****

**Report of the CONUL Sub-Committee for Collaborative Storage**

**on the**

**current shortage of library storage within the university and research sector in Ireland, and the potential options for an efficient and cost effective nationwide solution for**

**optimising storage and access to collections**

**June 2009.**

**Contents**

**Glossary**

1. **Executive Summary**
2. **Introduction**
3. **The Context and the Problem**
4. **The International Experience**
5. **Survey Summary**
6. **Options for the Ireland**
7. **The Next Steps – Strategy and Implementation**
8. **Bibliography**
9. **Appendices:**
   1. **A Survey of current and future storage needs   
      of CONUL Libraries**
   2. **Interim Proposal on De-duplication**
   3. **Scoping study showing the overlap of IReL collections**
   4. **TCD-UCD Collaborative Storage Group Report of Scoping Project**

**Glossary**

ANLTC Academic and National Library Training Co-operative

BL British Library

BLDSC British Library’s Document Supply Centre

CARM CAVAL Archive and Research Materials Centre

CASS The Collaborative Academic Store for Scotland

CMS Collaboratively Managed Store

COLICO Committee on Library Co-operation in Ireland

COOLPerStor Collaboratively Owned and Operated London Periodical Store

CONUL Consortium of National and University Libraries of Ireland

CRL The Center for Research Libraries

DCU Dublin City University

DD Document Delivery

DIT Dublin Institute of Technology

FCLD The Five College Library Depository

INULS Irish National and University Library Staff Conference

HEAnet Higher Education Authority Network

HEI Higher Education Institutions

IUA Irish Universities Association

JSTOR Journal Storage

NLI The National Library of Ireland

NLS The National Library of Scotland

NUIG National University of Ireland Galway

NUIM National University of Ireland Maynooth

PASCAL The Preservation and Access Service Center for Colorado Academic Libraries

RCSI Royal College of Surgeons in Ireland

ReCAP Research Collections and Preservation Consortium

RIA Royal Irish Academy

RIN Research Information Network

SCONUL Society of College, National and University Libraries

SRL Structure Regionale pour le Livre

SUNCAT Serials UNion CATalogue

TCD Trinity College Dublin

UCC University College Cork

UCD University College Dublin

UKRR United Kingdom Research Reserve

UL University of Limerick

WRLC The Washington Research Library Consortium **A. Executive Summary**

**Introduction**

This report has been commissioned by the Consortium of National and University Libraries (CONUL) to assess the current shortage of library storage within the university and research sector in Ireland, to consider the options for an efficient and cost effective nationwide solution for storage and to make recommendations accordingly. The report has involved obtaining storage statistics and data from 11 university and research libraries in the Republic of Ireland. The Committee has also considered current international strategies and developing models for storage.

The storage capacity of libraries within the university and research sector is under increasing pressure for a number of reasons. Despite the advance of the electronic journal within the academic sector, and the growth and improved access to electronic resources in general, library print collections continue to expand at a rapid rate. The expansion of print resources shows no immediate sign of decreasing, despite the increasing availability of digital or electronic alternatives (Shenton, 2005:3 ). In Ireland, this may reflect, perhaps, an historic weakness of Irish research collections in an international context, but also a wider reality, that the publication of printed resources continues to increase for the foreseeable future. (Publishers Association, 2008: 1-2).

Given the on-going expansion of e-publishing and the volatility of the international publishing industry, the need to ensure the long-term preservation of electronic publications and perpetual access to content is of critical importance to libraries worldwide. There remains a distinct caution within the library sector regarding the current long-term archival viability of electronic resources as there is no agreed approach or indeed satisfactory solution to this problem. In addition, the prevailing culture within academic cultures in some disciplines continues to be resistant to the disposal of print copies.

Within libraries the use of space is becoming critical and institutional strategies increasingly promote student-centred approaches to the layout of the building in order to provide a more favourable student experience. Extra storage space comes low in funding priorities. In any case, libraries cannot expand their collections indefinitely, nor satisfy all of their readers information needs from their own collections.

Our survey data shows that there is indeed a shortage of storage space, and, and that this shortage will increase substantially in the next ten years. The 11 libraries surveyed predicted a total shortage of shelving of 100.32 km by 2017. 9 libraries have or are developing plans to build or acquire additional storage or library space.

Increasing space pressure and associated costs, aligned with funding conditions (i.e. increasing support for collaborative funding proposals) are causing Irish research libraries to think again about the possibility of collaborative approaches to storage.

**Focus and scope of this report**

This report focuses on the storage options and possible areas of co-operation and collaboration as applied in the first instance to low demand periodicals and serials. These materials occupy considerable space and, if different methods of storing such resources collaboratively could be identified, without impacting on issues such as access, then cost savings across the sector should result.

It is clear that in order for both the academic and library communities to have confidence in any collaborative proposal that further discussion should take place to agree approaches to a number of critical issues which have arisen during the committee’s discussions as follows:

**Critical issues**

* Consensus – there should be a unified national approach
* The question of a national print archive or an alternative
* Agreement on management systems, services, commitment of resources and technological infrastructure
* Extent to which libraries will dispose of copies of their low demand materials, if they are available from other sources
* Question of ceding ownership to achieve maximum storage density and eliminate duplication
* The future of legal deposit collections
* Confidence of the academic and library communities
* Prompt access to the stored materials when required
* Preservation of the materials
* A long term guarantee of security for ‘last copies’ or unique copies
* A collaborative approach is only possible with the correct structures for leadership, coordination and advocacy

The Committee has taken the time to consider and analyse international examples of collaborative approaches to storage in various stages of development. As part of this analysis, additional issues specific to the situation in Ireland have been identified which will require further consideration in a subsequent analysis.

It is apparent that as a library and research community we do not have a full awareness of the extent or indeed the weakness of our collections. In an international context, Ireland has significantly fewer research collections with a consistent collecting history, and this may significantly mitigate against the viability of a co-operative approach to the storage of library collections unless a fully collaborative model is adopted. Following from this, the uniqueness in Ireland of some of our collections, especially in the context of the delivery of services to the fourth level, may be more significant due to the varied history of our collecting. Therefore, the scope for a collaborative project may be limited by the critical mass of materials that we can agree to be included in any selected model.

This raises the question of savings which may result from any proposal. It is clear that for significant savings to be accrued, a comprehensive approach will be required which include discussion and agreements on collection development, collection management and perhaps the strategic priorities of the participating institutions.

**Options for consideration**

The report outlines 6 options for consideration:

**Option 1:** **Shared regional stores** where individual institutions rent space for their own materials in a shared building and each institution arranges its own delivery, access and services. This option offers a potential reduction in storage costs.

**Option 2:** **Collaboratively Managed Store(s)** where a storage space is shared by a number of institutions, and in its operation there is an element of collaborative management which may include document delivery and if required, the operation of a reading room. The ownership of material held in storage is not normally ceded and there is no de-duplication of the material. Participating institutions cannot generally access each other’s holdings in the same store.

**Option 3:** **Fully Collaborative Store(s)** with common services, where member institutions manage a collection collaboratively, according to mutually agreed policies on retention, disposal, delivery and preservation that meet the needs of their user communities. A core principal would be that members accept that they will cede ownership and control over everything they deposit with the organising group of the consortium. This means that in a Fully Collaboratively Managed Store ownership is ceded, there is de-duplication of material and it is commonly managed by the participating institutions.

