

Summary of Review of the UK LOCKSS Alliance

November 2011

A service review of the UK LOCKSS Alliance (UKLA) was conducted during September and October 2011, undertaken as part of the UKLA Community Development Activities project. A follow on review will take place in early 2013 to assess the progress that has been made from this report.

The service review was an explicit activity of the UKLA Community Development Activities project, intended to direct the community support needed from the UK LOCKSS Alliance support team at EDINA, developers at Stanford, and between members of the UKLA. The work consisted of a review of documentation, interviews with UKLA members and with the Manager of the UKLA Support Service and the Director of LOCKSS at Stanford University in the USA.

For clarity, the UK LOCKSS Alliance is funded under two streams. UK HE institutions pay an annual membership to the UK LOCKSS Alliance, with that income being split between EDINA and Stanford. EDINA uses their proportion to fund the UKLA Support Service, which provides technical support for institutions running LOCKSS. JISC have awarded EDINA funding from August 2010 to July 2013 to undertake a Community Development Activities project. This funding is used to support face-to-face meetings of the UKLA and its Steering Committee, and to make technical enhancements to the LOCKSS software in response to community priorities.

This document presents a summary of the key points identified in the review. The two salient points are covered in Sections 1, about Communication and Feedback and 5, about Key Functions of LOCKSS in the UK.

1 Communication and feedback, clarity of roles, relationships and responsibilities

The review suggests that improved communication and feedback could greatly improve the functioning of the UKLA, and the satisfaction and motivation of UKLA members.

There are reported gaps in effective communication within the LOCKSS 'system' - between Stanford and the UKLA members, between the UKLA Support Service and Stanford, and between the UKLA Support Service and the UKLA members. Some of this is structural, e.g. current processes do not adequately communicate all that's required to keep everybody informed as needed and consequently processes may not be completed. Information holes leave people feeling uncertain as to whether LOCKSS is doing what it should or whether they are doing what is needed in order to keep their content safe.

Some members felt that feedback is not sufficiently acted upon in a timely fashion. This appears to be related to a lack of clarity about roles, relationships and responsibilities, and also about resource allocation. There appear to be two reasons when feedback has not been adequately addressed. First, the Support Service has sometimes felt unable to act on the feedback, due to insufficient resource or skills, or schedule activity with Stanford, due to competing short-term priorities. Second, sometimes feedback has been received and acted on but progress has not been communicated to the membership (e.g. the metadata in LOCKSS has been enhanced to include both volumes and dates in response to consultation with LOCKSS members but this change has not been publicized). There has been a perception within the

UKLA Support Service that only a complete function is newsworthy, and the UKLA Support Service has not prioritised the ongoing publication of developments (sometimes due to time constraints). In reality, news of progress such as the developments towards integration of link resolvers would demonstrate progress, would show that feedback has been received and has had an impact, and may contribute towards a sense of an ongoing, live initiative.

The 'tentative' style of the UKLA Support Service staff in addressing the membership and others may not be most effective at communicating a proactive initiative.

Action: *the Support Service Manager will:*

- *Put in place mechanisms to issue regular progress reports and news to the membership;*
- *Engage with staff at Stanford to clarify his and their roles and responsibilities to ensure that feedback is heard and either acted on or reasons are provided for inaction;*
- *Adopt a more active style in documentation thus clarifying roles and responsibilities and communicating the energy behind LOCKSS in the UK.*

2 Expectations, benefits and barriers

Among the members interviewed, the key expectations of LOCKSS are/have been that:

