The COOLPerStor Report

A Collaboratively Owned and Operated London Periodical Store

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Executive summary

This report contains the findings of an investigation into the feasibility of a collaboratively owned and operated print periodical store for the London academic library community. This study was conducted by questionnaire and interview among the library and information service directors in the spring and summer of 2005. Further information was gleaned from existing collaborative storage facilities both in the UK and abroad, sample academic users, senior librarians, institutional and estates managers and from the commercial operators and users of mass storage facilities.

Summary of findings

At this time, there was found to be insufficient committed interest among the institutions taking part in this study to create the funding required for a new build store in the South East of England. This view may change in time as deeper collaboration between institutions in collection development progresses, and as the views of key stakeholders in this area are revised when developments in the field of collaborative storage are developed. The resolution of uncertainties concerning the University of London and the development of experience in the operation of offsite storage by individual institutions may also encourage participation. Some smaller groupings of institutions wishing to collaborate on a more local level were felt to be possible. Possible ways forward for those libraries wishing to develop collaborative storage for the short to medium term future have been outlined in this report, but considerable negotiation between participants and review of these findings would be required to implement them.

Summary of recommendations for the operation of a store

1. Ownership
   A membership organisation based on either M25 consortium governance or London-wide governance by a consortium reflecting LHEC membership, possibly including other non-London members of the M25 Consortium, open to other participating institutions subject compliance with other recommendations. (§85)

2. Retention in perpetuity
   The statement of intent establishing the store should include provisions for the distribution of material in the event that the store were to be dissolved by the operating organisation. A recommendation emerged for close supervision of any dispersal by specific subject-led collaborations with interest in and knowledge of the material. (§86)

3. Extent of de-duplication
   Only one copy should be kept if the material is not intended to leave the store, two if circulation outside the store is agreed. (§87)

4. Online catalogue access
   A z39.50 link analogous to Inform25 should be maintained and that participants be required to edit their catalogue locations internally to show the existence of the store material to their users. (§88)

5. Storage standards
   Minimum standards of security and cleanliness should be imposed on the store, and incorporated into the service level agreements to be established by the participants. The negotiated initial statement of intent of the store should take into account any expectation for the store to meet BS 5454 standards by the participants. (§89)

6. Conservation service provision
   A conservation review should be included in the de-duplication project selecting the copies of the periodicals to be deposited, but no provision for in house conservation should be included in the start up costs of the store. (§90)

7. Access
   Access to the shelves for physical browsing in the material currently being offered to the store (electronically-available low-use periodicals) is not required. (§91)

8. Delivery
   A van service should be costed into the start up charges based on the actual number and geographical distribution of the initial participants. However this should be on a fixed term contract for review at a later date. (§92)

9. Ample
   Ample sufficient funds for the IT infrastructure for robust electronic delivery have to be costed into the business model (§93)

10. Arrangement of material on the shelf
    Collocation of sets of material should be abandoned. Periodical parts should be located by bar code to tote and shelf location. Investment in effective inventory software should be included in the start up costs of the store. (§94)

11. Cleaning and preservation (§95)
    Cleaning of the material should be the responsibility of the donor institution. Notes concerning the condition of the material should be taken on arrival. Both these processes should be costed into the preliminary de-duplication survey.

12. Optimum location of the store (§96)
    Locating the store close to an existing store with operating van service and infrastructure would permit the most cost saving. The survey results suggest within 30 miles of London or 1 hour's travel by public transport would be the most acceptable to those expressing a preference on this point.

13. Subject coverage (§97)
    Science Technology and Medicine appeared initially to be strong contenders for the initial subject coverage of the store. However poor coverage of some humanities subjects by electronic provision, especially foreign language material, suggested that a store providing desktop delivery of such material to humanities researchers would be welcomed.

14. Collaborative collection development (§98)
    Use of the store by collaborative collection development consortia should be encouraged, and the store should be encouraged to take a lead role in the development of such consortia on a subject-by-subject basis. There appeared to be little support among those surveyed for collaboration based on the retention of subject areas in any given institution.

15. Retention (§99)
    The retention policy should only be fixed after a clear statement of purpose for the store has been established.

16. Staffing (§100)
    Appropriate staffing levels for the store can also only be established once the purpose of the store has been agreed by participants and the extent of participant institutional support established. At least two fte staff are recommended.

17. Governance policy and management (§101)
    A participatory membership model under a steering group to include strong representation by the steering group of the M25 consortium. The governance should be flexible enough to accommodate the growth of participation and the variance in management required should the store become popular.

18. Shelving/storage (§102)
    Compact rolling shelving with a tote system of storage, supported by inventory software allowing code to location and content level, is recommended.

19. Security (§103)
    The store should be located on a site with 24 hour onsite supervision to its external perimeter as part of the site rental.

20. Insurance (§104)
    The store should be appropriately insured for a figure representing the costs of its establishment and equipment, including transport and accession costs but not for the replacement costs of the books

Summary of recommendations for further investigation

21. Although the creation of a store for a large number of institutions was felt to be too uncertain at present, the possibility of smaller groupings collaborating around the storage of particular subject areas would benefit from further investigation.

22. The University of London would benefit from the further investigation of the duplication of the retention of paper copies of theses, once the impact of electronic retention of research material has been assessed.

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The COOLPerStore report

The context of the project

1. Academic libraries in the UK are running out of space. Academics need to publish and the proliferation of journal titles enabling this publication to happen is creating a problem in terms of subscription costs and space for storage.

2. Libraries anticipated that a steady state of physical growth would be achieved in the next decade, by reliance on electronic versions of periodical literature, through consortium subscriptions and through collaborative collection development.

3. The shift towards more electronic use has led to debate concerning the future requirements of the users for material to be available at first hand in print format. Researchers can now be supplied with electronic versions from a remote point such as the British Library, or from an offsite store owned and operated by a library or one of its collaborative partners. This debate has led to a question mark in some minds over the future of first hand, or open shelf, access to print material by readers.

4. The introduction of student fees has resulted in a shift in perspective in the academic libraries in the UK from provision for research to provision of good learning environments for students. This has created additional space pressure for study spaces on libraries, many of which already consider themselves to be operationally full of books.

5. It has been assumed that academic resistance to the relegation of print from easily accessible locations to offsite storage would be significant and unmanageable. In the light of reported changing habits of use of print and electronic material, this assumption has become open to question.

6. Those libraries who have already withdrawn print periodicals to closed storage and who are thus able to monitor usage with some accuracy, report such a significant decline in use, that a serious question arose as to whether the continued storage of print material in prime open access space represented efficient value for money, even if an individual institution did not feel ready to dispose of the material altogether.

7. In the University of London, these questions have been addressed in the years preceding 1992 by the existence of the Depository Library in the grounds of the Royal Holloway College at Egham. Changes in the use of the Depository Library following the re-organisation of the University of London and the fact that the facility was effectively full at the end of 2004, necessitated a review of its future use in this context.

8. The opportunity for sharing resources both in terms of storage space and of shared access to printed periodical resources, has already been identified by other projects in the UK.

Aims of the project

9. The project aimed to investigate the feasibility of a collaboratively owned and operated London Periodical Store serving the University of London and the M25 consortium of academic libraries, taking into account the existence and future of the University Depository Library at Egham. The study explored the benefits and any disadvantages of the establishment of a collaborative storage facility and the likely costs of the proposal.

10. The project also set out to collect useful information to establish the relevance of general ideas and issues concerning collaborative storage.

Funding

11. The project was funded by the University of London Vice Chancellor's Development Fund and the M25 Consortium of Academic libraries in the ratio 3 :1.

Remit

12. The original remit of the project can be found at Appendix 1.

Methodology

13. The project officer conducted extensive desk research in the spring of 2005, reviewing the storage practice of the UK higher education community. Input was received from two recently completed storage feasibility studies : from the North West Academic Libraries consortium {NoWAL}and the Wales Higher Education Libraries Forum : Higher Education Libraries in Partnership project {WHELF/HELP} which proved invaluable in comparing the regional requirements outside the South East of England. Liaison was established with a parallel study *Optimising Storage and Access in Research Libraries*, being conducted on behalf of the Consortium of University Research Libraries and the British Library.

14. Exploration of the alternative storage solutions adopted by the HE and the commercial storage sector produced many variant approaches to print storage ranging from the open conventional shelf solution at Bristol to the proposed high tech automated library storage facility at Oxford and the new building to be added to the British Library at Boston Spa. The assistance of the National Preservation Office and the report of the October 2004 conference "*Where shall we put it*" is acknowledged in this respect. {Webster, ed.}

15. A useful survey of the American models of ownership and governance for collaborative library facilities was found in *Developing Print Repositories : Models for Shared Preservation and Access* by Bernard F. Reilly and Barbara DesRosiers of the Centre for Research Libraries {Reilly and DesRosiers}, from which much information concerning the regional depositories in North America was gleaned. This enabled the field of governance models to be narrowed to five alternatives for further investigation.

16. Interviews by phone and email concerning the establishment of collaborative stores in Australia (Steve O'Connor at CARM) and America (John Balow concerning ReCAP) were conducted to extract information concerning the foundation and early running of successful collaborative facilities. Some key pre-requisites for successful collaboration were identified for further exploration as a result of this.

17. Interest in collaborative storage was found to be high, even among storage facilities that have been established on a shared basis, to enable rival institutions to co-operate in primary storage costs. (See Library Management Vol 26 No 1-2 2005) Experience from those storage facilities that had begun life as a shared facility, participants retaining ownership, found that participants were interested in the active pursuit of closer collaboration in collection development. However, as for example with a three-university collaboration in Ontario Canada, {OUD, J. *Joint ownership issues in Off-Site Storage*, TUG} the original governance model and division of investment between the participants could militate against such closer collaboration if disproportionately weighted in favour of a larger institution whose actual deposit space declines when deduplication occurs.

18. A range of stores was visited (see Appendix 2 for the full list), extending from the relatively small, such as the University Library store at Bristol University, to the very large at the National Archive at Kew. Longer visits were made firstly to the pilot project Collaborative Academic Store (CASS) for Scotland housed at the National Library of Scotland's Causewayside building and secondly to the Centre Téchnique du Livre D'Énseignement in Bussy St Georges, Marne La Vallée, to examine the relationship between these collaborative academic stores and their respective National Libraries.

19. Stores outside the academic library sector were visited, including a commercial distribution warehouse containing materials other than books, and some advanced inventory equipment was surveyed in action courtesy of the music archive of a large recording company.

20. The University of London Depository Library at Egham was a key source of information concerning collaboration in action. Staff memories of the usage made of the Depository Library as a fully collaborative store were gleaned for their hands-on recollections. A senior retired librarian was interviewed to establish the history of the decline of the collaboration and what factors influenced the University to hand the library over to the Senate House Library rather than maintaining its independent status in the community of University Librarians.

21. A Delphi model investigation was established, based on six key library and information directors in the University of London and six from the M25. The oracles or "buddies" were available to the project officer for cross-checking information received against experience in other organisations, and for re-iteration of findings to establish synergy around key solutions as they emerged. The input received from these key stakeholders informed the interviews carried out with other UL and M25 library and information service directors and was triangulated by comparison with the experience of storage, collaborative agreements and deduplication of periodicals drawn from Europe and America.

22. The project questionnaire was created out of input derived from the buddies in the Delphi study and modelled on questionnaires created in advance of the CASS project, and from comparable questions asked by the NoWAL and WHELF/HELP projects, from the initial questions asked by the UL and M25 library and information service directors interviewed and from input from senior serials librarians in three key institutions, Kings College, LSE and RHUL. Additional questions were inserted at the request of the BL/CURL project.

23. The survey was mounted on Select Surveys software and opened on the 18 June and closed on the 31 August. 85 individuals accessed the survey to review the questions, 53 partial responses were received, although only 17 institutions completed the questionnaire in detail. The original questions and associated results can be found in full at Appendix 3.

24. Follow up interviews took place with the buddy group to expand and explain ambiguities in the responses received. These interviews revealed some discrepancies between views expressed in the questionnaire and views expressed in person. This arose because nearly all the buddies felt that parts of the questionnaire had asked questions on which their institution had yet to form a view. The consensus was that although the questions needed to be asked, they could not be answered yet.

25. Drawing on results from the preliminary work of the project, four possible solutions to the requirements noted by respondents so far were described and further input on these solutions was sought, with a view to creating costed models. Further discussion of these was encouraged by three briefings with the management groups responsible for storage took place, at Westminster, Kings College and LSE, as well as to the AGM of the M25. Experience of periodical usage and print relegation was sought, as well as input concerning current storage costs and space/resources relationship.

26. Estates managers from the BL, LSE and SOAS were interviewed and input received via the library from the estates management at other institutions. The estates management at Senate House responsible for the central University of London facilities were also interviewed concerning both the Depository Library building and the future of the remainder of the site at Egham.

The British Library

27. The first question asked by nearly all participants in the interviews and the survey concerned whether the costs of establishing and running a regional store for the M25 consortium could undercut the cost of acquiring electronic delivery from the British Library. For libraries that currently seek to de-duplicate their holdings against the service provided by the British Library, the rationale for payment towards storage for this material appeared weak.

28. However many senior librarians expressed concern about this way forward, believing that a role played by the British Library in any proposed storage consortium based on the M25 would be disproportionately large and might not necessarily meet the needs of a small institution with particularly specialist material. The adverse effects on effective collaboration of a disproportion in space requirements between the input of key players had been noted in the findings of studies of other collaborative projects. Senior librarians with experience of collaborating on future collection development advised that proposed storage consortia worked better when there were several domestic players of an equal size. This was especially true when the trust between the institutions was considered to be a key pre-requisite.

