottish systems landscape: http://libraryblogs.is.ed.ac.uk/benefitsofsharing/systems/systems-landscape/

^{**} Kuali OLE: http://www.kuali.org/ole

Open Source during this period. TBOS also identified that the technical challenges would perhaps be more easily negotiated than the the challenges of policies, governance, responsibilities and ownership.

Key Benefits for Systems:

- Sharing of technical expertise and knowledge across institutions to give greater efficiencies and cost savings in the areas of:
 - staffing
 - o maintenance
 - o on-going development of the system
 - o reduced duplication of staff effort (and metadata) cataloguing the same items
- Sharing technical expertise and staffing means that Open Source software, which a single institution may struggle to implement and maintain, is a viable option for consideration for a Scottish LMS
- Procurement and purchasing gives greater leverage to a consortium over an individual institution
- The consortial leverage also affects the on-going development of a system, whether within an Open Source software community or as a customer of a commercial supplier

Conclusion

The results of the participant voting at the end of the LMS Day provide an accurate vote of confidence of the overall benefits that could be provided by a shared LMS within Scotland – they are both tangible and achievable. The vote provided a snapshot of the day itself, during which much intense discussion took place. The pros and cons of creating and maintaining such a system and service were thoroughly explored by the people who would be the practitioners if such an initiative were to happen in Scotland. The benefits are further supported by the findings of all of the TBOS project work packages, summarised in this report but available in much more detail in the individual project reports.

Recommendations

- 1. If there is appetite within Scotland to continue discussions regarding the potential for a shared LMS, then a group such as SCURL should put a process in place for this to happen.
- 2. It would be prudent to conduct an in-depth survey and gap analysis on e-content across all Scottish HE libraries nearer to the time of implementation if a shared LMS was undertaken. The TBOS E-Content report is a sound basis to build on, but for e-content sharing to succeed, more in-depth and current information would be needed, including a current assessment of KB+, mentioned in the report as a potential solution to handling a shared collection.
- 3. SHEDL has made good progress in co-operative working for tender and procurement across libraries. Before progressing to a shared LMS, a review and gap analysis of governance, policies, pricing structure, and terms of membership would be useful as a means of informing the on-going co-operation needed for such a project.
- 4. A key discussion point at the LMS Day was the need for senior management and institutional support for any shared services. Questions such as branding (shared or individual), policies and terms of membership were identified as requiring agreement between institutions at the highest level before any practical work could begin. These areas were also identified as potentially time

consuming to agree upon, and it was strongly suggested that discussions should start as early as possible if a shared LMS was to go ahead in the future.

- 5. Further discussion about the kind of model for a shared bibliographic database would be needed. The bibliographic database, regardless of the model selected, would be the foundation upon which any shared LMS was built, so it is important to agree on a workable solution for all members.
- 6. Policies on access to records and content as well as policies on cataloguing standards and creation and maintenance of records would also need to be agreed among participating libraries. The possibility of shared physical access, either from the start or further down the line of a shared LMS, was highlighted as an important area for further discussion.
- 7. User engagement and input emerged as a key component of any successful shared system and service. The TBOS User Survey began this work, and also identified some of the gaps in user awareness of library systems and services. This work could be expanded upon and developed, ongoing, to ensure that users have input into a shared LMS and engage with the benefits on an ongoing basis.
- 8. From a systems perspective, sharing technical infrastructure and support structures would offer benefits of economies of scale, with more efficient use of staffing and greater expertise than any single library could offer. System options such as Open Source (OS) alternatives to 'off the shelf' commercial products could, therefore, become viable. It is recommended that at the tender and procurement phases of a shared LMS, all options, including OS systems, are reviewed and assessed.