- LOCKSS would have good coverage of publishers whose content they wish to preserve (although interviewees varied in their attitudes to whether or not large publishers fall within this category). Members would like to see more publishers participating.
- LOCKSS should function as a 'backup' source of content – providing uninterrupted access to users in the event that the primary source is down for any reason. This now relies on integration of LOCKSS with link resolvers and thus this functionality is critical to the perceived value of LOCKSS in the UK.
- LOCKSS should be useable (including the language used), have the functionality needed in a preservation archive, allow users to obtain and load 'archival units' at a pace that minimises the need for backlog. This was the source of complaint by several interviewees who find the system to be extremely difficult to use and understand which, in turns, deters them from introducing the system to other staff or including it in workflows.
- The staff at both Stanford and Edinburgh should communicate effectively with the membership. (See Section 1 above).
- Staff at Edinburgh should maintain a high profile for UKLA within UK Higher Education. This is one of many functions that the Support Service must fulfill with tight resource. The Manager will consider how it may be addressed.
- A large proportion of potential members should be members of UKLA thus contributing to a strong, community-based initiative whose costs are shared.
- The membership will have some impact on development of UKLA in terms of content and the system.
- Time invested to fill a LOCKSS box will be clearly beneficial to their institutions.

3 Information

Libraries considering joining UKLA need clear information about the cost of implementing LOCKSS (e.g. technology, human resource). By providing this information, the UKLA Support Service would demonstrate awareness of costs and activities (thus enhancing its professional credibility) as well as assisting potential members with their decision-making and budgeting.

Action: *the UKLA Support Service Manager will consider how such information may be gathered and made available to members and potential members e.g. by means of case studies (which would illustrate the varying needs of organizations of different sizes).*

4 Community participation

It is not clear to UKLA members how they might actively participate in a 'community'. To date members have found events that facilitate face-to-face contact to be most useful, namely the presentation from staff at the London School of Economics at UKSG and the UKLA members meeting in May. LOCKSS has also been added to the agenda of a local group that meets in London to discuss e-resource management. This gives some indication of how the Support Service could support community participation.

5 Key functions of LOCKSS – in the UK

During interviews it was clear that LOCKSS promises to fulfill two key functions for UKLA members: it will preserve content over the long term, and it will provide a back-up source of content in the event that the primary source is unavailable for whatever reason and for either short or long periods of time. The latter is contingent on functionality to facilitate access to the content in the box, e.g. integration with libraries' link resolvers so that end users may discover and access content from the LOCKSS box through the same mechanism that they discover and access all e-journal content in the library. Thus, implementation of the functionality to integrate LOCKSS with link resolvers is critical to the perceived value of LOCKSS in the UK.

While several members are interested in the preservation function and like the LOCKSS model, i.e. that content is preserved in the library rather than held by a third party which has control over its release, many also found it difficult to commit time and resource to ensure that their LOCKSS boxes held the content they needed and would operate when needed. Several explained that it is difficult to prioritise activities related to preservation when these compete with the more immediate information needs of library users. The key incentive to invest time and resource seems to be that the LOCKSS box may meet the immediate needs of end users in the event that the primary source of the content is unavailable (e.g. if a publisher's website fails). This appears to be a greater indicator that a person will commit time to engage with LOCKSS and understand how it functions than having e-preservation as an explicit responsibility in her/his role.

It seems important that the LOCKSS team recognize the relationship between these two functions of LOCKSS. The 'backup' function of LOCKSS distinguishes it from other preservation solutions. It also provides an incentive for active participation that is otherwise lacking when preservation competes for resource with the immediate information needs of end users.

Both functions rely on comprehensive coverage (although possibly to different degrees) so gaps in coverage should be explained and members should be informed whether such gaps are temporary or permanent.

6 LOCKSS – preservation for smaller publishers?

Some interviewees suggested that LOCKSS is a solution for preserving journals of smaller publishers. There is an idea that content belonging to larger publishers is at lower risk of being lost as it is secured by those publishers and by other agencies (e.g. KB, the National Library of the Netherlands and Portico). This distinction, however, applies only to the 'preservation' function of LOCKSS. Members who prioritise the 'backup' function, i.e. who value LOCKSS as a potential source of content to provide uninterrupted access when publishers sites go down, want their LOCKSS boxes to contain content from both large and small publishers.