29. Concern was expressed that changes in the British Library's collecting policy towards a more British collection might in future leave collaborators who deduplicated against their holdings without significant resources in areas subsequently discontinued from the British Library collections.

30. Those responding to proposals that the BL lead a collaborative storage consortium were influenced by the reluctant response they had met when approaching the BL to house unwanted collections in the past. Those librarians who had liaised with the British Library concerning storage as part of collaborative collection management schemes felt the current disinclination of the British Library to take on this role and that the structure of the BL was not conducive to easy participation in such co-operative ventures.

31. Should these views of the British Library change in any significant way, or the British Library become more concerned with the storage of collaboratively held material, the survey respondents may have to be approached again for a revised opinion.

32. Consequently considerable difference of opinion was noted between library and information service directors who felt comfortable placing increasing reliance on the British Library, and those who felt that a regional repository would provide a more flexible and responsive service to meet the immediate needs of their readers for access to print copies.

The size of the proposed store :

33. This was the most problematic statistic to establish as the enquiry requesting information on the volume of material that any given institution wished to send to the store was met with the response that it depended on the cost of the storage.

34. Respondents were asked to compare the existing costs of the storage at Egham, (in the region of £2-£3 per book for five years' storage or 40-60p per book per annum), with the perceived costs of storing a book in Central London. It emerged that many respondents appeared not to think of the per book costs of storage of material. In many cases the figures were only known where they appeared on a budget line for external storage.

35. Many institutions with an existing budget line for external storage were in favour of maintaining this at a steady state. These institutions prefer to dispose of stock rather than acquire more space.

36. Reluctance was expressed by some library and information service directors, especially those with an integral library all on one site, to house print material offsite when this would enable other departments to acquire space in the library for teaching or research purposes. The erosion of any boundaries between library space and other institutional uses was felt to be a cultural difficulty.

37. Those institutions prepared to commit to immediate relegation of stock to the proposed store generated 2,620 linear metres between them coupled to 800 linear metres of growth per annum. These figures were drawn from institutions with relatively little overlap in holdings, eg LSE and Imperial College, although some overlap cannot be ruled out at this stage. Extensive investigation would be required to establish these figures more precisely.

38. Based on the responses of those institutions with an immediate storage need and a strong interest in collaborative storage, the figure of 10,000 linear metres of stock added over 5 years was reached as a working statistic on which to base other cost developments. This by no means represents all the print periodicals available should a working store be established.

39. This would create a store a quarter full on opening, and with a projected lifespan of 9 years before being full. Respondents to the questionnaire concerning the proposed lifespan of the store responded to the question as to whether a store for paper would be redundant in ten years' time in the proportion 13 Agree to 27 Disagree.

40. A 10,000 linear metre facility would require a floor area of 2,500 square metres, or 3,000 square metres with office space included using conventional shelving. (A rule of thumb for the floor surface area requirement in conventional shelving is 36 linear metres per 9 square metres. Assuming a conventional stack 2 metres high, containing 6 shelves each one metre wide by half a metre deep. Allowing for a one metre aisle between each two units, the footprint of each 6 metre stack is 1.5 square metres. A six metre stack of this kind of shelving can hold 25- 32 books per metre depending on the loading, leading to a capacity of 250,000 to 320,000 volumes held on 10,000 linear metres). The relative merits of conventional fixed shelving versus other storage designs are discussed elsewhere.

Separation of the requirements of the M25 consortium participants from those of the University of London.

41. The original remit of the study requested that a separate report be compiled based on the findings of the M25 consortium participants, to be compared with the requirements of the University of London. The only significant divergence in interests between these two overlapping groups concerned whether any proposed store should be sited at the University Depository Library at Egham and continue to be managed by Senate House Library, or whether the M25 consortium itself might accept a primary governing role in any proposed store. Consequently, both funders will receive the same report.

Note of the terms used in this report :

42. Store : a physical location offering shelf space for the storage of library materials. This physical space is also referred to in the literature as a library facility, a print repository, a book depository, a Depository Library or a Library Annexe.

43. *A Light Store* : one from which working copies of material may be withdrawn for consultation, copying or onward transmission. May contain one or more copies.

44. *A Dim Store* : one from which materials may only be accessed by special arrangement and which does not supply offsite onward transmission, only EDD by onsite copying. Usually only contains one copy but may contain two copies of some material.

45. *A Dark Store* : one in which the materials are intended as secure archival copies, not intended for use in the normal operation of the store. Usually only contains one copy.

46. *A Shared Store* : One in which space is rented by the participating organisation for private use only. Some limited operating costs are shared between participants, but participants remain solely responsible for the content and delivery of material from their section, usually only to their own readers.

47. *A Collaboratively Managed Store* : One in which space and all operating costs, including delivery costs are shared between participants, and all contents of the store are deliverable to all participating organisations, but ownership of the contents of the store remains with the depositing library.

48. *A Collaborative Deduplicated Store* : All operations, including choice of materials, acceptance into the store, and delivery to readers are fully collaboratively funded by all participants, regardless of deposit, and managed by the store. All materials are collaboratively held on trust for the participants by the store.

The Benefits of Collaborative Storage

Space

49. The participants have indicated that there may be 2,620 metres of material available to relegate to store immediately plus a growth rate of 800 m of shelving per annum. This represents 625 square metres of floor-space, with a growth rate of 200 square metres annually. At the prices quoted in the responses to the questionnaire currently being paid by Central London institutions, this represents approximately £15,625 for basic floor room with a growth of £4,800 p.a. @ £24 psqm pa, or between £66,875 and £84,375 when building services and maintenance costs are added with a growth of between £21,400 and £27,000 p.a. @£107-135 psqm p.a.

50. These figures represent what an institution in Central London would save if they removed low use periodical material from the shelves, either to dispose of it or to send it to less expensive storage space. This saving may well be duplicated across the HE institutions depending on the preparedness of institutions to relegate their own copies and rely on the provision from either the hypothetical store or from any other provider.

Processing costs (including cataloguing)

51. Establishing the extent of the overlap of material into the store when compared with holdings at the parent library is problematic. The study found that the potential staff cost savings involved in transferring responsibility for processing the material off the open shelf and into storage from the participating institution and to the store management would be in the region of £138,000 for the 9 institutions volunteering this information to the survey.

52. However it should be noted that this saving is not absolute, as staff involved in the processing of the material these institutions wished to send to store were also involved in other tasks. One institution noted that the transfer to their offsite store of some processing responsibilities had led to a duplication of staff. Another institution moved the store to an un-staffed site in order to combine processing functions at the parent institution, operating the store with minimum security and once a day visits from library staff.

Closer collaboration in collection development.

53. Concerns about collaborative collection development have centred around the continued ability of participants to house material which their parent institutions may come to regard as superfluous to their requirements. Relegation of such material to a store enables a successor institution within the same consortium to adopt responsibility for its retention with minimum of disruption to the operation of the delivery of material from the collection. This retention of material within the geographical area served by the store and its continued availability is a strong argument for support of a hypothetical store by regional agencies.

54. Existing collaborative schemes for subject development or document delivery reported the benefit of having a named representative or contact at each participating library and recommended this be a feature of the store.

Freedom to walk away from subscriptions

55. Where an institution feels that a subscription is being maintained only for the purposes of completion of access to a back run, collaboration in access to a print copy of this run in a store creates a freedom of movement with respect to an ongoing subscription. Interviews with serials librarians indicated that staff and users were beginning to feel they had lost some independence when electronic provision replaces print provision of a title. One academic at a suburban university responded that he would like the university to guarantee a 30 year continued subscription to the electronic title for the purposes of access to the back run before he would acknowledge the appropriateness of the disposal of print copies.

An organised disposal regime.

56. In spite of various professional guidelines and the object lessons learned from some high profile cases of disposals that attract public opprobrium, library and information service directors continue to feel that their ability to retain or dispose of material according to their own strategic or operational agenda should be maintained.

57. On the other hand, staff were reported to be uncomfortable disposing of material that represented such a high initial investment and that was being replaced by electronic versions which contain uncertainties concerning delivery. Librarians of institutions with robust disposal policies concerning pre-1980 material were questioning the wisdom of disposing of material printed 1980-2000, even though this was all available online to them and the space needs were urgent.

58. The benefit of a collaborative store would be to take this painful decision out of the hands of people who are professionally motivated to retain and preserve print material. Disposal can be carried out in as environmentally friendly a manner as possible with the aid of a commercial paper compactor, or alternatively, the store management can be tasked with liaison with interested aid agencies and HE institutions in less wealthy countries to ensure an appropriate transfer of material.

Relief in times of turmoil.

59. The use made by the John Rylands Library of the records management facility operated by Deepstore {Watson, ed. NPO conference} provides an object lesson in using the additional space available during building work to ensure smooth service delivery, rather than accommodating material onsite in an inaccessible manner.

Local flexible delivery

60. Those institutions not yet able to provide electronic desktop delivery to their users might benefit from this service being developed collaboratively.

Advice on developing the infrastructure for such local flexible deliveries is part of the additional services, over and above simple storage and handling of the physical objects housed in the store, that a collaborative storage centre would be able to provide.

Cleaning and conservation

61. A number of collaborative stores have identified services performed by the store, for example cleaning stock on arrival and noting the conservation requirements of the material, as being of additional benefit to the participants in the store over and above the simple provision of storage. It should be noted that the initial statement of intent governing the store should make clear whether the preservation of fragile material is an intention of the operation of the store. It was assumed by nearly all library and information service directors contemplating sending material to the store that this would not include fragile material, but that the periodicals would be workhorse copies in the first instance.

62. Quantifying these services in terms of cost benefit both to the owners of the material in a shared store environment, and to the consortium as a whole in the collaborative store, is problematic. A rule of thumb figure for basic cleaning at 15p per book, assuming unskilled labour, would give a total cleaning bill of approx. £4,500 pa for a 10 km store. Storage in a relatively clean air environment out of Central London will reduce the need for cleaning.

63. Careful selection of the material accepted into a collaboratively managed or fully collaborative store should ensure that expert conservation requirements are kept to a minimum. Input received from the National Preservation Office comparing the condition of material in London with that held in other parts of the country indicates that a combination of heavy use and pollution has led to most London based collections being in a significantly poorer condition.

64. One estimate, based on generic library materials derived from the experience of the CARM deduplication against 9 university libraries, where 30% overlap in material between each institution and the store's holdings were established, would create a figure of nearly a third of value of the identified conservation work required by a participating institution on its periodical collections. However as the CARM deduplication included monographs, the extrapolation to periodicals remains uncertain. Furthermore, the low use to which the print periodicals were now put led to a disinclination to spend money on their upkeep, so savings in this area arising from collaborative storage remain hypothetical.

65. Another method would be to take the per book cost of a large scale conservation and refurbishment survey, conservatively estimated at 20p per book, and apply this to the operating costs of the store's accessions operation. Again these savings would not appear on the bottom line of the participating institution as the budget allocation to conservation would be spent elsewhere in the library, but in principle all participating institutions who were prepared to spend conservation money on their periodical collections would benefit.

Creation of electronic resources.

66. One clear benefit would be the identification of gaps in the electronic holdings of the parent libraries. The experience of a HE science-engineering team {Bracke and Martin, Arizona UL} that verified the electronic version subscribed to before relegating the print copy, established a proportion of 15:12 concerning material that was accurately reproduced in the electronic version to material that had more than 4 issues missing online or other local conditions prevented relegation of the print copy. Experience in this area by other libraries prepared to relegate in a robust manner might be pooled for the benefit of the LIS community and for the use of the e-publishers.

67. The creation of feedback on what material is most frequently requested from the store, would create knowledge of use in collaboration with publishers and copyright holders about the prioritisation of the conversion to electronic format of the most requested material.

68. The storage consortium should be prepared to negotiate a licence concerning the copying of collaboratively held material, if unnecessary duplication of scanning is to be avoided. For example the practice of allowing the retention of electronic copy in a restricted database to allow a limited number of further copies might be established from the outset.

Disadvantages of collaborative storage

Loss of service

69. The store will only be economically effective if the participant institutions de-duplicate against its holdings. The result that periodical material will no longer be in familiar space on the open shelves of the home institution library, was found to be a source of concern rising to "completely unacceptable" to the majority of the academics interviewed in the course of this study. The perceived "loss of service" involved in the requirement for users to "order in advance" was felt to be a significant factor in reducing support among librarians for the idea of a store.

Requirement for the intensive management of change

70. All the senior academic managers, as opposed to librarians, interviewed were prepared to take a robust approach towards academic perceptions concerning the relegation of print and to make a strong case for the availability of additional resources for electronic access. Experience was sought of managing the change in perception by academics when presented with the real potential of electronic resources. Drawing on the experience of one history department of a UL college, the concern expressed by librarians about the loss of service is found not to be insurmountable, given a pro-active stance by peer group academics. It was beyond the remit of this study to establish the extent to which academics themselves are prepared to campaign for this change but a follow up survey might prove useful in this area.

Perception that the academic community is not yet ready for this step

71. Six working academics were interviewed for their thinking concerning the relegation of print material. It was noted that the reliance on the robust nature of the service delivery promised from the store depended entirely on the previous experience of the academics concerned about service delivery in their institution. Additional input concerning academic attitudes in the humanities was derived from published literature in this area (particularly from the British Academy).

72. All academics interviewed expressed the view that those colleges who find themselves unable or unwilling to commit to the provision of extensive resources in electronic format, however strong their retrospective print holdings, risk losing high level academics to colleges prepared to commit to electronic provision in their subject area.
    The ability to search more flexibly, to print out working copies and to annotate their own copies were all felt to be significant in this respect.