**Option 4: Distributed Collaborative Storage** where the responsibility of storing copies of last resort is distributed between libraries, such that participating libraries are free to discard material, unless theirs is the designated copy of last resort. This model would involve no physically shared store as such. Libraries would maintain their own on or off campus stores as is currently the case. However, the Libraries would share the burden of storing low use research materials. Each Library would guarantee to permanently retain, preserve and make available to the other CONUL Libraries a copy of last resort of a particular set of material. One (or more) guaranteed copy of last resort of all material would therefore be permanently retained by one of the CONUL Libraries, with the burden of total retention shared between the Libraries. The other CONUL Libraries would then be free to discard their copies of this material, knowing that a copy, or copies, of last resort is being permanently retained and preserved by another member Library.

This model would require a great deal of coordination and negotiation via CONUL in deciding who would retain what material. The allocation of retention responsibility could be based proportionately according to available space or by some other method to be agreed by the CONUL Librarians. A decision would have to be made regarding the number of copies of last resort felt to be required. This would probably be affected by the availability of secure electronic access to the same material and by developments in the UK.

**Option 5: Collaborative Storage based on the British Library (BL) or a Central Repository such as the ‘UK Research Reserve’ (UKRR**) as proposed by theCHEMS Consulting report *‘Optimising storage and access in UK research libraries'* commissioned in 2005 by the British Library and CURL Consortium of Research Libraries (Chems, 2005). This has at its core the collection of the British Library, which forms the largest part of a UKRR The BL guarantees to hold low-use print material “in perpetuity” for researchers to access in either hard copy or e-format. Research libraries would be encouraged to send to the UKRR any materials they possessed that were not already held by the BL. It was reported in March 2007 that the UKRR had received key support from the research and library communities, which will help to ensure it is fully representative, collaborative and coordinated development. It has been estimated that the Pilot Project released approximately 11km of shelf space by de-duplication of low use research journals in the eight partner university libraries. This has resulted in an estimated saving of £308,000 in recurring estate costs and £3.8 million in capital costs to the university libraries (see <http://www.ukrr.a.c.uk>). Phase 2 has set the ambitious target to release 100km of shelf space and build a sustainable national research collection over 5 years.

In the Irish context and in the interest of maintaining a national print archive, the above model could be adapted by either (1) substituting the BL for a well-resourced (legal deposit) central repository in Ireland e.g. Trinity College Library on a standalone basis or in combination with the National Library of Ireland.

A second variation on this model (2) could be simply choosing to ‘piggy-back on’, or formally negotiating to ‘opt in’ (if membership was permitted) to the UK scheme, whereby the availability of three secure copies of last resort in the UKRR could be considered sufficient back-up to allow CONUL libraries to discard all bar one copy of the same material in Ireland.

**Option 6: The Status Quo,** where it is assumed that no central action is necessary to encourage collaborative storage and that the de-duplication of materials will remain the responsibility of individual libraries. This option assumes that research libraries will gradually begin to de-duplicate their serial holdings, and find alternative solutions to their own storage problems.

**Our recommendation**

The Sub-Committee has examined each of these options in the context of the specific environment of the research library community in Ireland. On the basis of this context the Sub-Committee recommends that **Option 4, the Distributed Collaborative Storage model**, is adopted in the first instance as the most pragmatic and immediate course of action. The Sub-Committee agrees that this option offers a speedy and cost-efficient approach to some of the most pressing storage problems currently experienced within the research library community in Ireland.

It is also agreed by the Sub-Committee, that **Option 3, the Fully Collaborative Store**, is the universally preferred solution. However, the required infrastructure, policy agreements and collaborative partnerships for this approach will require much more detailed discussion and agreements than can be feasibly delivered within a reasonable timeframe. It is also unclear if we have within Ireland the sufficient critical mass of low-demand materials to manifest significant savings under a Fully Collaborative Store model.

**Option 5** was also identified as a possible solution although this would place particular responsibility on one or more of the larger institutions, most probably TCD Library. This raises questions regarding the strategic and competitive advantage that this might afford such an institution. There was some opposition to this option from representatives of some smaller, regionally located libraries as the longer term implications of this were unclear. It was also felt by regional libraries that a Dublin-centred solution need not be the option.

**Implementation and the next steps**

It is proposed that this or another committee via CONUL be assigned the role of co-ordinating the implementation of the Distributed Collaborative Storage model. A preliminary scoping study has already been undertaken by this Committee to analyse the extent of overlap between libraries in holdings of low-demand periodicals which are also available via IReL. An interim proposal on de-duplication which is proposed by this Committee has been included as an appendix to this report.

**How an option might work? Some observations.**

Finally the Sub-Committee have made some further observations regarding the implementation process and identified further issues that require detailed consideration

* Can a business case be made for the chosen option?
* Access - research materials which are preserved must be made easily accessible
* Can agreement be reached on a secure standard for preservation of an electronic version of low demand print periodicals
* The chosen option will require a clearly defined management board
* Service level agreements
* The cost to retaining libraries should be identified – where does compensation for this cost come from?
* The viability of a document supply service?
* Potential savings should be made nationally, either in recurring or capital costs.
* National collection development and collection management policies should be in place

**B. Introduction**

This report has been commissioned by the Colloquium of National and University Libraries (CONUL) to assess the current shortage of library storage within the university and research sector in Ireland, to consider the options for an efficient and cost effective nationwide solution for storage and to make recommendations. The terms of reference for the CONUL Sub-Committee on Collaborative Storage are

1. To carry out a needs analysis of CONUL libraries in relation to co-operative storage facilities.

1. To examine existing models and to establish best practice in relation to high-density storage facilities for CONUL libraries.

1. To investigate the feasibility of providing one or more high-density co-operative storage facilities for all CONUL libraries.
2. In the light of 1-3 to proceed with a specification for a high-density co-operative store in terms of location floor space required, shelving capacity, types of shelving required, broad costs and service arrangements.
3. To identify key issues in relation to retention, ownership, access and delivery to and from CONUL storage facilities in the context of national storage facilities already in existence.

It was agreed by the Sub-Committee at an early stage that it was not feasible to proceed with term of reference 4 without significant agreements being reached at a national level by the CONUL Heads, and also without a fuller understanding of the range and diversity of our collections.

The report has been undertaken between October 2006 and May 2009 by a group of representatives from each of the CONUL Libraries as follows:

Pauline Corrigan UCD (until May 2008)

Monica Crump NUIG

Mary Dundon UL

Margaret Flood TCD (from May 2008)

Mary Kiely DCU

Jessie Kurtz TCD (until May 2008)

Anne McSweeney DIT

Mary O’Doherty RCSI

Crónán Ó Doibhlin UCC (Chair)

Colette O’Flaherty NLI (from Feb 2007)

Carmel O’Sullivan UCD (from May 2008)

Val Payne NUIM

Petra Schnabel RIA

**Programme of work**

The Sub-Committee’s programme of work consisted of the following elements:

* A research phase identifying examples of collaborative storage schemes throughout the world, together with a literature review of relevant articles and publications.
* The design, dispatch and analysis of a survey questionnaire to 11 CONUL libraries.
* A preliminary scoping study to analyse the extent of overlap between CONUL libraries in holdings of low-demand periodicals which are also available via IReL.
* An interim proposal on de-duplication of low-demand periodical materials.

The Sub-Committee met on 14 occasions during the period October 2006 to May 2009.

The format of this report is as follows:

* A summary of the context and the problem in Ireland
* A description of the international experience of collaborative storage
* A summary of the findings of the storage survey of the 11 CONUL libraries
* A description of the options for Ireland
* Proposals towards the next steps
* Appendices including an interim proposal on the de-duplication of low demand periodical materials, survey documentation and survey results.