Recommendations

Recommendations are numbered according to their chronological position in the main text of the report. They are rated according to their relevance to the key themes emerging through the evaluation exercise, e.g. under the sub-heading 'communication' recommendations 4 and 12 are rated as Priority 1 (P1). These relate to the need to establish a feedback mechanism that ensures that the UKLA membership has some influence over developments of LOCKSS that affect UKLA and the importance of publicizing the implementation of link resolver integration which is considered by many to be essential if LOCKSS is to be of value to their institutions, both of which are critical themes emerging from this work.

Responsibilities of different parties involved with UKLA

- **Recommendation 1 (P1):** Responsibility for planning and implementing the various activities needed to run UKLA should be clarified and made explicit so that those parties are aware of their responsibilities and accountable for progressing them.
- **Recommendation 16 (P1):** If the UKLA SS seeks feedback from the membership it should be willing and able to act on that feedback or to explain why it is not doing so.

Communication – including gathering and responding to feedback, publicity and dissemination

- **Recommendation 4 (P1):** The UKLA support team should establish a feedback mechanism whereby the concerns and issues raised by the UKLA membership is communicated to the LOCKSS team at Stanford and the response is communicated back to the membership so that it is clear to members that their concerns are heard and they know what action is being taken (if any) to address those concerns (or why the concerns are not being addressed).
- **Recommendation 13 (P1):** The UKLA SS should communicate the feedback from UKLA members regarding usability and performance of LOCKSS to the LOCKSS team at Stanford and should consider how to address it with the membership of UKLA.
- **Recommendation 12 (P1):** When integration of the LOCKSS software with link resolvers is achieved, the UKLA SS should publicise this new functionality throughout the membership of UKLA and UKHE community more broadly. The role of a LOCKSS box as a 'back-up', i.e. a locally held collection of subscription content whose access is within the

control of the institution is perceived to be a key benefit and should be highlighted in publicity about UKLA.

- **Recommendation 6 (P2):** as part of the Community Development project, the UKLA SS should demonstrate that LOCKSS works in a live environment e.g. by providing testimonials and/or visual examples.
- **Recommendation 2 (2):** the wording in UKLA SS Terms and Conditions about the email discussion list could be strengthened to indicate that members are strongly encouraged to join the mailing list and to use it for active discussion of priorities and for planning of e-preservation within the Alliance and their own institutions.
- **Recommendation 8 (P2):** the UKLA SS should endeavour, on an ongoing basis, to be aware of and publish information about all of the costs involved in membership.
- **Recommendation 9 (P2):** If UKLA SS wishes to position the LOCKSS approach as a solution for preserving the content of small publishers, the UKLA Director and Manager should endeavour to ensure that UKLA membership is an explicit part of JISC Collections' thinking when it liaises with smaller publishers.
- **Recommendation 7 (P3):** UKLA SS needs to make clear how the LOCKSS approach fits in this field so that potential UKLA members understand why they should join UKLA. The UKLA SS should clarify for itself whether it wishes to identify as the archive for content from smaller publishers – and if not, how can it accurately identify itself – so that it make its role clear to the wider community.
- **Recommendation 11 (P3):** the UKLA SS should consider documenting in full and publishing the case studies of institutions that have implemented the LOCKSS approach within a strategic framework, e.g. have secured institutional buy in through evidence of reliable, long term access.

Technical and strategic development

- **Recommendations 5 (P1):** as part of the Community Development Project, the UKLA SS should identify the link resolvers used by UKLA members who do not have SFX or 360 Link and prioritise integration of LOCKSS with those products.
- **Recommendation 10 (P2):** The UKLA SS team should seek to anticipate any 'e-preservation principles' that may be adopted by JISC on behalf of the community, should consider how well LOCKSS adheres to those principles (and what should be done to achieve a better fit if necessary), and whether and how the LOCKSS approach may be used for preservation of content beyond journals and possibly institutional content.
- **Recommendation 15 (P2):** the UKLA SS may consider whether it can provide the functionality to obtain reports on the content available for LOCKSS boxes and reports that compare that with an institution's subscriptions - or should seek to determine whether such functionality has been developed by any UKLA member and whether this may be shared with others.