73. Academics who had recently shifted from one college to another within the University of London said that it was the strength of academic support in the library service rather than straightforward access to print or electronic materials that affected their preference for working in one college or another.

Length of time required for the project to get going

74. This was perceived as a serious short-term disadvantage. Four library and information service directors indicated that unless the store were to become

a reality in the next 12-18 months, it was unlikely that they would be able to hold onto the print periodicals they had already relegated. The lead time for a deduplication selection process was felt to be problematic when librarians simply wanted to get on with implementing their own policies concerning the material. Differing methods of deduplication have their own time related problems. See Appendix 4 for a review of the benefits and disadvantages of three separate deduplication projects examined.

Loss of institutional independence

75. One anticipated disadvantage was not particularly strongly marked in the responses received. The view that the size of a collection reflected the quality of the institution appears to have died away in light of the depth of collections that relatively new institutions can now provide electronically. Only one library and information service director indicated that making high quality collections available to rival institutions would be a problem to his management. When this was followed up with the management, the advantages of collaborative access to the material of other institutions were felt to outweigh this consideration. However other institutional objections to participation were invoked at academic managerial level, concerning guarantees of robust service delivery rather than ownership.

Copyright responsibilities and tracking for internal charging

76. The lack of clarity as to whether collaborative ownership constitutes sufficient ownership for the licenses of the participating library to cover the stock in the collaborative store would have to be addressed. The role and responsibilities of the store concerning copyright verification and internal charging for supply would have to be clearly established at the outset.

Duplication of national effort

77. A strong representation was received from the parallel study OSARL that a regional store serving only the M25 and the University of London would represent an unnecessary duplication in view of the provision available from the existing copyright libraries and the ease with which academics could reach the library provision of Oxford and Cambridge as well as other London institutions. Librarians with strong experience of collaborative collection development and document service supply reported that the economies of scale of service contributing to this centralised approach to national provision did not always guarantee quality of service at the receiving end. A recurrent theme was the feeling that the loss of local and specific control over service outcomes outweighed potential national saving. This argument requires any hypothetical regional store to ensure service agreements outperform the standards set by the existing services from the British Library and the publishers themselves.

Strategic prerequisites for a collaborative store

Trust

78. Preliminary trust building exercises at all levels of prospective participation need to be established early in the process. This should be carried out not only at library and information director level, but also at senior librarian, senior academic and academic manager level.
79. Examples of this exercise drawn from collaboration in action are
    a. a series of meetings between practitioners conducted in a spirit of openness (CASS)
    b. circulation of open discussion documents (U. California)
    c. adoption of the scheme by a successful existing collaboration (CAVAL) where existing levels of trust are high
    d. adoption of the scheme by participants with strong mutual self interest (PASCAL, Amherst 5 colleges) based on geographical or subject driven realities.

Champions

80. Key stakeholders or established champions should also be identified early. Successful collaborative stores gain significant input from key players prepared to make a robust defence against criticisms generated from either political/strategic institutional rivalry, or from resistance to change. The role of key champions in the establishment of the UL Depository Library was marked.

Statement of intent

81. Prospective participants need to create and secure agreement for a clear statement of intent limiting the purposes of the store, for example to the retention of a deduplicated collaborative print collection, and openly discussing the lifespan of the project (perpetuity or 10 years etc). Decisions concerning the structure and location of the store and its strategic and operational goals will flow from this statement of intent. Lack of clarity as to the primary purpose of the store (collaborative collection management and development and retention in perpetuity) and its dilution by way of attempts to simply provide storage space for participants on an ad hoc basis, will weaken the operation of the store. The strength of the operation of the Centre Téchnique du Livre d'Énseignement derives in part from the clarity of the law governing its establishment.

Business model

82. A robust business model should be devised for the operation of the store, which will allow it to stand alone financially speaking within a finite length of time. Even where the store is "nested" within the structures of an existing library or libraries, as with CASS and the UL Depository Library, the case for its continued existence has to be made perennially and based on clear statistical need to all participants, rather than simply the service to the parent library within which it is nested.

Secure external funding

83. The prospective participants should confirm significant and secure external start up funding commitments at an early stage, which will ensure that these are not subject to later political interference from rival establishments.

Successful collaborations based on strong regional pride and/or state funding (Paris, Scotland, Minnesota, Ohio, California) appear to attract funding streams based on supporting a regional agenda and partnerships across the sectors in one geo-political area. This is in contrast to the far fewer number of successful collaborations where the funding stream is at second hand, via participating member institutions, who have to request funding from their own sources, sometimes at the expense of projects closer to home, (CRL, ReCAP). That said, subject and user group alliances and needs may be more closely and better defined and met in a store serving a membership base rather than a region.

Income stream from clearly defined established customer base

84. Conversely participants should establish the extent of the organisations expected to benefit from the existence of the store and create a funding stream to tap into this market. For example, although only those donating material to the store will be charged for the space, those organisations de-duplicating against the existence of the store and benefiting at second hand should be charged. Mechanisms for achieving this are in an early stage of development by the pilot project CASS and are most successfully administered when the store forms part of an existing consortium whose members can be charged for the service provided, as was the experience of the CARM store operated by CAVAL.

Operational requirements for the store:

(figures in [brackets] refer to questionnaire results found at Appendix 3)

85. Ownership [17]

Perceived uncertainty concerning the future structure of the University of London and the disinterest of two major UL stakeholders in a hypothetical store at this stage appeared to weaken the case for UL leadership. Concerns about the long-term viability of either a new commercial enterprise, or of a new organisation membership model, also led to a lack of confidence. Those indicating interest in a BL led model felt that this would have increased security but responses in this area varied according to individual knowledge of the BL's current policies. Those closely concerned with the management of the M25 expressed concern that the existing structure of this largely voluntary organisation might not be sufficiently robust to carry the weight of managing a store at present, although this was not ruled out for the future. The record of effective collaboration in the M25 was perceived by all respondents to be a strong building block for collaboration.

86. Guarantees for retention in perpetuity [15.5, 16.1-7]
Institutions were reluctant to contemplate the transfer of material unless sufficient guarantees were in place concerning its future retention. The storage consortium would be required to negotiate to establish successor collaborations prepared to take responsibility for the safe relocation of material. It appears at present that more reliance is placed on a subject-by-subject approach to these guarantees for retention. Participants indicated that this should be part of the statement of intent for the store and was preferred to the difficulty of finding a single successor institution to adopt the whole collection. Input from those libraries already collaborating on a subject basis indicated that housing material of significance to a subject based consortium on either a permanent or a temporary basis would be a significantly useful role for the store. Participants in such subject based collaborations would have greater confidence in storing material in the store were consultation of subject based interested parties to be guaranteed.

87. Extent of de-duplication [16.6, 23, 24, 25]
It appears that institutions holding unique material are unwilling to offer sole copies to the store, but in the event that such material is found to be in the store's collection, it was felt this should be retained in the store permanently and not circulated or offered elsewhere.
Concern was felt that duplicate copies not available at the BL Boston Spa should be offered to the BL rather than two copies retained in London but opinion was divided on this point as to whether the store should act as a national archive.
Very few respondents felt more than 2 copies should be retained. There appeared to be a correlation between the envisaged use of the material and the number of copies it was felt appropriate to retain. Experience from the CASS project concerning the strains placed on the store by high usage of material stored by one participant is a useful indicator of the necessity of resolving this issue in the statement of intent for the store.

88. Ensuring easy online catalogue access to the collection [35,36]
The existence and experience of the InforM25 listing, together with the Union List of Serials (ULS) catalogue of University of London and University of Westminster holdings was felt to be a strong argument in favour of a London regional store with significant M25 consortium input. This infrastructure, establishment of which apparently daunted collaboration in other regions, was already in place and operational. It was noted that support for those participants with less robust IT infrastructure would be required. LIS participants preferred the z39.50 portal arrangement whereby their own library catalogues provided the relevant information, rather than expecting their users to be aware of and to navigate to an alternative source of information. User participants felt seamless catalogues indicating terms of availability via their home institution were more useful than access via an alternative website.

89. Storage standards for the store

The LIS directors consulted unanimously agreed that storage to BS 5454 standards was unnecessary for the periodical material they would be prepared to send to a collaboratively deduplicated periodical store at this stage. (Only those LIS directors primarily interested in collaborating in the costs of establishing a BS 5454 store on a shared store basis to save operating costs for the storage of Special Collections were interested in this level of conservation storage.) Consequently no further investigation concerning this standard was made concerning a de-duplicated periodical store. Nevertheless all participants agreed that minimum standards of security and cleanliness should be imposed on the store, and incorporated into the service level agreements to be established by the participants. The guidelines of the Bibliothèque Nationale for a regional library to function as a resource library for local information could form a useful starting point here {SANZ 1 and 3}. The negotiated initial statement of intent of the store should take into account any expectation for the store to meet BS 5454 standards by the participants, for example only if the store is ever intended to serve as a sole copy archive in a dark store.

90. Conservation service provision

Clarity concerning the extent to which the store should provide conservation facilities to the participant institutions may not be possible until the statement of intent has been agreed, concerning the archival role of the store. Consequently this feature was included only in the interview stage of the survey and did not appear in the questionnaire.

Although repair and cleaning of the stock has been identified as a potential benefit of participation in the store, it was felt that the deduplication process would choose the copies with the longest life expectancy. Furthermore accession policy should ensure that no material was deposited in the store in an unsatisfactory condition. National overprovision of commercial conservation facilities was also felt to be an inhibitor to this feature being an economical addition to the store. LIS directors intending to create conservation facilities in their home library to maintain more direct quality control of the work being carried out, felt that a facility in a store which participants felt bound to use might find itself in the worst of both worlds, not sufficiently close to home for close control of the work, but not so flexible as the use of specialist commercial services would be.

91. Access [18,19,20,37]

Academics consulted distinguished between physically browsing recently published material which they considered important but wished to do in their home library, and browsing the older material that the store would be housing, which they preferred to do electronically. Where users contemplated travelling to a store they indicated that, once on the road, they would prefer to seek it out in another library where other investigations could be carried out at the same time. Storage facilities that offer either open shelf access, or reading room access report very low levels of use of this material. Consequently it appears that reader accommodation need not be catered for in the initial capital costs, but that requests for this usage be monitored with a view to later adaptation if appropriate.

92. Delivery [28,29,30]

There was no consensus among those consulted concerning the viability of reliance on electronic delivery alone to provide an adequate delivery mechanism for material from the store.

The costs of a van service were felt to be problematic, were the store to attempt to serve too wide a geographical range of institutions. Consultation with the operations management of the UL van service indicated that to serve the UL colleges effectively with a once a day delivery, 2 vans and four drivers would be required. It was also noted that expertise in navigation to appropriate delivery points on many different campuses would require some development ahead of implementation. However delivery to the outlying M25 institutions would almost certainly extend the costs and viability of a van service almost to breaking point. Annual recurrent operating costs and charges should take these differing levels of service into account where outlying institutions opted out of or were denied delivery by van.

93. Electronic transmission [28, 31, 32, 33, 34]

Ample sufficient funds for the IT infrastructure for robust electronic delivery have to be included in the business model, not only for the store, but for all participants. The experience of stores attempting to maximise the volume of delivery by electronic means (BL and UCL) indicates that under-funding this area is impractical, and results in returned material. Returns duplicate both staff time and wear on the material in rescanning. Monitoring of the discussion list serving interlibrary loan systems in the US indicated that software with a high update cycle created additional problems in a network with high interdependency of the software between institutions with varying budgets. The BL solved this by keeping to a fully functioning early version of the software, while the UCL store fell back on van delivery. It appears to be best practice in this area to operate more than one electronic delivery system and further investigation is required to align these into a seamless service, if electronic only delivery from the store is contemplated. In the experience of this study, stores relying on only one delivery software system and not having a van service to back it up could not, at present meet the delivery service (24 hours to academic and research postgraduate desktops) requested by the potential participant group. It is also recommended that negotiation with publishers be undertaken to permit the retention of scanned copies, to ensure that the scanning process is not unnecessarily duplicated.

There was no consensus that replacement of library access to print copies for external users by electronic delivery to either the library of origin or the user's desktop, with the copyright being handled by the store, was required. Most LIS directors interviewed were interested in exploring broader direct desktop delivery for their internal user groups but preferred delivery to the library for onward transmission in order to monitor usage and cost recovery.

94. Arrangement on the shelf [37]

As it appears unlikely that there will be any demand for direct access to the shelves for material by readers, no consideration should be given to the arrangement of the material in coherent sets. It is recommended that sufficient funding be included in the start up costs for inventory and access by bar code. Storage in totes on compact, or high fixed shelving, was found to be the most cost effective in the experience of those consulted (CTLes and OULS). Good practice for the most efficient use of space would see abandoned any

collocation of material arriving annually in the store. Journal parts, or even articles, can be located to a tote by barcode on accession, such as that used at the Iron Mountain store at Belvedere or by the National Archive at DeepStore. This would reduce dependency on key staff with knowledge of the whereabouts of the material and ensure effective access to large amounts of material.

95. Cleaning and preservation of the material [37,38]
If no open shelf access is to be permitted and storage in totes is preferred, then no ongoing cleaning costs are required in the operation for the first five years. Initial cleaning before accession should be the responsibility of the donor institution. Notes concerning cleanliness of the copies reviewed should be included in the bibliographic survey of material prior to admission to the store and costed into the de-duplication survey.