**C. The Context and the Problem**

**History**

The issue of a shortage of space in Irish university libraries is not a new one. For significant periods in our history, resources for physical infrastructure and collection development have been severely limited. This is a common historical experience across the academic sector in Ireland. This has negated any sense of strategic planning for storage space for libraries within the university sector, as physical storage, especially in the context of appropriate storage for low-demand materials has not been seen as a priority against the competing requirements to consolidate and develop central library and campus facilities in servicing a growing student and academic population.

Many of our low-demand collections, therefore, are located in older buildings which are either full to capacity, or are simply not fit for purpose. The situation in some of these facilities has now reached a crisis point.

Significant and welcome investment in recent years has enabled the advancement of the strategic development of services, including the development of collection development and management policies locally, although national policies have not yet been agreed. There is additional current imperative to meet the demands of the 4th level and provide services which compete on an international basis for researchers and funding. This means that prospective students and researchers will require more comprehensive and better managed collections.

University libraries in Ireland have a long history of collaboration in the development of supports and services within the sector (e.g. INULS, CONUL, COLICO, IUA (CHIU), SHIRL, NEWSPLAN, HEANET, ANTLC, and IReL), and therefore the current challenges, in terms of both resources and infrastructure are not unusual.

**The experience of university libraries in the United Kingdom**

The development of a collaborative approach to library storage has a well-defined history within the university sector in the UK. Similar to the situation in Ireland, many institutions suffered into the 1970s from underfunding, and were clearly not in a position in provide the library infrastructure on a scale to deal the increasing volume of print publications. Following from the 1975 University Grants Committee Working Party which was tasked with reviewing the provision of library buildings, the principle of a ‘self-renewing library of limited growth’ was recommended, that is a library where acquisitions were off-set against withdrawals. This recommendation was reported in the subsequent 1976 Atkinson Report (University Grants Committee, 1976). Until the Atkinson report, it had been fairly well accepted that library buildings or stores would continue to be built or extended to accommodate indefinite growth. This thinking was now being challenged (Chems, 2005:10). The Atkinson Report directly challenged the absence of apparent lack of collaboration and strategic planning in the UK, and took the view: “A dormant stock is the last thing desired. Stock must be exploited or it must go.…conservation implies a passive stock, while self-renewal implies an active stock. ….The library is for use” (Harris, 1977: 10)

Universities continued to build new libraries into the 1990s and beyond as funding was made available following the 1993 Follett Report. Some pressure was alleviated by the British Library Lending Division Scheme where unwanted items could be sent to the BL in the almost certain knowledge that any not already held would be added to the BL collections. This scheme ceased in September 2002.

Following from the CHEMS Consulting report: Organising Storage and Access in UK Research Libraries (CHEMS, 2005), Phase 1 of the UK Research project ran from January 2007 to August 2008. In collaboration with the BL, 8 university libraries repurposed over 11,000 metres of shelf space, whilst maintaining access to their low-use print research journals. As a benefit to the university sector as a whole this can be seen as equivalent to a saving in recurrent estates costs of £308,000 and a capital value approaching £3.8 million per year. Participating libraries drew up lists of their low-use print journals that could be stored off site. Many factors were considered during the process, including their electronic journal portfolios. The lists were submitted to UKRR and journals selected to form the basis of the Research Reserve. Detailed workflows and procedures were developed to ensure that robust, streamlined processes supported the Research Reserve. The British Library successfully checked against their own holdings more than 14,000 holdings records submitted by the partners, representing over 13,000 individual titles. More than 8,000 titles have so far been retained for the Research Reserve collection at The British Library.

Phase Two of the programme will run from 2009 to 2013 with an ambitious target of releasing 100 km of shelf space and building a sustainable national research collection over five years. (see <http://www.ukrr.ac.uk/about/about.aspx> accessed 23 May 2009).

**Electronic resources**

From the late 1970s library materials were increasingly becoming available electronically. Gradually, materials that had been prepared electronically for publication in paper were made available electronically, frequently on CDROM, then online. An early model for IReL in UK was the UK Pilot Site Licence Initiative where 4 publishers made their journals available online (albeit with different pricing and access models). Almost 400 electronic journals became available to all UK university libraries. By the end of a 3 year period, all university libraries in the UK were acquiring e-journals, and publishers quickly realized the potential of this new market.

With increasing confidence in e-journals as a resource, the Mellon Foundation established JSTOR in 1995 with the objective of releasing space in libraries through the digitization of

back-runs of print journals were digitized. According to JSTOR’s Bound Volume Survey 1999-2003, a reluctance to dispose of back runs of print journals continued, so that in 2003, over half of subscribing libraries had not discarded, and had no plans to discard, titles included in JSTOR (JSTOR, 2003). (JSTOR has recently invested significant resources in the creation of Portico, a service that provides a permanent archive of scholarly literature published in electronic form. More than 7,000 scholarly journals are committed to Portico for preservation, and they are moving toward the goal of self-sustainability. See <http://www.jstor.org/page/info/about/programs/scholarship.jsp>).

Both JSTOR and Elsevier, the world’s largest publisher of scholarly journals, now market the sale of backfiles of their journal titles partially on the basis of space that might be released for other purposes (Science Direct, 2005). In contrast, it appears that the discard of print versions of monographs, in the current ratio to which e-versions are available, would have only limited impact on storage requirements, of the order of 285 linear metres per 16,000 e-books (Chems, 2005: 12)

**The Library Environment in Transition**

The physical space requirements within a modern library space are changing. Conventional demands for sufficient shelving for open access collections, secure facilities for special collections, purpose-built spaces for ‘nonbook materials’, and adequate seating or study accommodation remain. However, increasing use of IT and computing in teaching and learning and resulted in a new requirement for clusters of PCs on campus for student use. The library was frequently the location for these clusters as they served a dual purpose of providing access by computer to many library resources. Almost universally, libraries now provide ‘plugin’ facilities and/or wireless networks for readers’ laptops, resulting in a sometimes unpredictable use of conventional study spaces. Partly in response to this, and to reflect changing teaching and research methodologies, libraries have begun to offer collaborative and group study spaces for readers.

These developments have a potentially huge implication for the use and function of spaces within libraries, especially on busy campuses, especially where functional, networked spaces are at premium.

**The Student Experience**

Universities in Ireland and internationally have become increasingly concerned to increase their student numbers and are, therefore are keen to improve ‘the student experience’ within their institution. The library which is seen an identifiable, prominent resource at the heart of university life has an important role to play in attracting both students and academics researchers into the future. Investment in libraries and related resources is increasingly undertaken with a view to attracting students. In simple terms this means a greater emphasis on longer opening hours, sufficient copies of course texts, reductions in the price of services such as photocopying and printing, and comfortable spaces, some of which may be given over to social activities or refreshment areas. The library offers a secure, central, and accessible location for many new activities to take place. All of these new requirements and services place an increased pressure of available library space.

**Duplication of Collections**

University libraries continue to be reluctant to dispose of printed materials. There are a number of reasons why this is the case. Firstly, the physical size of a collection is still regarded as an important indicator of the importance and quality of the library. Libraries and some public “bench-marking” tables continue to reinforce this position.