Support including documentation, guidelines and technical support

- **Recommendation 14 (P1):** UKLA support team should seek some service level guidelines from the LOCKSS team at Stanford as indication for UKLA members so that UKLA members

know when service deviates from those guidelines and when they should seek further information. Procedures for seeking such clarification should also be made clear to members. Processes for making content available should include clear communication, at each step, with participating libraries.

- **Recommendation 3 (P1):** The UKLA SS should provide either direct support for new members immediately following sign up – or the means to access such support (e.g. an active community facilitated by means of appropriate spaces and technologies may be sufficient to support new members).

Addressing the issues

Revised in May 2012

Since receiving the Service Review report, staff at EDINA and Stanford have been discussing how to address the issues highlighted.

JISC project funding is guaranteed until July 2013. It is essential to address the major issues identified in the report by early 2013 in order to allow a follow up review and improve prospects for further funding. Our vision of the UK LOCKSS Alliance as a community-driven sustainable organisation remains intact, but in order to achieve this vision we need to regain the enthusiasm of members and this will best take place by overcoming the current communication and technical barriers.

An initial conversation was held between EDINA and Stanford in November 2011, with the Director of LOCKSS at Stanford noting that the problems highlighted in the report apply across Stanford and the Global LOCKSS Network as much as they apply to EDINA and the UK LOCKSS Alliance. The detail expressed in the report has been helpful in identifying issues and prioritizing their resolution.

In the sections below, we pick out the main outcomes so far rather than responding to each of the recommendations for action. As such, the outcomes below reflect a work in progress.

Responsibilities of different parties involved with UKLA

The UK LOCKSS Alliance needs a clear model for prioritizing technical developments with the Stanford LOCKSS team. The UKLA Support Service has taken on the role of project management and lead developer for user interface developments.

Having a developer at EDINA dedicated to LOCKSS significantly improves UK capability to respond to local community needs. More generally, the UKLA Support Service Manager is discussing with the Stanford development team how to formalize a roadmap and a development schedule for UK priorities.

Communication – including gathering and responding to feedback, publicity and dissemination

Improved communication is needed at various levels.

There is a need for regular and improved reporting to members, and in response a regular News Roundup has been introduced for distribution to all LOCKSS members. This is written jointly by the UKLA Support Service and the Stanford-based development team, and contains contributions from UK and international members. The intention is to keep members aware of ongoing developments, and there is a discussion of ongoing progress and activity along with a promotion of completed milestones.

To improve the support documentation available on the UKLA website, the UKLA website blog has been used for blog posts that describe how to complete common tasks associated with LOCKSS. A series of short videos have been completed to provide an additional reference. Information on costs will be clarified, both on the blog and in the Quick Start guide.

When integration with link resolvers is complete, case studies describing deployment of LOCKSS at member institutions will be published.

Technical and strategic development

EDINA has implemented functionality to export metadata about collections in KBART format. Institutions can use this to see the range of content that is available for preservation, the range of content they have configured for preservation, and the range of content they have successfully collected.

EDINA has developed scripts and software used to make available a spreadsheet listing the total range of content either made available (preserved) or committed for preservation (in progress). This spreadsheet is now available on the LOCKSS website at:

<http://www.lockss.org/community/publishers-titles-gln/>

A survey was conducted in August 2011 to identify the link resolver systems in use. Ten responses were received, with the following link resolver systems identified: Ex Libris SFX, Serials Solutions 360Link, and Innovative Interfaces Millenium WebBridge. Development work with Ex Libris and Serials Solutions is complete and contact has been established with Innovative Interfaces.

We will review JISC best practice principles as they become available.

Support including documentation, guidelines and technical support

EDINA will discuss with Stanford a definition of 'service level quality' and ways of ensuring that this service level is being met.

A new and expanded content-testing team has been established at Stanford, and new processes around content releases have been introduced. This will make it easier to improve the content release process in response to community requests (for example, it is planned to make available a CSV file of newly-released titles and volumes with each release). Suggestions on the documentation needed are welcome.

New members will be referred to the QuickStart guide, and the short training videos. The UKLA Support Service will offer phone support, and we will review the satisfaction of members to improve support quality.