96. Optimum location of the store [38]
A significant number of respondents felt that the store should not be more than 30 miles or 1 hour by public transport from Central London. Follow up investigation of this established that much of this input was based on instinct rather than experience and assumed onsite reader access. No support was found for the suggestion that the van run should be able to accommodate readers travelling from central locations to the store and back (as operated by NLS and used by CASS) so this suggestion was omitted from the questionnaire. However in view of the uncertainty as to whether delivery should be electronic only and the geographical range of the potential participants, further investigation on this point would be required, particularly once impact of the disruption caused by the relocation for the Olympic village has settled. Input from estate agents concerning the availability of easily accessible space within 30 miles of London at a viable cost psqm for the project indicated that this would not represent significant savings on storage. Location further away, with electronic only delivery would be more cost effective. Investigation of the possibility of taking space adjacent to the UCL store at Wickford or to the UL Store at Egham and sharing van service infrastructure would also affect this decision.

97. Subject coverage [4,6,20]
A quick fix to the initial problem experienced by the London HE library community would be to establish the store as a “paper JSTOR”. The store would commence by collecting JSTOR titles in good condition, supplemented by pre 1930 holdings surplus to the requirements of the participant institutions that are not available electronically.
Fuller responses to the subject coverage recommended by the LIS directors can be found in questionnaire section [22]. A common theme in interviews with LIS directors was that Science Technology and Medicine should be the primary concern of the store as the resistance to the withdrawal of open shelf print in these areas would be weakest and the provision of electronic versions was richest.

However a conflicting view was expressed by two humanities researchers with a serious interest in electronic provision in that the relative paucity of e resources in their field created an interest in a store that would create e versions for delivery and thereby improve their utility over the paper copy in the institute’s library.

98. Collaborative development [4,6]
Building on the experience of the California University Library facilities, there was some support for the possibility that the store hold one print copy of all new electronic titles on behalf of the subscription consortia serving the UL and the members of the M25 consortium.

99. Retention policy [24, 25, 26, 27]
Approaches to a retention policy varied so widely that little consensus could be found among those surveyed. Depending on whether the store was viewed as an archival backup or a lending facility, the number of copies and the length of retention policies varied between one copy only to two or three copies to support the regional agenda. The retention policy should be fixed only after a clear statement of purpose for the store has been established.

100. Staffing the store
Outside the project of establishing and equipping the store, onward staffing levels should include at least a store manager, a cataloguer/bibliographical surveyor and 4 fte delivery and support staff in the initial phase. These levels assume that the participating libraries will assume responsibility for bibliographic recording of the transfer of material and the delivery and support staff are flexible enough to complete some inventory control operations.

101. Governance, policy, and management of the store [17]
The most popular model for the governance of the store remained a participatory membership model under a steering group to include strong representation by the steering group of the M25 consortium.
It is the received wisdom from mature developed collaborative stores such as CARM (Australia) that the governance model in the initial stages should be strongly representative of the participating institutions, but that as the user base widens and the interdependence of the original participants is weakened by the inclusion of a larger number of institutions, the governance model should be flexible enough to reflect these changes.

102. Shelving/storage issues
Subject to the content of the initial statement of intent for the store, compact rolling shelving should be adopted as the most cost effective, space efficient model for the size of store contemplated. Should this not prove possible in view of the heavy demand on initial funding streams, fixed conventional shelving could be considered, at a height amenable to safe manual fetching. High stack and automated fetching do not appear to be appropriate for the size of store contemplated at present.
Expert opinion in this area remains divided as to the degree of automation required for such shelving systems. New build library storage projects consulted apparently prefer fully automated systems. However those operating large scale storage in the records management and archive sectors expressed a preference for manually accessible shelving, indicating that mechanical failure would so seriously compromise the operation of the facility that any savings in space and convenience would be offset by loss of service delivery.
Storage in appropriately sized tote boxes permitting inventory control to the quarter metre is the most appropriate for low use material in the store as it combines cleanliness with an additional level of inventory control. The size of

tote should be restricted to no greater than 30 cm by 50 cm as this represents a comfortable weight for manual handling.

103.security of the store

The store should be located on a site with 24 hour onsite supervision to its external perimeter as part of the site rental. Internal 24 hour supervision will be required only if H & S regulations require it following decisions concerning shelving and atmospheric control.

Electronic tagging of books in the store is not felt to be appropriate in view of the variant security systems in operation among the potential participating libraries.

Fire suppression systems specific to archive quality storage are not considered necessary for the operation of the store. Early suppression fast response sprinklers activated individually by heat detection are considered to be the least harmful fire response system for non-unique material, although additional water pressure is required for these to operate effectively. Gas suppressant systems are not considered appropriate for the storage of non-unique material in a light or dim store where staff H&S issues are a concern.

104.Insurance

The store should be appropriately insured for a figure representing the costs of its establishment and equipment, including transport and accession costs. Replacement insurance for the books was not felt to be required but, if financially viable, this insurance should include some cost of distributing the collection in the event of the winding up of the store.

<u>An outline of costs for the hypothetical store,</u>

A Business model for initial five-year operation

Deduplication programme	£120,000

(This figure is based on extrapolating the cost of a deduplication programme carried out at CTLes 2004-2005, 1 full time employee covering 12 institutions and the 114 subject areas included in the Index Medicus, including costs born by the participating institutions surveying their collections in house).

Set up COOLPerStor business incl. software (Includes professional fees and consultancies)	£130,000
Acquisition of space (new build or rental @£3 psqm for 25 years £375,000 plus adaptation costs, air conditioning, floor levelling)	£1,000,000
Fitting out of space including hardware, scanner and compact shelving	£650,000
Removal to space	£100,000
Running costs first 5 years @£200,000 pa	£1,000,000
[Staffing – 2 fte £50,000	
Van, staff and depreciation £100,000	
Operating and service costs £50,000]	
Total	***£3,000,000***

M 25 Membership model with no external funding

If all 52 current M25 libraries participated : £60,000 purchase of membership required i.e. £12,000 per annum per institution.

Figures derived from the survey suggest only 12 institutions, mixed between UL and M25, are interested in this facility at present requiring £250,000 from each or £50,000 per annum.

It appears ***<u>unlikely</u>*** that this sum will be forthcoming from the estimated space saving figures available. Those responding to the survey anticipated the space would be retained in house for use by IT and teaching so that no visible additional funds would be created in the home institution's budget.

Space rental model

Working at 1 linear metre holding 33 books, a £3 per book cost would require 1 million books or approx 30,000 metres of shelving, (ie a facility the size of the whole of Egham DL) to raise the sum required to initiate the project.

The UL Depository Library at Egham current per book rate, based on £10 per metre per annum, or £50 for the 5 year duration envisaged, and 25 books per metre, is £2 per book for UL, £3 per book for non UL participants over 5 years.

The willingness of participants to pay the present charges at the UL Depository Library indicates that library and information service directors are willing to pay the costs of running a storage facility. However, it should be noted that the Egham facility is predominantly used for special collections by the participants and less for long runs of periodicals.

If the project creates 10,000 linear metres of conventional storage by the construction of an additional pod at Egham, the cost over the five years would be £11 per book ie just over £2 per book per annum and the pod would be paid for. Delivery would be free for participants for this time span.

If the store were to be established separately from the UL Depository, annual running costs of the store, estimated at £200,000 pa for a minimum operation, create a per metre cost of £20 per annum for this 10,000 metres. The separately managed operation would duplicate staffing and delivery structures already in place.

Increasing the space available, by using compact shelving at Egham or by renting additional space elsewhere, can create economies of scale. For example 20,000 metres for the same set up and running costs would reduce the p.a. book cost. However, the findings of this study indicate that filling this size of store in a timescale to make it financially viable would be problematic.

Participants to the store would have to decide whether the costs should be met by an upfront payment levied on all members of the consortium, irrespective of their participation in or usage of the store.

Relatively high delivery costs of material to users not participating in the funding of the store might recoup these costs for unique material not available electronically but not for a paper archive supporting electronic periodical material.

Basic storage space rented collaboratively

Using the following rule of thumb derived from the experience of conventional storage at Bristol and Glasgow Universities, 36 linear metres of conventional shelving occupies an equivalent of 9 square metres.
The 20,000 linear metres needed to recreate a facility the size of an additional pod at Egham with compact storage, and thus bring the per book cost down to £3 per book currently paid by non UL Egham users, will require 5,000 square metres of floor space for conventional shelving, or 2,500 square metres of compact shelving.
Undeveloped storage space just inside the Circular roads (Clapham) is costed at £3 per square metre per annum for a 25 year lease, giving a minimum figure of £375,000 initial cost. Further investigation of the space rental costs elsewhere in the South East would be required prior to implementation. This site is given as an example because it permits relatively convenient road or transport access to the majority of the M25 consortium.

Profitability of a hypothetical store

Working to a hypothetical store able to store 20,000 linear metres of books at £2 per book per annum over 5 years, the project would generate income of £200,000 per annum, i.e. cover the running costs outlined above.

This is compared with the potential income of the existing UL Depository Library at £2 per book per five years for 750,000 books, of £300,000 per annum. The profitability of the UL Depository Library is seriously reduced by the non-income generating space occupied by the Central University for paper theses.

Possible ways forward

Egham revived :
Creation of additional space at the University Depository Library.

Those participants in the survey who had material at Egham under the Private Store arrangements were happy with the service provided and interested in expanding the space available to them there. It appears there is a case to be made for the construction of a fourth pod at the Depository Library.

Based on information supplied by the Estates Management Team at Senate House, derived from a feasibility study for the construction of a light industrial warehouse on the site, carried out in 2002, the estimated construction costs for a unit of similar capacity to the existing pods would be £1,000,000.

A preliminary enquiry addressed to the Runnymede Council Planning office, with hypothetical sketches for a fourth pod adjacent to the existing pods, met with opposition from the planning department. (A copy of the letter from Runnymede can be found at p.37) This rejection was based not only on the grounds that the proposal had not been included in long term planning applications, but that additional use of the entry by an expanded van service would be problematic for local residents. Development of the facility at Egham for an expanded user group would probably have to be restricted to electronic delivery only on these grounds. Were this option to be preferred, further investigation of the planning permissions required for the site would have to be made.

Without an additional building, sufficient space at the Depository Library would only be available for such additional use were the University to resolve the issues surrounding the duplication of theses held for both the University and the individual colleges. The future of the arrangements for the retention of paper copies of theses would benefit from a wider ranging review once the impact of the electronic retention of research material in e repositories has been established. The use of the paper theses in the UL is expected to decline and the retention of this material in highly serviced space may be open to question.

Advantages :
The experience of the Depository Library management team and the existing facilities at Egham would be available to the store consortium.
Provision of a scanned delivery service from Egham to the participant institutions would benefit the existing occupants of the Depository Library, subject to suitable agreements between the ULRLS service and the new store.

Disadvantages :
Were the new pod to be built and serviced to the standards expected by participants in the scheme, the existing tenants of space in the UL Depository Library might consider it to be worth transferring material into the new space. This might be assumed to lead to difficulties for the existing store management, though it is widely believed by the library community in London that space at Egham would be attractive to a wide range of potential external customers.

Concerns
Some concern was expressed by the non UL M25 respondents that use of the Egham store would not create an independent service. Service level agreements would remain at the current level operated by the University of London, and the past model of absorption of collaboratively owned material into the ownership of the University of London's library services would pertain again in the event of the failure of the store. (See below for a fuller discussion of the UL Depository Library as a separate case study). These concerns would all need to be addressed in the original statement of intent and in any agreement between the operators of the new store on behalf of the M25 in negotiation with the University of London.

A shed in the hinterland
Creation of a new build facility, or rental of space from an existing records management facility.

This functional model, based on the use of commercial storage by such institutions as the National Archive, could be applied to a collection governed by a consortium of libraries, without the need to manage a facility. The operational model is also applicable to a high-density storage facility housed in a shed outside the London area rented by the consortium operating the store.

Those librarians who have already withdrawn periodical material (mostly JSTOR titles) from prime open shelf access into dark storage, described by one as a "virtual skip", nevertheless reported some inhibitions about disposing of the material altogether, in view of its irreplaceable nature. Attempts by the survey to establish how long they thought this state of affairs could continue [see Q. 16, Appendix 3] proved inconclusive.

Those institutions finding themselves in this position were most interested in an immediate and relatively cheap solution to the storage of their periodicals while they established either a climate of trust in the British Library as the ultimate back up, or an effective collaboration in the retention of materials with other institutions, or any provision arising from the outcome of this feasibility study.

In view of the uncertainty as to the funding of a new build site for collaborative storage, use of existing commercial storage facilities while these debates were undertaken was investigated. It would not be commercially viable to store books in conventional open shelf methods in these facilities, but "tote" or closed box storage would enable existing bar code technology to record the location and, if necessary, collocate a run of a title even if any given periodical sequence had been deposited in segments, for example following the annual rolling fire wall providing online access through JSTOR.

Storage of periodical runs in conventional shelving is costed as follows :
Assuming 25 vols to a metre and assuming that a hypothetical shed in the hinterland is going to cost in the region of £200,000 pa to run, in order to house in the region of 10,000 linear metres of conventional shelving or 20,000 metres of compact shelving, this gives a storage cost per book of 40-80p per year

A "box" of books can be stored in conventional records storage at 20p per box per month. Assuming a box can contain 18 bound volumes (standard archival storage box at 30 cm by 40 cm). A "metre" of records management space could hold 2 such boxes. Hence 2 boxes, 36 books at 40p per month, £4.80 per annum, gives a figure of 13p per bound volume per year (though binding would not be assumed).

Advantages :
This model is relatively flexible and responsive to future changes in thinking about print retention as there is no investment in infrastructure, only in administration of the collection. It would be very fast to implement.

Scanned delivery of documentation (by email attachment) from commercial stores is already in place, though relatively expensive.

This model does have some lessons for library staff in re-thinking the approaches to the future relegation of print under a rolling firewall. An annual batch of periodical parts do not need to be married on the shelf to the rest of their runs but can be inventoried for recall in the same manner as documents sent by central registry.