Secondly, there is a genuine concern within the library community in Ireland that an accessible last copy of a work should be retained in perpetuity. The history of collecting and managing collections in some of our research libraries has been an uneven one, primarily as a consequence of the limited resources and poor infrastructure. Although it is feasible that a great deal of de-duplication would take place and extensive meterage in library space saved if low-demand print materials were transferred to a single store, it is not yet clear that there is sufficient overlap within Irish research collections to deliver a workable business model. Some scoping work on the overlap of IReL collections has been carried out by this committee and is appears in an appendix at the end of this report: Appendix III)

The UKRR pilot has identified significant targets for de-duplication. It has been estimated that the Pilot Project released approximately 11km of shelf space by de-duplication of low use research journals in the eight partner university libraries. This has resulted in an estimated saving of £308,000 in recurring estate costs and £3.8 million in capital costs to the university libraries Phase 2 has set the ambitious target to release 100km of shelf space and build a sustainable national research collection over 5 years (see <http://www.ukrr.a.c.uk>).

The benefits of de-duplication for Irish research libraries, though attractive at first glance, are not so clearly defined. The pattern of collecting in Ireland with the exception of the two largest legal deposit libraries (Trinity College Dublin and the National Library of Ireland) does not necessarily compare with examples in the UK. Further research is required to identify specific areas of collection overlap, and devise and agree satisfactory policies on any de-duplication process that would in turn deliver cost saving s and a business case. To some extent a portion of this work has been done with the IReL scoping project mentioned above.

**D. The International Experience**

**Introduction**

As part of the preparatory work of the committee, a review of international examples of co-operative and collaborative storage schemes was undertaken. This chapter presents a summary description of storage schemes that have informed our discussions and which provide helpful models for further debate. Information on these schemes has been drawn from the respective project web sites (see accompanying URLs) and in the case of the USA from a 2003 report from the Council on Library and Information Resources. The schemes are presented in the context of their national or wider regional (i.e. European) context.

1. **The United Kingdom**

European interest in national repositories has also been particularly evidenced by recent

developments in the UK with the implementation in Scotland of a national academic library store – the Collaborative Academic Store for Scotland (CASS) – in 2004, and subsequently in England, where the lead in repository development has been taken initially by the Higher Education/British Library Task Force reporting to the Research Support Libraries Program, and subsequently the Consortium of Research Libraries in the British Isles (CURL) working in conjunction with the British Library and the Research Information Network (RIN). A key outcome of the UK activity has been the completion of the 2005 report, Optimising Storage and Access in UK Research Libraries (CHEMS, 2005). This report offered several alternatives for the development of a national repository for research materials, and following a period of consultation during 2005 and 2006 a consensus emerged for a scheme based around a repository system – the UK Research Reserve (UKRR) – founded on the lending collection of the British Library.

## UK Research Reserve (UKRR) PROJECT

## (See <http://www.rluk.ac.uk/node/85> and <http://www.ukrr.ac.uk/default.aspx>.)

In July 2008 the Higher Education Funding Council for England (HEFCE) announced £9.84 million of funding for a collaboration project of higher education libraries led by Imperial College London and the British Library following a successful 18-month [pilot](http://www.bl.uk/news/2008/pressrelease20080717a.html#pilot#pilot). The funding was to enable the creation of the UK Research Reserve (UKRR). (<http://www.hefce.ac.uk/news/hefce/2008/journals.htm> accessed 17 July 2008.)

The UK Research Reserve is a collaborative collection, holding print copies of important research journals, which is managed and stored through a partnership between the British Library and Higher Education. At least 3 copies of journals that fall into a 'low use' category are maintained within the UK. Access to the collection is underpinned by the BL Document Supply Service, which can deliver a document electronically to the desktop within 24 hours.

## Holdings are transferred from individual libraries to a central repository at the British Library. The de-duplication of journals across the sector frees valuable space within institutions which can be used by the individual library for whatever purpose best fits its need.

## The UKRR has three goals:

1. *Safeguarding the long term future of printed research journals*. The UKRR will protect vulnerable printed research material by establishing a system to manage the co-ordinated retention of an appropriate number of copies of low-use printed research journals, ensuring that 'last copies' of titles are not inadvertently discarded. Journals within the UKRR will be permanently retained both centrally at the British Library and at an agreed number of libraries within the higher education sector.
2. *Enabling quick and easy access to research materials.* Journals within the UKRR will be accessible to all researchers, regardless of location or institutional affiliation. The UKRR will provide fast and convenient access to journals, by building on the existing strengths of the British Library's Document Supply Service. Researchers will have a choice of accessing journals from the UKRR in printed or electronic format, with electronic desk top delivery being the norm.
3. *Ensuring efficient use of resources*. By co-ordinating the storage and retention of printed journal titles, the higher education library sector will make significant space gains. The space reclaimed from journal storage can be re-purposed for new opportunities and higher priority research, teaching and learning uses. By the end of the five-year programme, it is expected that 100 km of shelf space will have been released.

**b. The Collaborative Academic Store for Scotland (CASS)** (<http://cass.nls.uk/>)

CASS is a developmental storage facility project that seeks to establish a collaborative storage and delivery service for valuable but low-use research materials held in Scottish academic libraries. CASS was developed as a joint initiative of the Scottish federation of University and Research Libraries and the National Library of Scotland (NLS). The CASS store is located within the National Library of Scotland. CASS contains thousands of items including journals, books and other materials from the libraries of Aberdeen, Edinburgh, Glasgow Caledonian, Paisley, St Andrews and Stirling universities, and the Royal Scottish Academy of Music and Drama. Any member of the public can search the CASS [catalogue](http://cass.nls.uk/cgi-bin/Pwebrecon.cgi?DB=local&PAGE=First). Material may be consulted in the NLS reading rooms or be requested via local inter-library loans departments. Depending on the type of material requested it can either be delivered electronically or physically.

The CASS project currently operates according to the following agreed criteria:

1. the partner library identifies that it has limited or restricted shelf space for low-use but valuable items
2. the library then enters into a contractual agreement with NLS to lease space in which to store the material and to use the CASS service for delivery
3. the materials are sent from the partner library to the CASS facility at NLS
4. the partner library supplies catalogue records for addition to the CASS [catalogue](http://cass.nls.uk/cgi-bin/Pwebrecon.cgi?DB=local&PAGE=First)
5. the partner library updates its local catalogue to reflect the new location for the material it has put into CASS. The library may also establish local [links](http://cass.nls.uk/connection.htm) to the CASS catalogue.
6. on behalf of their customers, the partner library's inter-library loan department makes requests to the CASS service for materials that they require
7. CASS staff process the requests and deliver the requested material either via electronic document delivery or traditional postal methods. Most requests are satisfied within 24 hours.

**2. United States of America**

In the USA, although there is as yet no co-ordinated approach to the development of a national network of regional repositories, there has been some exploration of this concept as a possibility. In 2001 the Task Force on the Artifact in Library Collections issued its final report to the Council of Library and Information Resources (CLIR) recommending the development of a network of “regional repositories”. The Task Force report called on librarians and researchers to act collaboratively and: “Advocate for the development of regional repositories of artifactual collections that reduce duplication of effort, create economies of scale, and ensure that the greatest number of unique or scarce priority items are preserved and made accessible to researchers (Task Force on the Artifact, 2001).

A further influential report, Developing Print Repositories: Models for shared Preservation and Access published in 2003 by Council on Library and Information Resources expanded further on the potential for regional co-operation citing examples of schemes in practice.

In the United States there are two main collaborative storage models:

1. schemes within a state university system.
2. voluntary collaborative projects between independent institutions.

Schemes within a state university system have the advantages of funding for the construction and operation of the store derives from the state budget. Project governance and management of the operation of the facility is also part of the state university framework. Collaborations occurring outside the state system require more complex negotiation on issues such as the provision of funding and management control. Both storage models have come about for similar reasons to those elsewhere:

1. Shortage of storage space on campus when expanding existing accommodation or building additional storage was not possible for financial reasons;
2. because of a lack of suitable land on campus ;
3. because campus land has been increasingly used since the 1970s for residential, pedagogical, cultural and recreational spaces for students.
4. Inadequate and expensive off-campus facilities (e.g. unreliable leasing arrangements).