Disadvantages :
The condition in which the material is stored and the continued duration of the existence of this archive as a short-term change management solution would need to be monitored, as the 20p per box per month rate is not held in good quality storage.

Service level guarantees would be only indirectly controllable by the consortium as these would be in the hands of those operating the commercial store. Robust review of the operation of the store and frequent consultation between the commercial store operatives and the governance of the consortium collection would need to be established.

The commercial storage solution is really only appropriate for *very low use* material as the delivery charges do not compare with the secure electronic delivery charges from the British Library. Eg £15.25 for next day delivery or £40 for immediate delivery to Central London from Kent and £2 per sheet for electronic delivery.

Concerns

The cost of constructing and operating a store in a shed from scratch does not appear to be justified by the interest expressed to this study. As the establishment of any collaborative scheme, however housed, requires considerable input of time and interest by the participants, supervision of any mass storage facility, whether owned and operated by the participant institutions, or owned and operated by an independent contractor, may be beyond the levels of interest and resources available for the storage of periodicals in the South East.

A Nested store in an existing service

Some financial modelling for a "nested" store renting space and services from an established library store and document delivery service.

An examination of the relationship between CASS and the National Library of Scotland, between the University Depository Library and the Senate House Library Service (now ULRLS), and between CTLes and the Bibliothèque Nationale together with the review of storage and collaborative facilities contained in Reilly and Des Rosiers *Developing Print Repositories* revealed a successful model for a relationship of a store within an existing infrastructure, even when the existing institution did not wish to take responsibility for housing and administering the books belonging to the collaboration that had formed the collection.

The relationship between CASS the UL DL at Egham and their "parent" libraries are, to some extent historical or political accidents, arising from local conditions (National pride, the devolution of the University of London) which may not be appropriate elsewhere. These institutions are more closely entwined than CTLes where the store co-habits in a shared building and uses some cleaning and conservation facilities on the site, but is otherwise a separate, and separately funded, institution.

However a framework of expectations and consequent financial agreements to create such a relationship artificially from scratch might be a useful tool for thinking in this area. For the purpose of this model, it is helpful to assume that the store is being created by a consortium or on a membership model whereby no charge per transaction is levied.

Role of the parent library

To provide storage in conditions of atmospheric and physical security to be agreed between the two parties for a duration of not less than 5 years.

The pilot model in CASS pays a per metre per annum rental cost for the shelves on the understanding that office space and management support for the CASS worker are included in this sum.

The University of London Depository Library charges non UL participants £15 per metre per annum (60p per book @ 25 books per metre)

Based on the business model of this survey, a per book per annum cost of 60p per book per annum (25 books per metre, £15 per metre pa storage charge) might set a starting point for basic standard open shelf storage.

To provide robust, tried and tested inter library loan infrastructure by electronic delivery of material from the store to participant institutions.

As it would be anticipated that the start up charges and up front membership charge would pay for this infrastructure on a single payment basis, the "parent" library would have to calculate the cost provision of this service into the rental agreement.

CASS accommodates a sole worker within the ILL department of the National Library of Scotland (NLS) site in which the store is located. Books are delivered to the NLS reading room and the ILL department of the NLS draws on the collection to augment its own holdings.

Advantages

The advantage to the parent library for the provision of this infrastructure are additional access to the print collection and some staff assistance in interlibrary loan functions, in addition to income generation for dead space provided ahead of time for its own needs.

The advantages to the consortium providing the material lie in avoiding duplication of storage and delivery infrastructure and in social and managerial support for the staff of the store from a wider team, albeit employed separately.

Disadvantages

The disadvantages for the parent library lie in terms of staff time for management and supervision of additional readers and staff.

The disadvantages for the consortium providing the material lie in the potential lack of clarity concerning ownership and the loss of flexibility in operation and service standards when these are too closely tied to those of the parent library.

This is particularly problematic where no initial trust exists between the parent library and the consortium. Time to create trust building exercises can be expensive and, in some cases, unworkable.

The difficulty in establishing an appropriate charge for this arrangement between parent library and consortium. If one assumes at least one full time member of staff and some depreciation on scanners, this cost might stand at £35,000 pa. for the volume of material presently contemplated by COOLPerStor. Alternatively staff support analogous to HE project funding for project hosts might be appropriate.

The University of London Depository Library, Egham, Surrey

A case study in collaborative storage

Outline history

The Depository Library was built in three stages between 1960 and 1975 to

- Ease pressure of library space in Central London
- Provide accommodation for little used material at the lowest possible cost
- Reduce duplication of holdings of material within the University

The site was provided by Royal Holloway College to the University of London on a 999 year lease. It was intended to accommodate an eight-stage building, each stage capable of holding 250,000 volumes on 10,000 metres of conventional shelving. The three stages constructed accommodate 30,000 linear metres of conventional shelving representing storage for 750,000 volumes.

Governance

The Depository Library was created by a strong central university with significant input from well placed advocates for its existence on the University Libraries Co-ordinating Committee. Changes in the nature of the University of London and in the governance exercised by the LRCC led to the operation of the Depository Library being transferred to Senate House Library, now part of ULRLS, who manage the staff, content and delivery. The building and services are maintained by the UL Estates Management. Ownership of the Co-op store (then ca. 310K vols) was formally transferred to Senate House Library in 1994, and the gradual reduction and management of the material has been in process ever since. It is intended that the bulk of the remaining material (now ca. 110K vols) will be disposed of in 2005, as was reported to and approved by the ULC meeting in May 2005.

Content

The Depository Library was designed to hold three categories of material :

1. Material belonging to the Central University, including theses and records
2. Co-operative Store: material deposited by UL colleges for which ownership was handed over to the store. All colleges could access this material equally, although delivery was managed through Senate House Library. This included both monographs and periodicals. The material arrived with its card catalogue records which were retained at the store, and later provided on microfilm to the UL colleges. The depositing library indicated in their home catalogue records that the material was now at Store, but in practice very few of these records were transferred to online catalogues, leading to decline in use.
3. UL Private Store: Material housed at the Depository Library retained in the ownership of the individual colleges of the University, mostly books and journals but also archives and special collections. No central record of this material was made and access to it is governed by the owning college only, although delivery to the owning college is arranged by the store staff via the UL van systems.

After 1995, the requirement to fill the store to ensure income led to a fourth category of material :

4. Commercial Private Store Non-UL institutions rent private storage space at a more commercial rate. The inventory and access to this material remains with the institution. Deposit and collection is arranged by the institution in liaison with the Depository Librarian. Visiting readers are able to use this material at the store by prior appointment.

Operation of the co-operative store

The creation and demise of the Co-operative collection in the Depository Library provide an object lesson in the operation of this kind of storage, from which the following lessons may be learned.

1. It operated as a "nested" store within the functions of the then Senate House Library (now ULRLS) in the same way that CASS "nests" in the National Library of Scotland. Its existence, strengths and weaknesses were closely tied to the role of the Central University and its institutional culture. This relationship created confusion as to whether the buildings and material remained the collective property of all the colleges of the Central University, supervised by the appropriate committees of the University, or belonged to Senate House Library itself.
   Clarity of ownership between any consortium forming the collection and the library within which it is housed should be clearly established from the outset.

2. Some confusion was noted by librarians sending material to the store as to the difference between Co-operative store and Private store, in that both provided access to all participants and in effect, prior to 1994, the question of ownership of the material did not arise. Input from librarians managing severe space problems in the 1980s suggested that the decision to send material to the Co-operative store was not clearly associated with a decision to relinquish ownership of the material. The offer to the colleges to reclaim material from the Co-operative store in the early 1990s was problematic as many colleges could not retrieve all the material they would have liked, nor could they justify the Private Store charges for this material to be transferred in to their ownership but remain in the store. Some librarians felt that the Co-operative Store should not have been diluted in this way, but continued to operate as a fully collaborative deduplicated store, but the requirement for the store to become self financing reduced the space available to grow the Co-operative Store and develop it as a common resource. **A robust collaborative model should allow for disposal and/or dissolution of the collection in a mutually agreed manner.**

3. Before 1994, the differentials in pricing structure between the Private Store option available to the University of London and the Co-operative Store space did not create a sufficient incentive to favour deposit on the Co-operative part of the Library. The financial benefits deriving from depositing material in the fully collaborative collection were therefore less obvious.
   The business model of the store should create a clear margin of benefit in depositing material in the collaborative collection. The income derived

from private storage available from the store should not squeeze out the availability of space for the collaborative collection.

4. The lack of a catalogue, or access to the content of the store on the OPACs of the participant institutions did not create active usage of the material. **Participant institutions should ensure that the content of the collaborative collection should be as accessible as possible directly from their home library.**

5. The potential for the provision of additional benefits in participation in a collaborative store, (e.g. as reading room, work station, photocopy, conservation and preservation workshop, environmentally monitored or controlled space), have not been fulfilled in the case of the UL Depository Library. The exigencies of a requirement to operate on as stringent a budget as possible has led to some lack of modernisation.
   The management of a collaborative store should be encouraged to review service level agreements and revise costs incrementally to ensure that the services provided by the store maintain the quality required by the participating libraries.

6. The service offered by the Depository Library in terms of access to the collections and delivery to Central London, while acceptable to the majority of its users, has not kept pace with the expectations of some potential participants in a collaborative collection based on the University of London. Colleges preferring to manage their own collections to ensure service delivery weakened the case for collaborative storage based on the Depository Library.
   Service level agreements between participants should be clearly negotiated, based on infrastructure that is fit for the purpose to which it is being put, and charged accordingly. Should a two-tier service delivery be appropriate to accommodate differing expectations and resources of multiple participants, this should be openly agreed by all participants, and the methods for re-negotiating the service delivery standards built into the management structures of the store from the outset.

Further development of the Depository Library at Egham

1. The COOLPerStor project employed an architect, Geoffrey Ward of Greenwich University, to draft a hypothetical addition to the Depository Library at Egham and submit this as a proposal to Runnymede Council Planning Office.
2. The hypothetical addition was to add a further pod to the north side of the existing three pods. Estimates of the additional use of the road from Spring Rise and the loss of mature trees in the area were attached to this.
3. The following letter was received by the project officer on the 14th October 2005. Although hypothetical, the response indicates the problems that would need to be overcome if any further development of the Depository Library were to be contemplated.

Dear Mr Ward
I refer to your letter and plans received on 12th September 2005 and our recent telephone conversations.
The campus of RHUL is classified as a Major Developed Site (MDS) in the Green Belt. Policy GB10 of the Borough's adopted local plan (April 2001) requires any limited infilling or redevelopment to be in accordance with a comprehensive scheme. A series of comprehensive masterplans for the University have been produced since 1984. Most recently in June 2002 the latest comprehensive plan i.e. '10 Year Development Plan' was permitted under the combined permissions RU.97/1140 and R.U.99/1106. This permission identified a schedule of works much of which has already commenced or is subject to reserved matters applications.

The Book Depository has not been identified for any extensions or redevelopment under this current 10 Year Development Plan. Therefore in my opinion your proposed extension to this building is likely to be resisted by the Planning Authority as this would be contrary to Policy GB 10.

Moreover what you propose would be outside the existing envelope of developed area and as such is likely to have a greater impact on the Green Belt than existing development. Any intensification in the use of this depository could also give rise to highway problems that could conflict with Policy GB 10 and may cause objection from local residents given the access off Spring Rise.

I am also concerned over the potential loss of woodland area that provides an important buffer between the residential properties of Spring Rise but also as the site lies within an Area of Landscape Importance whereby under Policy NE8 special care is taken to ensure that development is in keeping with surrounding landscape and safeguards existing tree cover.

In summary I would advise against this application as in my opinion this is likely to receive an officer recommendation for refusal. The advice given is at officer level only and without prejudice to any future decision taken by the Planning Authority.

Jonathan Partington : Team Leader (North)

Appendix 1 The original remit

A feasibility study on a collaborative journals store for the University of London : a proposal for the Vice-Chancellor's Development Fund and for the M25 Consortium of Academic Libraries.

1. The rationale behind the proposal

1. Most ULC libraries have a shortage of space, and given the cost of accommodation in the capital this issue is critical for London libraries.
2. Some of the libraries already have offsite stores, and the opportunity to save costs by sharing a de-duplicated journals collection would be beneficial.
3. The ULL store at Egham may offer some scope for further collaborative storage. The experience of Egham may also allow some valuable lessons to be learned. The original store was in fact a collaborative one until changes in the organisation of the University of London gradually changed the way in which Egham worked. This is an opportunity to look again at the feasibility of a collaborative store for the University of London building on past experiences.
4. Some ULC libraries have long back runs of print journals which are not heavily used. Moving them to a collaborative store and de-duplicating them would make for maximum space efficiency and would ease the space problem for the libraries without significant loss of service to researchers.
5. Similar space problems exist in libraries within the wider M25 Consortium of Academic Libraries, and with the addition of some funding from the Consortium the study will extend its remit to cover further HE libraries within the London area.

2: The Proposal

6. A feasibility study is proposed which will investigate the potential for a successful collaborative journals store for University of London libraries. The study will ascertain the benefits and any disadvantages of the idea and establish likely costs of such an initiative.
7. The study will take into account a range of organisational, technical and political issues and will consult widely with ULC librarians and other stakeholders in the University of London. It will also look into the possibility of extending the store to include journals from other libraries within the wider M25 Consortium of Academic Libraries. The study should also consider the role of the British Library Document Supply Centre as a complimentary or alternative provider of articles from old print journals in support of researchers.
8. The study will concentrate on journals only at this stage. However, some of the ideas and issues emerging from the study may well have relevance for other types of material (for example theses). Any such intelligence or information gathered during the study will be documented in case of future opportunities to look at collaborative storage of other materials.

3. Issues to be explored

9. Issues requiring investigation will include :
    (a) establishing ownership of the de-duplicated collection
    (b) guaranteeing storage of the collaborative collection in perpetuity
    (c) extent of de-duplication (eg should two copies be kept?)
    (d) ensuring easy online catalogue access to the collection
    (e) preservation and conservation requirements
    (f) physical access to the store by researchers
    (g) document delivery from the store, both physical and electronic
    (h) arrangement of collections on the shelves
    (i) cleaning
    (j) transport
    (k) optimum location of the store
    (l) subject coverage and policy
    (m) staffing the store
    (n) governance, policy, and management of the store
    (o) shelving/storage issues
    (p) security of the store
    (q) insurance

4. Methodology

10. Desk research will be needed on existing stores, including collaborative ones, in the UK and elsewhere. Among the prominent collaborative stores to be investigated are University of London store at Egham, the Centre for Research Libraries (US), Minnesota Library Access Centre (MLAC), Ohio Depository Program, Northeastern Ohio Co-operative, Research Collections and Preservation Consortium (US), CARM (Australia), Research Resources Australia, and Centre Technique du Livre de l'Enseignement Superieur (France). A number of individual stores in the UK could also be studied, notably among the Russell Group universities and including UCL.
11. Early attention will be paid to Egham, covering its past and present organisation, and lessons learned from the Egham experience are expected to be useful and informative for the feasibility study as a whole.
12. The study will also liaise very closely with a significant Scottish initiative called CASS: A Collaborative Academic Library Store for Scotland. In 2002 the Carnegie Trust for the Universities of Scotland and the Scottish Confederation of University and Research Libraries (SCURL) commissioned a study to 'determine the best funding and management model for a collaborative storage and delivery service for valuable but low-use materials held in Scottish University libraries'. The report was published in June 2002 (at http://scurl.ac.uk/projects/cass/documents/documents.html), and since then a pilot collaborative store project was agreed between the Scottish universities and the National Library of Scotland, and got under way in early 2004.
13. Visits to appropriate stores for face-to-face discussions with librarians and other appropriate stakeholders (including building managers and researchers). This will include some travel abroad.

14. Consultation via questionnaires and interviews with all ULC librarians to determine, among other things, level of support for the concept, likely volume of materials to be deposited, extent of cataloguing problems/issues associated with the relevant materials, possible obstacles (including ownership and cost issues). (This is likely to be an iterative process, with secondary follow ups).
15. Consultation via questionnaires and interviews with a sample of relevant stakeholders in the University of London, including V-Cs, estates directors, finance directors and a cross-section of researchers, (again an iterative process).
16. Consultation via questionnaires with the non-University of London M25 Consortium library directors, and interviews with a sample of them, (again an iterative process).
17. Consultation with the British Library to ascertain the level of support that they provide to researchers from the relevant old print journals.
18. Meetings as appropriate with relevant groups to report progress and seek further views. This will include meetings with the M25 Consortium personnel outside the University of London.
19. Calculating the potential volume of materials likely to go into the store, the storage capacity needed to accommodate likely deposits and to include space for the long-term future deposit of further volumes.
20. Identifying an initial specification of space and building requirements for a successful store.
21. Investigating likely locations of the store, including Egham, and researching costs of premises in various parts of the capital and nearby. The concept of a distributed store across more than one site may feature in the investigation.
22. Estimating costs of establishing a collaborative store covering a wide range of issues, many of which have been outlined above.
23. Estimates of volume of materials and costs will be presented in two forms : 1. For the University of London libraries only, and 2. Inclusive of the remaining institutions in the M25 Consortium within the same collaborative store.

5. Deliverable

24. A report which will outline the benefits and disadvantages of a collaborative journals store, describe the operational, technical and financial implications of the concept, summarize the views of the stakeholders approached, and propose costed options for the way forward. The report will essentially cover the University of London libraries, with a supplementary report, covering the remaining M25 libraries. It is expected that the issues will be similar for both groups, but the supplementary report will highlight any significant differences for the non-University of London group of libraries. Both the main report and the supplementary report will be submitted to the ULC, the M25 Consortium, and the V-C. It is anticipated that the V-C will wish the report to be discussed at an appropriate Heads of Colleges meeting, and the M25 Consortium may wish to submit it to a meeting of LHEC.

Appendix 2

Stores visited and persons consulted by the study

Kathy Adamson, Librarian, Royal Academy of Music, UL
Paul Ayris, Director of Library Services, UCL
Toby Bainton, SCONUL
John Balow Collection Management Librarian, New York Public Library, ReCap
Paul Bastick, Building Services Consulting Engineers
Raymond Bérard, Directeur, CTLES
Virginia Berridge, Professor of History, London School of Hygiene and Tropical Medicine, UL
Nick Bevan Head of Library Services, Brunel University
Jackie Bishop, EMI archives
Marianne Stowell Bracke, Science/Engineering Librarian, Arizona University
Emma Bull, Library Services Manager, Royal Holloway College, UL
Martin Burchett, Head of Building Services, Estates Division, UL
Paul Burchett, Managing Director, Telepen SB Electronic Systems Ltd.
Bonnie Good Buzzell, Head, Circulation Department, Brown University
W.J. Carley, NoWAL
Mireille Chapuzy CTLES
Michael Clarke, Director, London Libraries Development Agency
Toby Clark, St Mary's College, Twickenham
Guy Cobolet, Directeur, Biliothèque interuniversitaire de Médecine
Helen Cocker, User Services Manager, The Library, LSE
Goretti Considine, Deputy Business Librarian, City Business Library
Martyn Cowsill, Harrow Green
Mary Davies, Deputy Director, Customer Services, Kings College Library, UL
J. Andrew Dawson, Manager, Wickford Store, UCL
John De Lucy, Estates and Facilities, The British Library
Douglas Dodds, Head of Central Services, Word and Image Dept. National Art Library, Victoria and Albert Museum
Neil Dumbleton, CASS officer
Helen Durndell, Associate Director of Library Services, University of Glasgow
Helen Edwards, Head of Library, London Business School, UL
Malcolm Emmett, Support Services Manager, Brunel University
Suzanne Enright, Director of ISLS University of Westminster
Neil Entwistle Queen Mary College UL
Dr Brent Elliott, Librarian and Archivist, Lindley Library, Royal Horticultural Society
Maggie Fieldhouse, senior librarian, University of Sussex
John Fielden, CHEMS Consulting, OSARL study for BL/CURL
John Flanagan, Head of Library and Archives, Royal Botanic Gardens, Kew
Peter Fox, University Librarian, Cambridge University Library
Andy Ganff, Regeneration and Economy Manager, ALM, London
Sarah Gerrard, Librarian and Director of Information Services, Royal Holloway College, UL
Henri Griffault; Plan de conservation partagée des périodiques médicaux en Île-de-France
Cliff Gumm, London Projects Manager, Iron Mountain Records Management

Margaret Haines, Director of Information Services and Systems, Kings College, UL
Robert Hall, Chair, M25 consortium Head of Library Services University of Surrey
Helen Hayes, Vice Principle for Knowledge Management and Librarian to the U.of Edinburgh
Steve Holmes, Deepstore
Gary Horrocks, Research and Learning Liaison Manager, Kings College Library
Gordon Hunt, SCURL, National Library of Scotland
Barry Jenkins, Librarian, Institute of Cancer Research, UL
Clare Jenkins, Director of Library Services, Imperial College, UL
Mike Kendall, LENDS, Northwick Park Hospital (NHS regional repository)
Elizabeth Kensler, WHELF HELP project officer
Toby Kirtley, Estate Projects Officer, OULS, Oxford
Chris Kudlicki, Estates Director Operations, LSE
Steven Lang, Savils
Nigel Lees, Manager Library and Archival Services, LIC, Royal Society of Chemistry
Tim Leunig, Lecturer in Economic History, LSE
Sarah Lizska, Education Support Officer, UL Institute in Paris
Caroline Lloyd, Head of Library Services, London School of Hygiene and Tropical Medicine, UL
Marina Logan-Bruce, Library Services Manager, St George's Hospital Medical School. UL
J.P. (Max) McCarthy Pouladuff Library Depository Boole University, Cork.
Tim McCluske MLAC
Pat McKenzie, National Library of Scotland
Paul McLaughlin ULRLS,UL
Lorna Maguire, Head of Information and Knowledge Management, The Open University
Professor Nico Mann, Chair ULC, Dean and Pro-Vice Chancellor SAS, UL
William Marsterson, Pro-Vice Chancellor and Head of Learning Resources and University
Librarian, University of Middlesex
Bob Mills, Group Manager, Libraries in the London Borough of Harrow
Lucy Mitchell, Librarian, UL Institute in Paris
Ann E Murphy, Head of Learning Services, Greenwich University
Brian Murphy Director of Information Services, Queen Mary College, UL
Bernard Naylor, CPSH Panel, CILIP, former secretary ULCC
James G. Neal, Vice President for Information Services, Columbia NY.
Pat Nelson, PASCAL
Hans Nijhuis, Cultures Keep, Netherlands
Mary Nixon, Librarian, Goldsmiths College Library, UL
Anselm Nye, Darran Whatley Assistant Librarian, Queen Mary Library, UL
Margot O'Donnell, Collection Services Manager, Glasgow University Library
Philip Payne, Librarian, Birkbeck College UL
David Pearson, Director of the UL RLS, UL
Christopher Pedley, Librarian, Heythrop College Library,UL
Janet Percival, Senior Sub-Librarian and Group Manager, Planning and Resources, UCL
Carole Pickaver, Planning and Projects Manager, Kent University
Stephen Pickles, Library Manager, Institute of Education, UL
Anne Poulson, Librarian, School of Oriental and African Studies, UL

Richard Poulson, Building Services Manager, School of Oriental and African Studies, UL
Dr Sue Price, Courtauld Librarian & Head of Academic Information Services
Courtauld Institute UL
Gordon Read, Print Collections Manager, LSE Library
Allan Schofield, Head of Group, The Higher Education Consultancy Group
Dr Jane Secker, Learning Technology Librarian, LSE
Chris Senior, White Rose Project, Brotherton Library, University of Leeds
Kate Sloss, Information Services Manager, LSE
Richard Taylerson, Deputy Estates Director, LSE
Jez Tibbetts, Harrow Green
Vic Verrall Operations Systems Development manager, The British Library
Maureen Wade, Deputy Librarian, LSE, UL
Michelle Wake, Library Manager, London School of Pharmacy, UL
Alison Walker, National Preservation Office
Harry Wanless, Property Support Manager, The British Library
Geoff Ward, architect
Helen Ward, senior librarian, Kingston University
Tony West, Depository Librarian, UL
Jan Wilkinson, Head of Higher Education, The British Library
Christine Wise, Head of Special Collections, Senate House Library, ULRLS, UL
Rupert J.M. Wood, LIS director Reading University
Peter Wynne, NoWAL

External Stores visited

Bristol University Store
The British Library, Boston Spa
Le Centre technique du livre de l'enseignement supérieur, Bussy St Georges
Collaborative Academic Store for Scotland (CASS)
EMI Archive, London
Glasgow University Library Annexe
Iron Mountain Records Management Facility Belvedere
The National Archive, Kew
University College London Store, Wickford, Essex
University of London Depository Library, Egham

Appendix 3 Questionnaire results

85 individuals opened and reviewed the questionnaire, resulting in 53 partial responses. Of these completed responses in full were received from 9 University of London institutions and 8 M25 institutions. The respondents identified themselves as follows :

THE SCALE OF THE MATERIAL AVAILABLE

1. ***Do you have a storage problem now for low use print periodical material?***
   Yes 32 No 7 No answer 14

2. ***Will you have a problem in the next ten years for the storage of low use print periodical material?***
   Yes 30 No 7 No answer 16

3. ***Quantified as :***

Number of titles	4 answers : 20, 400, 450, 2000
Number of volumes	3 answers : 6,000; 12,000; 1,000
Metres of shelving	4 answers : 600, 7,00, 1200, 120,
Growth rates per annum	5 answers : 12, 25, 300, 400, 30-50

(converted to linear metres where given)

4. ***Categories of material available to send to a proposed store :***

4.1 Available to a collaborative deduplicated store
(the original UL Depository Library Co-operative store model)

Specialist pre 1930 material not available electronically	16
Specialist pre 1950 material not available electronically	16
Specialist pre 1970 material not available electronically	15
Specialist pre 1990 material not available electronically	10
Periodicals covered by JStor	20
Periodicals covered by Science Direct Archive	13
Periodicals covered by other e-journal provision	12
Other periodical material in subject areas no longer relevant to this institution	19

4.2 Available to a collaboratively managed store
(ie material managed by collaboratively agreed service levels and made available to all, but retained in ownership by participants).

Specialist pre 1930 material not available electronically	10
Specialist pre 1950 material not available electronically	10
Specialist pre 1970 material not available electronically	14
Specialist pre 1990 material not available electronically	12
Periodicals covered by JStor	9
Periodicals covered by Science Direct Archive	8
Periodicals covered by other e-journal provision	12
Other periodical material in subject areas no longer relevant to this institution	8

4.3Available to a shared store

(i.e. the store building rents out space to individual institutions – the current London Depository Library model).

Specialist pre 1930 material not available electronically	13
Specialist pre 1950 material not available electronically	12
Specialist pre 1970 material not available electronically	12
Specialist pre 1990 material not available electronically	9
Periodicals covered by Jstor	9
Periodicals covered by Science Direct Archive	6
Periodicals covered by other e-journal provision	7
Other periodical material in subject areas no longer relevant to this institution	9

5. ***What are the approximate library costs for the administration of the material you would be prepared to send to a store?*** (estimating staff time for processing, re-shelving and disposal).