The benefits and success of cooperative or collaborative solutions as interpreted by funding bodies and project partners are as follows:

1. economies of scale achieved through high capacity and scaleable storage facilities, with modular construction and storage
2. high levels of automation (eg automated storage equipment in purpose-built units and bibliographic control, and electronic records that can be shared via online catalogues or integrated library systems).
3. transfers of large, easily identified, types of material, such as, for example, older imprints, government publications, old science journals, JSTOR and Elsevier Science journals (which users can access electronically), microforms, foreign language materials, archives and special collections (if the storage units have the appropriate conditions)
4. The provision of a limited number of specialised services, which can be delivered through a high level of automation and the employment of mainly clerical staff.

Providing access is a crucial factor and this is achieved through:

1. close cooperation with faculties to reach an understanding of what can be defined as low use research material suitable for permanent remote storage – although removing material from storage is costly and is therefore not encouraged and, in some cases, not allowed
2. easy and rapid access to the material via ILL (usually within 48 hours)
3. Document Delivery (DD): nearly all services provide a DD service.
4. onsite reading rooms: nearly all services allow consultation on site
5. provision, if possible, of services that were not available when the materials were stored on campus (i.e. added value),

The management of these facilities involves the participating libraries agreeing a set of principles and rules governing, in particular, deposit, retention and access, and, consequently, their relinquishing a measure of control over the collections they deposit, even if they retain

ownership of them. Reilly comments that ‘… the issue of ownership is something of

a red herring. Control, rather than ownership, is the factor that affects economics of these

ventures.’ (Reilly, 2003: 17).

**a. The Center for Research Libraries (CRL)** (<http://www.crl.edu/>)

The Center for Research Libraries (CRL) is a consortium of North American universities, colleges and independent research libraries. The consortium acquires and preserves newspapers, journals, documents, archives and other traditional and digital resources for research and teaching. These resources are then made available to member institutions cooperatively, through interlibrary loan and electronic delivery.

The Center’s mission is to support advanced research and teaching in the humanities, sciences and social sciences by ensuring the survival and availability of the knowledge resources vital to these disciplines. The Center accomplishes this mission through cooperative action with its members and partners.

CRL operates a global cooperative collection development program to assist academic and research libraries in obtaining otherwise inaccessible and important research materials. These materials are made permanently available to scholars and researchers. The program fosters the collection and preservation of research materials in print, microform and electronic formats. It is supported by its large centralized collection of materials, consisting of five major components upon which libraries make local collecting decisions. The components are expensive to collect in relation to their use at any one institution, but are cost-effective when held in common and made available through pooled resources. Participating academic institutions and their libraries use carefully selected materials held in shared ownership by CRL. By using these shared library materials, institutions reduce the costs of acquiring, processing, preserving and using resources that have limited ongoing local demand.

**b. The Five College Library Depository (FCLD)** (<http://www.fivecolleges.edu/sites/depository/>)

The Five College Library Depository (FCLD) is a high density storage facility for the lesser-used materials from the libraries of Amherst College, Hampshire College, Mount Holyoke College, Smith College, and the University of Massachusetts Amherst. The Five College Librarians Council adheres to the principle that the FLCD is a trusted repository and that all collections transferred to the facility are considered persistent deposits. Designating the FCLD collections as persistent is intended to give all Five College libraries and affiliate members the assurance that they can withdraw duplicates of deposited items from their campus collections and rely with confidence on access to the copies placed in the Depository. A policy framework has been developed and approved by the Five College Librarians Council (<http://www.fivecolleges.edu/sites/depository/policies> This provides the basis for the Five College Libraries to share an off-site periodical and book storage facility leased from and maintained by Amherst College. Items stored in the Depository by the University remain the property of the University. Items given to the Depository by the four colleges become the property of Five Colleges, Inc.

**c. PASCAL, the Preservation and Access Service Center for Colorado Academic Libraries** (<http://pascal.uchsc.edu/>)

PASCAL is the state-of-the-art high density library storage facility located on the new Anschutz Medical Campus. Operating since March of 2001, The Health Sciences Library shares PASCAL with four other academic libraries: Norlin Library of Colorado University Boulder, Auraria Library, and the Law and Penrose libraries of the University of Denver. Based on a design pioneered at Harvard University, PASCAL can hold 1.6 million volumes in under 10,000 square feet of space with the possibility of adding four more modules of equal size in coming decades. The building is climate controlled with year round temperatures averaging 55 degrees F and 35% relative humidity. Currently, volumes eligible for storage are older research materials that have value but are in low demand. All volumes are sorted and stored by size in cardboard trays on 30-foot high shelves identified by bar-codes. Individual library catalogs indicate if a particular book has been moved to PASCAL allowing patrons to make requests via their own library. PASCAL personnel make every effort to deliver items to requesting libraries within 48 hours. PASCAL uses an operating agreement that would allow other academic libraries to join as participants in the future

The mission of the Preservation and Access Service Center for Colorado Academic Libraries (PASCAL) is to provide centralized, high-density environmentally-sound permanent storage for library materials from the member campuses of the University of Colorado and the University of Denver.  PASCAL provides member libraries with rapid, efficient and safe access to and delivery of stored materials.

**d. The Washington Research Library Consortium (WRLC)** (<http://www.wrlc.org/>)

The Washington Research Library Consortium (WRLC) was established in 1987 by some of the major universities in the Washington D.C. area to share library collections and information technology in order to enhance the resources available to their students and faculty. The WRLC outlines 4 main service objectives which it endeavours to provide to its member universities:

1. provide optimum space for collections, services, and users in campus libraries and reduce capital expenditures for library book space via the maintenance of a cost-effective, secure, environmentally-controlled offsite storage service for member library materials and develop policies to support optimal use of the storage facility and effective collection management within the libraries.
2. provide coordinated access to all information resources owned or chosen by WRLC member libraries, and contain library systems costs by building on shared technology resources
3. increase the scope and accessibility of information resources available to WRLC students and faculty via Co-operative Collection development and access policies

The centerpiece of WRLC's programs is the shared information system known as ALADIN (Access to Library and Database Information Network), which has been in operation since 1990.

**3. Australia**

**a. CAVAL Archive and Research Materials (CARM) Centre** (<http://www.caval.edu.au/carm.html>)

Established in 1997, the CARM Centre is a high-density climate controlled print repository, housing a shared collection of close to one million volumes of archive and research material for university libraries in Australia. This shared collection is managed by CAVAL for long-term ownership, maintenance and access, providing a cost-effective solution to archival storage. The Centre gives libraries fast, easy access to rarely-used material, delivering requested material digitally to the user-desktop.

A second stage of this project, CARM 2 (Stage 2 CAVAL Repository), is a proposal to construct a second storage facility for low-use library materials adjacent to the existing CARM facility in order to take advantage of the available staffing and facilities management services; including collection management, deposit and retrieval services, and on-site digitisation and document delivery services.   
  
In March 2008 the CAVAL Board approved the preparation of full design documentation, planning approvals and tenders for the construction of the Stage 2 CARM Repository (CARM2). Ernst and Young have reviewed the funding model for the project and the University of Melbourne, Monash University and RMIT University have all now agreed to make long-term prepayments to lease space in the facility over 30 years. CAVAL has engaged Coffey Projects to manage the project and detailed designs are now being prepared to meet the specifications and standards for long-term medium and high density storage of books and paper publications on behalf of the library sector. It is expected that the facility will be available for members and other libraries to take up space in 2010. CAVAL is already in discussion with some other agencies for the specification of specialised fit-out to accommodate other collections such as museum artifacts and pictures on a more commercial basis to supplement the expected income from the facility.