   9 answers received (converted to per annum rates)
   £13,000; £23,500; £3,000; £10,000 per 1000 linear metres; £4,000; £8,800; £40,000; £25,000; £11,000.

6. ***General expression of the kind of material the institution might contemplate sending to store in the next 10 years :***

   Pre 1970 science titles and, if a store is collaboratively deduplicated, about 200 JSTOR volumers p.a. (according to the moving wall). Plus a range of titles from other subjects usually pre-1970 and low use.

   JSTOR (570m) Science Direct IoP RSC Annual reviews
   other journals post 1996 now available electronically

We have approximately 32 Arts, 31 Education, 26 Science titles with issues dating to before 1970 (though very few of these go back before 1960, and many are incomplete).

Normal annual transfers of paper copies of material held electronically (currently 1070 titles) over 10 years = 2600 linear metres. Other transfers to be made as and when space becomes pressing, never < 500 metres/year

J Stor Arts and Sciences II and III up to 124 metres

Any material held in JSTOR and EBSCO which is not specialist Asian and African materials
Remaining "geography" titles (no longer taught at SOAS)

24 JSTOR social science titles; 119 lm
Potentially other titles covered by e-journal provision but identifying these would require a review involving significant staff time.

JSTOR Arts & Science I & II (700 metre shelving)
Science direct;

FINANCE

(This section of the questionnaire was also available to estates directors and senior academic managers) :

7. What is the total rental value of the space occupied by the library of your institution?

18 answers received : 15 replied this information was not available to them.

Rental in current use £108,000
Commercial rental value probably c£270,000

£400 per sq metre per annum (£5040000);

A very rough estimate from our Estates Division (certainly not to RICS valuation standards or guidelines) is approximately £800,000 per annum.

8. ***What is the total maintenance cost of the space occupied by the library of your institution?*** (converted to per square metre)

16 answers received : 12 replied this information was not available to them

£24 psqm (external building only) (Central London)

£25 psqm (external building only) (Central London).

£135 psqm (including services) (Central London)

£107 psqm (including services) (Central London)

9. How much is the library being charged by your parent institution for the space occupied and how does this compare with local commercial rates ?

19 answers received : 4 replied this information was not available
13 replied there was no internal cross charging within the institution

We are charged £206K for our proportion of [the central institution] by central administration. This does not mean that we would save money if we moved the Library elsewhere. It is the space we pay for at our remote store that is causing us concern. I have little control over the space we presently occupy.

£182,000 equivalent at local commercial rate probably c. £400,000

10. How big, in square metres of net useable space is the library of your institution?

15 answers received : 3 replied this information not available

3,000 sq m (£108,000 rental) Central London
1,200 sq m (no internal charge) Central London
2,500 sq m (no internal charge) (Suburban West London)
12,600 sq m (no internal charge) Central London
8,056 sq m (20 + miles from Central London)
1,600 sq m (Suburban London).
17,900 sq m (Central London) £135 psqm incl. services
10,500 sq m (15 miles from Central London)
8,000 sq m (Central London)
7,632 sq m (Central London)
16,500 sq m (Central London) £107 psqm inc. services
12,800 sq m (20 + miles from Central London)

11. Does your institution currently plan to acquire expansion space for your library?

Yes 15 No 34

12. Can you supply estimated capital development costs for this project and indicate how much additional space this will provide for printed material?

11 answers received : 7 replied the figures were not yet available

> The total project cost is over £15 million but that part of the building occupied by printed material is approx 250m2 [180 store plus rare books segment]. Mainly compactorised. (Suburban west London).
>
> We are not acquiring expansion space, but are planning to spend c£4m over next few years to make more effective use of existing space to house more study and IT spaces and printed materials.

I am being encouraged to investigate and cost options for off site store, which I am trying to 'manage' because of possibilities of regional or national solutions that I believe would be more cost effective

5% additional space

13. ***Do you currently house printed material offsite in a distant store?***
If so can you provide per annum costs for this facility, including heating lighting repairs, rates rental costs and other service charges?

22 answers received : 16 do not use an offsite store

Approx £8K per year. This decreases as we throw material out but I am very concerned that we may be throwing out material that should be kept for the national …archive. So far the BL has not shown much interest.

£14,525.50 plus VAT for 1,529m

We own the freehold and so cannot quantify costs. The facility is approx 30 miles [away]

Most of the material held offsite consists of archives

Annual operational costs (including staff salaries and transportation costs) in the region of £170.6k/year. Capital cost £2.462 million including fit-out.

14. If your institution does not anticipate having a storage problem in the next ten years, would your institution consider renting out space to house a COOLPerStor collection in an existing or proposed store?
11 answers received : No : 10 Possibly 1 Yes 0

INSTITUTIONAL AGENDA AND CHANGE MANAGEMENT

15 A survey of current institutional views:

15.1 Senior managers of our institution have already raised the case for collaborative storage on a regional basis

Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly disagree
2	4	8	0	14	12

15.2 Our institution is interested in a collaborative storage model that would enable us to reduce the number of campus or departmental library sites

Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly disagree
3	13	6	1	11	6

15.3 Provided our readers can be guaranteed access to a copy of a periodical title we are not worried that it may not be our own copy

Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly disagree
5	15	10	1	3	6

15.4 We consider the de-duplication of low use periodical holdings in the London Higher Education community is simply not practical in the current competitive climate

Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly disagree
3	2	5	5	16	9

15.5 We cannot see the purpose of a periodical store for printed material continuing for much more than 10 years

Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly disagree
1	3	9	7	9	11

15.6 Our printed library collections are under severe pressure from the space requirements of additional study space, IT facilities and teaching space within the library

Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly disagree
10	14	6	2	5	3

15.7 Our institution has invested for many years in developing specialist journal collections which we are unwilling to let out of our control but *would share*

Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly disagree
3	10	8	6	10	3

15.8 Our institution has invested for many years in developing specialist journal collections which we are *unwilling to share*

Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly disagree
1	3	5	3	17	11

15.9 We anticipate resistance from our academic community over the relegation of printed periodicals

Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly disagree
6	6	17	5	2	4

15.10 This resistance can be managed by the library

Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly disagree
5	9	17	4	1	4

15.11 We anticipate resistance from our academic community over the relegation of printed periodicals that it will be beyond the library to manage

Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly disagree
6	2	14	8	5	5

16 Monitoring changing attitudes to electronic access to periodical material

16.1 We are happy to weed old and less used stock and have discarded runs of print journals we are confident about long term electronic access.

Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly disagree
8	10	6	5	5	6

16.2 Electronic access to periodical material is not yet sufficiently secure to completely abandon access to the printed version at present.

Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly disagree
12	11	9	3	2	3

16.3 We do not anticipate electronic access to be sufficiently secure to completely abandon access to the printed versions for at least 5 years.

Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly disagree
11	7	11	6	2	3

16.4 We do not anticipate electronic access to be sufficiently secure to completely abandon access to the printed versions for at least 10 years.

Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly disagree
6	7	8	8	6	5

16.5 We cannot foresee a time when electronic access to periodical material will ever be sufficiently secure to completely abandon access to the printed version.

Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly disagree
2	6	5	6	17	4

16.6 Our institution would be content to let the British Library hold the last printed copy/two printed copies of a periodical title in the UK.

Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly disagree
3	8	10	5	6	8

16.7 If we knew that we had guaranteed access to a print copy from a regional or national store on suitable terms we would deduplicate our own print holdings accordingly.

Strongly agree	Agree	Slightly agree	Slightly disagree	Disagree	Strongly disagree
5	11	12	3	3	6

17 Ownership model survey outcome	1A collab	1B shared	2A collab	2B shared	3A collab	3Bshared	4Acollab	4Bshared	5Acollab	5Bshared
	New business		**Membership model**		**UL leadership**		**M25 leadership**		**BL leadership**	
Institution										
Goldsmiths UL	1	1	3	2	3	3	3	3	2	1
Heythrop UL	2	3	2	3	2	3	2	3	2	3
Imperial UL	2	2	1	2	1	1	1	1	4	2
Kings UL	2	2	3	3	4	4	4	4	3	3
LSE UL	2	1	2	2	1	1	1	1	2	2
LSHTM UL	1	1	1	3	2	4	2	4	2	2
QMC UL	2	2	3	2	3	2	3	2	2	2
SOAS UL	3	4	3	4	4	4	4	4	1	1
UCL UL	1	2	1	2	1	1	3	2	3	1
NAL V & A (M25)	2	3	2	3	2	3	3	3	3	1
Reading (M25)	2	2	2	2	1	1	4	3	2	2
RS Chemistry (M25)	2	2	2	2	2	3	2	3	2	2
Kew (M25)	1	2	2	2	2	3	2	3	1	1
Kingston (M25)	2	2	1	2	2	2	2	2	4	4
Surrey (M25)	2	1	2	1	1	1	1	1	2	1
Sussex (M25)	2	2	3	2	2	2	4	4	3	2
St Mary's (M25)	2	2	3	3	4	3	4	3	2	2

COLLECTION MANAGEMENT AND ACCESS POLICIES

18 What volume of use is made of your printed collections by non UL/M25 HE researchers including number of visitors and any charges made?

20 answers : 5 replied the information was not available

Essentially our Library is publicly accessible. Non members need to make an appointment and bring letter of introduction if possible

One or two users per week (this is an educated guess, there is not seprate record of the use of periodicals). No charge is made for one off visits. Regular reference access £45 per year.

Relatively little external use. Our libraries are publicly accessible

Printed collections publicly accessible without charge. There are 823 registered external users of the Library but numbers of non-registered users are unknown

Approx 3000 researchers a year - no charge other than photocopying. Bona fide researchers rather than publicly accessible

Current situation complicated because of … shared building/collections/services - though this may not continue indefinitely

Our periodicals are consulted by a wide range of users, 50% of whom are not students. We don't charge for access to anything in the library's collections

Very little. Our library is publicly accessible and we are participating in an Inspire Surrey scheme

We allow free access to members of the public. Use of this is low - maybe 1 or 2 external visitors per day.

In practice our library is publicly accessible - we don't turn visitors away. We don't have separate statistics for the use of periodical collections.

Very modest use. There are no charges. Very little use of pre-1970 material held in closed access. We cannot assess use of post-1970 material which is publicly available. Main Library is publicly accessible outside core term time hours

Anyone can use us as a national research library - c. 15,000 visitors per year. No record is kept specifically of periodical use as the collections are all on the open shelves.

Low use. Our library is publicly accessible

We do not monitor the use of collections by our 1200 external users, nor do we have statistics on where they come from.

Library is accessible to all researchers, HE, private and/or commercial, who have a genuine need to use the collections. In 2003/04 we had 12,260 registered external users, plus 2,765 alumni.

19. ***Is access to your library by all external users governed by a signed service agreement or informal arrangements?***
    19 answers received 8 used informal arrangements
    8 used signed formal agreements, under HEFCE or similar arrangements.
    2 libraries indicated they used both
    Based on Library's own access policy, but we are members of UK Libraries Plus and SCONUL Research Xtra schemes. When we received an HLF grant for the Library redevelopment, we agreed to cease charging private researchers for access. We now only charge commercial external users.

20. ***Which subject areas are most heavily used by all external users coming to your library to use printed periodical material?***
    20 answers received : 3 replied that this information was not available.
    Subjects reported as being heavily used by external visitors to institutions interested enough to participate in the survey were as follows :
    Chemical sciences, history of chemistry
    Theology / Church History
    Law, Art and Design, Social Work, Psychology
    Social sciences
    All areas on Asia, Africa and the Middle East
    Botany and history of science.; Botany, 19th C horticulture, history of science
    History of science
    Art & design periodicals in general.
    Education and Sport Sciences
    Economics, politics, international relations/ sociology/social administration
    Humanities; law

21. ***Does your institution operate a public access policy for reference use of printed periodical material?*** (distinguished in follow up questions from access to other HE researchers included in all external visitor numbers above).
    19 replies received. Yes 19 No 0 (Although some yes answers indicated that it was within the Librarian's remit to deny access where appropriate).

Future collaboration

22. ***Which subject areas do you feel are most/least amenable to collaborative retention and disposal schemes concerned with periodicals?***

18 answers received 5 replies indicated no strong views

All subject material, except valuable historical items, are amenable for retention and deduplication/disposal

We only hold periodical material in Philosophy, Theology and History. All of these would be suitable for collaborative schemes

Art and Design (pressure on space). Geography (no longer a separately taught subject)

History (collaborative retention) because of its interdisciplinary nature and the difficulties of making acceptable cases to historians for selective disposal

General and interdisciplinary material - most amenable.
Specialist material on Asia, Africa and the Middle East - least amenable.

High tech areas such as biotechnology are most amenable. Systematics literature in botany needed indefinitely because of historical basis of botanical science.

Most amenable - Biomed sciences
Least amenable - rare humanities stuff

Biomedicine - some of the groundwork already done

Very difficult to say. Medicine is generally more amenable than other subjects, partly because of greater pressures on medical library space. Before embarking on disposal or collaborative retention, we would consult on a title-by-title basis and would expect many "local" factors to influence decisions

Of the subject areas that we cover (mainly Arts, Humanities and Social Sciences) probably fine art is the least amenable

Art & Design probably most amenable as there as been less digitisation in this area

I would argue that the sciences (physical, biomedical, life, health, clinical) would be most amendable to this proposal as the need for currency and high expectation of online access is key in this area). Certainly anything pre-1985 (maintaining say twenty years of a local run). The success of such a venture would obviously be predicated on a robust network infrastructure and efficient electronic document delivery. Obviously, consultation with staff would be required - and it would have to be achieved through some form of dialogue and strategic options discussion that articulated the potential pros and cons.
I'd say that humanities would be the least viable - the concept of the library as 'the laboratory' for humanities scholars might make the need for retrospective local hands-on access more important

23. Would you expect a deduplicated collection to hold one or two last copies of a printed periodical in London

20 answers received
8 replied that 2 copies should be retained in the M25 area/London
5 replied that 1 copy would be sufficient
6 gave ambiguous replies indicating that it depended on other factors.