**E. Summary report of a survey of current and future storage needs of CONUL Libraries**

## 1. Introduction

As a preliminary stage in the investigation of future storage solutions for CONUL Libraries, the Sub-committee for Collaborative Storage conducted a survey of CONUL Libraries to establish their current and future storage requirements as well as elements of their collection development or management policies that might affect the viability of any collaborative storage solutions.

This survey was carried out in Spring 2007. All eleven CONUL Libraries took part:

* Dublin City University (DCU),
* Dublin Institute of Technology (DIT),
* National University of Ireland Galway (NUIG),
* National University of Ireland Maynooth (NUIM),
* National Library of Ireland (NLI),
* Royal College of Surgeons in Ireland (RCSI),
* Royal Irish Academy (RIA),
* Trinity College Dublin (TCD),
* University College Cork (UCC),
* University College Dublin (UCD),
* University of Limerick (UL).

The survey questionnaire is available in Appendix II. The individual responses of each institution will be made available to CONUL separately.

## 2. Institutional Collection Development and Collection Management Policies

### 2.1 Key Points:

* Most libraries have a collection development policy which specifies policy relating to retention.
* There is little distinction in most cases between the management of legal deposit materials and general collections, with the exception of UCC, UL and TCD who state that they actively preserve their legal deposit collections.
* Donated material is mostly treated in the same way as general collections.
* Some libraries support permanent local retention of specific collections
* Age or date of publication is not the sole determining factor for retention of print.
* Most libraries are currently reviewing their policy on the retention of print serials which are available electronically, and are considering single format subscriptions, i.e. e-only formats. NUIM, TCD, and UCD the current policy states a preference for e-format only.
* Most libraries are cautious about disposing of their print archive, pending developments in digital preservation, the recommendations of this group and/or the development of a national “copy of last resort” policy development.
* NLI are planning a national digital repository to collect, preserve, and ensure continued access to Irish and Irish interest e-publications.
* Storage facilities are critically required by some libraries, while others have no need of them.
* Policies for relegation to storage and for disposal range from formally adopted statements of policy to contingency practices that develop over the years.
* The majority of libraries expect collection management policies to change due to increasing space problems and the availability of electronic resources. Others believe existing policies will suffice, but will need to be enforced more stringently.
* A difference of opinion emerges in the definition of ‘regional’ – with some respondents clearly considering Ireland a ‘region’, while others focus on their smaller geographic area.
* Most libraries welcome regional and/or national collaboration on storage, while three consider it to be of less importance. Those with a stated commitment to preserve print legal deposit collections were less likely to see benefit from collaborative storage, although regional options may prove more attractive in these cases.
* All libraries agree that it seems difficult if not impossible to predict the exact impact that trends in electronic publishing will have over the next 20 years.

### 2.2 Policies on retaining materials

The majority of respondents have a Collection Development Policy in place or in development that specifies institutional retention policy, which is generally based around the teaching and learning/research needs of the institution. Generally legal deposit and donated material is subject to the same retention criteria as purchased material. The NLI plan to address the issue Collection Policy Development in the coming months.

The NLI currently retains all material in its collection. TCD, as a legal deposit library for UK and Irish material, retains legal deposit material in perpetuity; however, certain categories of legal deposit material are retained selectively e.g. back years of UK phone directories, diaries and calendars, promotional and trade publications etc. Other libraries e.g. UCC and UL have employed a “keep all” policy in practice. UCD noted that retention is currently the default policy.

Other Libraries specifically retain certain material, either based on subject area or material of regional/local interest. For example:

* NUIG, UCC, and UL retain material of regional interest;
* UCC and UCD retain Special Collections and legal deposit material;
* RIA maintains specific bequests and donation collections;
* DIT generally retain specific subject areas, e.g. art, design and architecture;
* NUIM retains material published before 1900, subject specific material e.g. religion and theology, history, music, early science;
* UCD retains Veterinary Medicine material and material of Irish interest.

### 2.3 Policies on retaining print serials above a certain age

For most libraries surveyed, age is not a determining factor when considering retention. Electronic availability is more important than age.

Some libraries, e.g. RIA and UCC, currently retain print as a matter of course. TCD is committed to retaining print holdings of the publications received under legal deposit. For TCD it has been the policy to build up holdings of research journals as comprehensively as possible and also to send material to the libraries of academic departments. However, these departmental libraries are keen to transfer material back to the main library and use the departmental space for other purposes. DCU retain all current print serials subscriptions and cancelled titles are considered for disposal based on usage. UL retain older runs with local or institutional relevance, however, newspaper archives are discarded if available on microfilm. In NUIG, this area is currently under review. In DIT core/relevant titles are bound and retained for approximately 10 years and the availability of e-versions is now a factor in some subject areas. The RCSI maintain long term access to approx 10% of their core journals, otherwise all print serials are discarded after the most recent 5 years.

NUIM note that JSTOR has influenced policy regarding print retention in the sciences and social sciences. Other libraries noted that to date IReL and JSTOR have not greatly influenced policy on retention of print. This may change with the recent IReL agreement, permitting the cancellation of the print version where both electronic and print versions are distributed). DIT is currently not a member of IReL.

### 2.4 Policies on retaining print serials available electronically

For nearly all respondents this is currently under review, however, the RCSI has moved to e-access with 95% migration of print complete. In NUIM current policy is e-only preferred. Most libraries are considering single format subscriptions, i.e. e-only. Some libraries (DCU, UL, and NUIM) note that the print subscription will be retained if the academic community wish to continue with same. UL will retain a browsing collection of popular journals in the medium term. NUIG is awaiting recommendations of this group before proceeding with current discard projects. In TCD and UCD the current policy is to subscribe to the e-versions where available. TCD is currently in the process of relegating academic journal titles and backruns runs to an offsite commercial facility, if access to the e-journal title and its archive can be provided. While in DIT back-runs of core titles are generally retained, certain subject areas e.g. art and design, are held for longer periods.

While most libraries are still cautions about disposal of back runs of print journals, the development of secure, stable digital collections and a “copy of last resort” policy would support change in this area.

The NLI although not yet claiming e-serials is at the preliminary planning stage for a digital repository which will collect, preserve, and ensure continued access to Irish and Irish interest e-publications.

### 2.5 Policy and practice on locating stock in off-campus stores

Five libraries have no off-campus store or no need of such. Six libraries have an off-campus store. At UCD, new library storage space has been commissioned on campus. Five libraries also have on-site storage, while one library (UL) is using a commercial off-site storage facility. Those libraries with a library store have well-established criteria for relegation of material to storage as follows:

* Low/cyclical use (NUIG, NLI, TCD, UCC, UCD)
* Older material (UCC, UCD, UL)
* Historic value (UCD)
* Selected journals (RIA, UCD)
* Online availability (UCD)
* Special collections (UL)
* Unprocessed donations (UCC, UL)
* Higher demand material as a core library service due to space constrictions (TCD)

### 2.6 Disposal policies

Seven libraries have disposal policies that specify criteria for disposal of material (DCU, NUIG, NUIM, RCSI, TCD, UL, UCD). Two libraries specified no policy regarding disposal (DIT, RIA), while two libraries have specific policies of no disposal (NLI and UCC). Two libraries carry out annual reviews of the short loan collection specifically with a view to disposal (DCU, UCD). Three libraries are currently reviewing their policies (DCU, UCC and UL).

Those libraries who dispose of material, have specific criteria for selecting material for disposal, including the following:

* Obsolete or superseded editions or formats
* Multiple copies
* Relevance
* Condition
* Unsatisfactory serial runs
* Historical or intrinsic significance
* Level of use
* Availability of alternatives
* Space
* Donation/ownership
* Cost

### 2.7 Regional considerations in storage and retention policies

Most libraries consider regional thinking very important and welcome regional and/or national collaboration. Only two libraries, which are legal deposit libraries, regard collaboration on storage as either not important or not an option.

Reponses to this question showed a difference in opinion in the definition of ‘regional’, with some libraries considering a national collaborative effort as being a regional approach, while others considered regional to refer to the local geographic region only. Those who interpreted regional as ‘national’ were predominantly positive in their attitude to future collaborative storage approaches. Only TCD and NLI felt that a collaborative approach would be of limited value to them, as they are inhibited from taking full advantage of the opportunities that a national approach might offer by their ongoing commitment to print legal deposit, but it might be possible to speculate about the storage of back-runs of print legal deposit journals for which an electronic surrogate exists.

The libraries who interpreted ‘regional’ as applying to specific local regions within Ireland had mixed views on the importance of regional considerations. NUIM felt that the collections are not large enough to warrant regional solutions and would favour a national approach. UCC on the other hand recognises the importance of its role in preserving regional printed and manuscript heritage sources in Munster and contributes to the preservation of the cultural heritage of the local region. UL actively acquires and preserves material relating to Limerick City and County.

Two of the Dublin libraries indicated that their geographical proximity to other major research libraries had an influence on their retention policies (RCSI and DIT). UCD suggested that as TCD and NLI are in close proximity and are legal deposit libraries with a commitment to retain last resort copies of Irish and UK publications, it would make sense for UCD and other libraries to give priority to the retention of last resort copies of non-UK and non-Irish materials.

TCD and UCD have carried out a joint scoping exercise on chemistry print journal holdings to establish the level of overlap between the collections of the two institutions in this discipline. The outcomes this exercise are detailed in Appendix IV.

### 2.8 Expected policy changes as space pressures grow and costs increase

The majority of libraries expect collection management policies to change due to increasing space problems and the availability of electronic resources. Three libraries are already in zero-growth situations – one of these expects this to influence collection development policies in the future (RIA) while the others have already changed their collection management policies to reflect this (RCSI, NUIM).

The existence of a national storage policy or approach is mentioned by several libraries as being a likely key future influence on collection management policies for certain types of material at least. Even libraries that don’t envisage space pressures in the medium term, e.g. UL, envisages extending by two-thirds within the next 2-3 years, felt that they could greatly benefit from a national policy on storage.

However, legal deposit remains central to the future development and management of collections of both TCD and NLI. The impact of the implementation of legislation extending legal deposit to non-print formats on physical storage requirements is at this point virtually impossible to calculate. National collaborative storage will have no impact on the storage of this material. However, TCD indicated that a rationalisation of the storage of non-legal deposit collections offers some potential to make savings in storage commitments into the future.

Two libraries felt that their collection management policies would not change significantly due to increasing space pressures. UCD felt that their policies may be more stringently implemented but that existing policies would still hold good. NUIM are already implementing strong retention/disposal policies and expect to dispose of some further runs of print periodicals and expand their e-book collection for student texts. They hope that this will result in a self-renewing collection which will not grow to any great extent.

The need to provide storage of acceptable quality and space for growth for both the modern and historic collections is an ongoing and urgent challenge.

### 2.9 Potential impact of electronic resources on future storage policies

All libraries agree that it seems difficult if not impossible to predict the exact impact e-resources and other new trends will have in the next 20 years.

The increase in the availability of electronic journals, e-books and institutional repositories will lead to a decrease in the acquisition of print materials, especially periodicals, in the next 10 years. The stock of printed materials will still continue to increase and hence the need for its storage, but more slowly than in the past. Open access publishing may save some money, which might be used for the purchase of monographs that are mainly available in print format. On the other hand, the online availability of large-scale monograph collections might reduce storage requirements. Availability of full text out-of-copyright works via Google Books etc. might lead to a further reduction of storage needs. Issues surrounding preservation and archiving of electronic journals will have been addressed, so that electronic-only subscriptions become the norm. There will be a small growth in physical collections in some subject areas, static and reducing growth in others (for example, science).

The British Library in cooperation with the publishing community and the other UK legal deposit libraries is developing a technical framework for the ingest, storage, preservation and access to digital publications deposited under legal deposit provisions. Advancement towards e-deposit has been slow to date, but it is reasonable to assume that the rate of progress will increase as technical and legal solutions emerge, are tested and agreed by the stakeholders.

The trend in academic publishing is increasingly favouring output in electronic format as a complement or in place of print. Whether e-deposit would be an option for non-academic/general interest publications is less clear. A substantial move away from print to e-deposit would have significant impact on storage requirements going forward, particularly beyond the 10 year horizon. Currently this future impact is difficult to calculate.

## 3. Institutional priority of space shortage issues

### 3.1 Key Points

* Library management in ten of the eleven institutions surveyed consider space shortage

to be of sufficient priority to warrant immediate action.

* Institutional management are broadly in agreement.
* Four libraries are engaged in building or planning to build additional library space.
* Another four libraries are considering or planning storage space for library stock.
* The majority of respondents do not expect the views of library or institutional management to change.

### 3.2 Priority given to resolution of space shortage within the Institutions



High Priority – solution is in progress or in planning

Medium Priority – solution is under consideration

Low Priority – this issue is not being considered at this time

Nine libraries are actively planning solutions to their space shortage needs, while the resolution of the problem is viewed as high priority by six of those nine parent institutions:

* A new DIT campus is being planned at Grangegorman, with first students on site 2010/2011. These plans include a new single library building to replace current eight units.
* Planning permission has been obtained by the NLI for a new 6,108 sq.m. repository building on-site, in response to serious storage capacity problems plus concerns in relation to suitability of certain storage areas.
* NUIG is suffering from a severe shortage of space in the main library and in stores, especially for archives and special collections. Funding has been promised for a Humanities and Social Sciences Research Library, which will increase the space available for archives and special collections only. Plans are also under consideration for a custom built off-campus store.
* NUIM received the go ahead for an extension to its existing library in November 2008.  As yet the extra amount of shelving is difficult to quantify as the extension is only at the design concept stage, however, it is unlikely that there will be a significant increase in storage capacity.
* There are ongoing concerns in RCSI with limited library and campus space. The Library engages in continual evaluation of library collections to justify space utilisation.
* The RIA is stretched to capacity, and library has lost most of its original space. Off-site storage has alleviated the problem to a limited extent.
* Phase 1 of UL Library was designed to accommodate 350,000 volumes and 1,000 reader spaces in 1998. It is now accepted as a strategic priority that space for a further 350,000 volumes and an extra 830 reader spaces is required. Planning is under way for Phase 2, with a completion date in late 2010/early 2011. The expansion programme is concentrating on creating user and social space as much as addressing collection space shortages. Physical space remains an important concern in the meantime.

Two libraries are actively planning solutions to storage needs, however institutional senior management assign only medium priority to the matter:

* TCD Library effectively ran out of storage space during the summer 2008. External consultants have been employed to review the situation, including space requirements until 2025. The recommendations are under consideration by senior TCD management. In addition, TCD Library has produced a plan for interim storage measures (2008-2016). These are also being costed.
* UCD Library has identified a growing need to release space to accommodate study and collaborative work by reviewing underused stock.