I would expect 2 copies at least (not counting the BL copies if they have them).;

At least 1, but preferably 2 if the title is very rare

Perhaps this should depend on levels of demand for different titles

Generally the last copy only, assuming one also held at Boston Spa

Not necessarily, if the periodical was readily available elsewhere

At least two; three in some cases. This is to cope with copies being mislaid/mis-shelved and also items being off the shelf for scanning/consultation/reshelving

24. In what ways, if any, would your answer to the previous question alter if it concerned a periodical not available from the British Library at Boston Spa?

18 answers received
Then at least 3 copies should be kept. If the BL hasn't got it then the collaborative store is acting as a national archive for that material

In which case, two copies would be better if extant

If not available at Boston Spa any second copy should be offered to BL first, rather than retain two in London

Would probably want to hold 2 copies if available, and preferably on separate sites

I would expect there to be additional copies at another location from the "London" store

This would add more weight to the 2 copies model, but perhaps not for all titles

It would generally make the difference between one and two.; Maybe there would need to be more than one copy maintained in some circumstances

There should be more than one copy held somewhere in the UK, not on the same site

It wouldn't. There are other significant collections elsewhere in the country

There would be a need for larger number of copies

25. If you knew that a London/National Academic Store was guaranteeing to hold two "last copies" to which you could have access on suitable terms, would you be ready to start de-duplicating your own holdings of those items?

22 answers received Unequivocal Yes 8 (from 7 institutions)

Yes. However I would like to see some more discussion on how many copies an archive should keep in perpetuity

Open to persuasion but we are a designated national collection so would need Board of Trustees approval on a case by case basis

provided that rules of engagement were clear and both parties had signed up tio agreed set of guidelines for operating disposal

Only when arrangements had been made, agreed and implemented.

Possibly, depends on the speed of delivery

Yes, if they were not on the same site

Not if the two copies were held in the same place. Otherwise, it would depend on the journal

Yes, subject to sufficient copies and acceptable access/delivery service

26. Do you think the store management should be empowered to dispose of unwanted or duplicated material received at the store

30 answers received Yes 22 No 8

(Those answering yes who were subsequently followed up on this point indicated that this would require clear rules of engagement in this process and that both parties had signed up to an agreed set of guidelines for operating the disposal.)

27. Would you consider paying a service charge to the store management to arrange the disposal of your unwanted stock

30 answers received Yes 23 No 7

(with the added caveat that costs should be reasonable, cheaper or no more than if participants paid themselves).

DELIVERY AND ACCESS

28. What would your institution consider to be an acceptable time-scale for physical delivery of low use printed periodical material to the requesting library from any store?

	U/G	P/G	Academic	Non academic regular user	Visitor
Same day	(2)	(2)	(4)	(4)	(2)
Within 24 hours	(5)	(6)	(8)	(5)	(7)
Within 36 hours	(10)	(9)	(10)	(7)	(5)
Within 48 hours	(4)	(8)	(9)	(6)	(7)
Within 72 hours	(4)	(1)	(0)	(7)	(7)

The following additional comments were given in response to this last table :

If timescales are short then someone has to administer a "rush" or same day service and this will add to running costs. This is low use stuff or electronic is available on site. No need for speedy service

An express service would be needed for delivery within 24 hours

An additional "urgent" stream would be helpful - even if perhaps at an expensive rate

In an ideal world nobody should have to wait more than 48 hours. You have not differentiated between research and taught postgraduates. All postgraduate researchers and staff should really expect same day or 24 hour at the latest

29. Should guaranteed delivery times be built into any service-level agreement

Yes 30 No 4

30. What do you consider to be the maximum acceptable charge to your library per item for delivery of the hard print copy of a periodical ? Or do you consider delivery should be free to participating libraries who support the store financially?

27 answers received

Free	13
Less than £2.50	4
Less than £5	8
Less than £7.50	2
Less than £10.00	0
Less than £15.00	0
Less than £20.00	0
More than £20.00	0

Additional comments :

A charge could be acceptable even if supporting the store financially but the level would depend on guaranteed delivery times, other services (if any) but mostly on the overall economic model to be developed and what levels of financial support would be needed for viability and sustainability

The answer to this depends on how much financial contribution may be paid by libraries supporting the store. But cost should not be greater than the cost of Bl ILL as maximum, and if significant financial contribution made to running store, should be very low cost (less than 2.50) or free

It would depend on the financial model – e.g. a small annual fee plus higher charges per item, or vice versa. Some sort of banding for levels of storage and usage might be the fairest way.

Difficult - at the moment the College subsidises ILL costs to keep the charge to £3.50 per item/article. Most of our users are undergraduates, and unlikely to pay more.

31***. Does your institution currently provide desktop electronic delivery for academic readers?***

34 replies Yes 16 No 18

32. If the proposed store offered only electronic desktop delivery of the material, what do you anticipate would be the reaction of your institution?

Very interested	18
Cautiously interested	9
Doubtful about applicability	6
Not interested	0

Additional comment
In general very interested with, of course, resistance from some quarters, though this might be expected to diminish over the next ten years.

33. Where do you consider the preferable point of delivery for electronically delivered material to be :

	Inst. library	**Academic department office**	**User's desktop**
Undergraduate	(14)	(2)	(8)
Postgraduate	(11)	(4)	(11)
Academic	(7)	(3)	(17)
Non academic regular user	(19)	(2)	(5)
Visitor	(21)	(2)	(3)

Additional comment : for taught postgraduates, the delivery point should be the library.

34. ***Would your answer to the question about the point of delivery differ if copyright management were handled by the store?***

Electronic copy could go direct to the user providing appropriate forms were signed and/or fees paid, but this would add to admin burden at store. Not necessary

If the Library were not required to obtain a copyright declaration then the user's desktop would be preferable

The user's desktop might be preferable for external users, as an option, if copyright issues could be sorted out.

Assuming we agreed with the management principles [operated by the store]

We would consider desktop delivery to non academic regular users/visitors

We are doubtful about providing this service to external users, but would probably do so if copyright were handled by the store

Desktop delivery for all university members if charging can be tracked
No change for others

Catalogue access

35. Would all the titles that you would consider sending to the store from 2006/2007 onwards be included in either

	Yes	*No*
Union list of Serials (London)	18	7
SUNCAT	21	5
Inform25	24	2

36. What details do your catalogue entries include ?

Title only	10
Title and ISSN	23
General holding info.	18
Specific holding info. Including lost and Omitted volumes	23
Subject classification	17

37. Would your institution be prepared to bid for funding the catalogue of any uncatalogued material sent to the store, in partnership with the store?

13 answers received Yes 7 No 3 Maybe 3

We would be prepared to be part of a bid. We are too small to lead it.

Geographical Access

38. Do you consider that provision should be made to

a) Work at the store	Yes	12	No	17
b) Browse the stacks	Yes	5	No	24

39. What is the maximum distance from your institution that you and your research community would find acceptable for an offsite storage facility?

18 answers received
9 indicated this was not a relevant question in view of their preference for e delivery only
8 indicated that one hour was an acceptable travelling time by public transport
2 indicated that the distance should permit a 24 hour delivery time

> "Probably not very relevant as long as it did not result in unacceptable costs or delivery times"

……

FURTHER COMMENT

This is a very important project and has my full support. We don't need to keep 100 copies of a particular journal in perpetuity but perhaps we need to keep a max of 5 copies to ensure access.

There is massive duplication of print and this is costing us money. The BL is not the only institution interested in the national archive - we all are. There are common sense solutions here and we will all need to let go of print, providing we can easily borrow the volume in question (or get a pdf).

My responses no doubt reveal an ambivalence. This arises because our collection does not belong to the College and any disposals or transfer of ownership would need the approval of the owner, who would probably have serious reservations about such a development. If the collection belonged to the College and was a public sector asset I would be more unambiguously enthusiastic.

To be honest, we probably wouldn't want to collaborate in this. We hope to achieve a 5-10% growth in storage space for all printed material, not just journals, in the next 7 years, after which we are looking for steady-state storage. With one exception, we don't have significant collections of older journal material and we would prefer to use the BL as a backup. However, we appreciate the need for a solution for some London colleges.

We would not want to send items to store which we only hold in print, as we want users to be able to access all our collections on-site. [There is] scope for sending print items [that are] also held as e-journals, but this would require review of stock and security of e-versions.

Assessment of different ownership/management models difficult without detail, as much depends on conditions, both re. ownership (legal issues) and service delivery options. Our view is that the most value for a collaborative store would be provided by a journals-only store, with electronic delivery of articles. The store could also provide a useful staged approach, i.e. allowing libraries to dispose of their own copies of printed journals also held in e-version, with the safety net of de-duplicated print copies held in the store. This would give time to assess the security and archiving of e-journal collections.

Appendix 4

Print Periodical Deduplication and relegation methodologies

1. CARM (CAVAL Australia)
   Collaborator 1 "deposits" a copy in the store, relinquishing ownership of the copy to the store managers and paying for the space occupied on a per metre basis
   Later collaborators,
   i) decide that a copy is no longer required in prime onsite access,
   ii) decide it is still sufficiently relevant for some form of access to be retained,
   iii) check the CARM catalogue and establish that a copy is already held at CARM.
   iv) Dispose of the copy

   Advantages :
   Once material is accessioned into CARM it is held in perpetuity and
   No duplicate is admitted to the store
   Therefore no redundant accessioning is carried out
   Later collaborators find 20-30% of the material that they would send to the store is already there, saving them the cost of storing this material.

   Disadvantages
   Disadvantage to the "first comer" as they pay the charge for the shelf space
   No quality control over the copy offered as only the first come copy is accepted, even if a later offered copy is better (where better can vary in meaning from conservation-grade clean, to disbound for scanning).
   No income to the store deriving from the benefit offered to libraries disposing of material based on availability from the CARM store.
   The store fills less quickly, leading to redundant space.

2. CASS (and Egham in former times).

(This outline is a simplification as in effect a group of partners would be involved, but only two are used here for clarity).

   i) A collaborator decides that its strategic storage requirements will necessitate additional storage and reserves space in the store.
   ii) A copy is found to be surplus to requirement in prime on site storage and is sent to the store.
   iii) The store manager notes that two collaborators have sent the same material and suggests they hold the material co-operatively.

   Advantages
   The store fills quickly leading to less redundant space.
   Collaborating institutions are enabled to effect strategic decisions quickly.
   The store achieves a visible saving for collaborators when the space rental (and proceeds of sale of duplicates) is divided between partners.
   Requires good active management by the store librarian

   Disadvantages
   The store staff can accession two copies of the same material.

Collaborators require mutual trust between partners sharing material to remain in the store partnership.
If one partner subsequently decides they do not wish to keep paying for the material, the other partner would then have to step in to pay for it all, or agree to dispose to the other partner's timetable.
The store becomes clogged in the absence of good active management by the store librarian.

3. CTLes Medical Periodicals Project
    i) A list of desirable periodicals to be held in print form in the store is compiled by broad consultation (e.g. based on Index Medicus)
    ii) Collaborators are approached to offer copies to the store.
    iii) A store researcher inspects the copies offered to establish that they are suitable for receipt by the store (clean, sufficiently loosely bound for scanning, complete).
    iv) The best copy (copies) are selected and accessioned to the store in a planned programme over two years.
    v) Other collaborators are free to decide to dispose of their copies as and when it suits them to do so.

    Advantages
    No duplicate accessioning is carried out
    Broad consensus is established as to what should be held before moving the material
    Material held in the store is appropriate to the delivery method adopted by the store (stout binding for physical delivery or disbound for scanning)
    Space is allocated and taken up in the store in a planned programme
    Leaves collaborators free to make locally appropriate decisions about retention.

    Disadvantages
    Slow to implement
    Librarians may not act independently to send material to the store when local conditions suit.
    Requires considerable staff time to inspect copies.
    Store fills in sporadic bursts requiring careful timing.

Print Relegation by individual institutions

The time is ripe for widespread experience sharing in the relegation of print material from open shelf access. Anecdotal evidence gleaned by the COOLPerStor research indicates that this is more widespread than is generally believed, but that publishing the existence of such relegation projects is felt to be too contentious. However useful input is available from those libraries prepared to be more open about their projects, such as Marianne Stowell Bracke and Jim Martin of the Science Engineering Team, University of Arizona Libraries whose *article Developing criteria for the withdrawal of print content available online* and follow up emails concerning the physical shelf length of Elsevier titles, provided useful input for estimating the size of store required for London.

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accessed 9/03/05

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Council on Library and Information Resources
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Version 1.8 April 14 2005
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Informing Science InSITE –June 2003

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The print block and the digital cylinder
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McCLUSKE, Tim
MLAC : an overview : A presentation given at the ALA conference, LAMA Library Storage discussion group 26 June 2005 (email communication courtesy of Deborah Slinguff, John Hopkins University and the author)

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MLAC : Minnesota Library Access Centre
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See also {McCLUSKE} above

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From Failure to Success: Creating Shared Print Repositories
ACRL 12th National Conference April 2005 Minneapolis, Minnesota.
http://www.ala.org/ala/acrl/acrlevents/murrayrust05.pdf
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