In UCC, while Library senior management assign high priority to space shortages, the issue is regarded by university management as a low priority problem. A new library extension which includes approximately 50% increase in Special Collections shelf space was completed in summer 2007. However, storage space for low demand library materials continues to be an issue. Institutional support for further library accommodation at UCC is currently unlikely. The issue will partially be addressed by the implementation of collection management policies on storage and retention deriving from a recently agreed Collection Development Policy. A strategic priority for the library is the replacement of the current off-campus store in Pouladuff with a purpose-built facility to include a reading facility or additional services.

In DCU, the resolution of space shortages is not seen as a matter of concern at either library or institutional level. DCU Library is a relatively new building and as such no space shortages exist at present.

### 3.3 Future changes to priorities

The majority of respondents do not expect the views of library or institutional management to change. However, DCU believe that change is possible in the future as collections develop. In TCD, institutional views may change if the library is unable to meet its legal deposit obligations, and if finance for storage solutions becomes available. Institutional views in UCC may be influenced by library requests for finance to cope with growth in demand for a research resources and subsequent storage requirements from an expected increase in postgraduate student numbers.

## 4. Storage options explored or currently being explored

### 4.1 Key Points

* There is a clear difference in approach depending on seriousness of each library’s current space shortage.
* Libraries have taken a variety of approaches to dealing with space shortages including the building of a library extension, the acquiring of an additional off-site store, the use of commercial storage companies and the disposal of stock.
* The concept of a collaborative store is considered a possibility that may need to be explored in the future by most libraries, while one Library is already actively considering it.
* Only RCSI and UCD do not consider a collaborative store of any kind as a concept they may need to explore in the future.
* Apart from the RIA, which would not be happy to cede ownership of material, there is no difference indicated from the survey responses between libraries’ willingness to explore a fully collaborative store, where libraries cede ownership of the material they deposit, and a collaboratively managed store, that is a shared store where material remains in the ownership of the Library depositing it. Although subsequent to the survey, it has become clear that this will create difficult policy issues for TCD and the NLI.

### 4.2 Storage options considered or implemented by CONUL Libraries

Several libraries have recently implemented or are actively considering acquiring or building a library extension that would provide them with more space. Only two libraries have not considered this option. Of these two, DCU has had a new library building within the last ten years and therefore has no space shortages as yet and the RIA building being landlocked has no possibility of expansion. RCSI and UCD both considered a library extension but rejected this option – RCSI followed a route of significant disposal as an alternative, while UCD have constructed a separate on-campus store. Four libraries have also recently made use of part of a new institutional store (on or off the main site), while three others are actively considering this option.

A clear difference can be seen between the libraries regarding disposal of material. The NLI and UCC both have a “retain all” policy. While the NLI has not considered nor would consider significant disposals as an approach to dealing with space shortages, UCC believes it may be necessary in the future. Other libraries (DCU, DIT, RIA, TCD) have not considered disposal in the past but feel that they may need to in the future, while UCD Library has considered but rejected large scale disposal as a solution to space shortage. Other libraries (NUIM, NUIG, RCSI, UL) have carried out or are actively planning disposal of material.

NUIG and the NLI have both made use of storage space in a shared off-campus store. UL considered this option but rejected it, as the potential partner did not wish to go ahead. The remaining Libraries have either not considered this option or see it as something potentially worth exploring in the future.

The concept of a collaborative store is considered a possibility that may need to be explored in the future by most libraries, while NUIG is already actively considering it. Only RCSI and UCD do not consider a collaborative store of any kind as a concept they may need to explore in the future. Apart from the RIA, which would not be happy to cede ownership of material, there is no difference indicated from the survey responses between libraries’ willingness to explore a fully collaborative store, where libraries cede ownership of the material they deposit, and a collaboratively managed store, that is a shared store where material remains in the ownership of the Library depositing it. This is an area where further discussion is warranted to explore the extent to which a fully collaborative store would be possible and whether Libraries would be willing to cede ownership of material stored collaboratively. One library suggested that distributed collaborative storage should also be explored, where each Library would take responsibility for retaining particular material within their own existing storage space, allowing the other Libraries to dispose of that same material if required.

Alternative storage models have been explored by only two libraries. Both the NLI and UCC are making use of commercial storage facilities. Interestingly both of these libraries have a ‘retain all’ policy, which has led to chronic space shortages.

It should be noted that subsequent to the survey, it has become clear that the question of ceding ownership will create difficult policy issues for TCD and the NLI.

## 5. Space Shortage Statistics

### 5.1 Key Points

* As of this moment in time the unused storage capacity (on or off-campus) across all CONUL Libraries stands at **9.33** km. The estimated additional storage needs in 2017 is **100.32**km and in 2027 is **198.42**km. This means there will be a very significant storage capacity shortfall in the next two decades if the situation is not addressed.
* The estimated additional storage needs in 2027 are **198.42**km, which is nearly equivalent to the current storage capacity within the libraries of **208.88km.**
* Other current storage capacity on campus (**11.92 km**) and current storage capacity in any off-campus store (**109.83km**) is in total **121.75 km**.
* Not all material requiring storage is accounted for in the figures given e.g. master microfilm, exhibition materials, conservation equipment, unprocessed material and material held in departmental libraries. If these were included in the estimated additional storage needs in 2017 and 2027, then the figures would be even higher.

### 5.2 Summary of Space Shortage Statistics (in Linear Km)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Monographs** | **Serials** | **Archives/ Special Collections** | **Others\* (Please specify)** | **Unspecified** | **Total** |
|
| **Current storage capacity within the Library** | 93.1526 | 60.472 | 43.547 | 11.7117 |  | **208.8833** |
| **Other current storage capacity on campus** | 3.332 | 3.664 | 1.42 | 0 | 3.50 | **11.916** |
| **Current storage capacity in any off-campus store** | 64.282 | 36.292 | 5.824 | 3.436 |  | **109.834** |
| **Subtotal current storage capacity** | 160.766 | 100.426 | 50.791 | 15.1477 | 3.50 | **330.6333** |
| **Total current unused storage capacity (on or off campus)** | 2.361 | 2.354 | 0.162 | 0.839 | 3.617 | **9.333** |
| **Estimated total additional storage needs in 2017** | 42.163 | 17.205 | 13.2388 | 17.7009 | 10.003 | **100.3197** |
| **Estimated total additional storage needs in 2027** | 83.307 | 32.722 | 25.5436 | 28.9874 | 27.86 | **198.42** |

\*Others – for example microfilm, AV material, photographic collections, institutional records, etc.

* 1. **Part 4 – Space Shortage Statistics: Individual Library Responses**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **DCU** | **DIT** | **NUIG** | **NUIM** | **NLI** | **RCSI** | **RIA** | **TCD** | **UCC** | **UCD** | **UL** | **Total** |
| **Current Storage Capacity within the Library \*\*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Monographs | 4.97 | 4.9966 | 9.873 | 8.3 | 6.144 | 1.607 | 1.191 | 25.588 | 7.1 | 18.42 | 5.375 | **93.5646** |
| Serials | 3.19 | 2.54 | 7.96 | 2.88 | 5.348 | 0.835 | 0.988 | 15.993 | 4.44 | 12.21 | 4.498 | **60.882** |
| Archives/Special Collections | 2.87 | 0.005 | 2.266 | 2.981 | 3.652 | 0.436 | 1.124 | 18.949 | 7.3 | 1.76 | 2.444 | **43.787** |
| Others\* (please specify) | 0.12 | 0.5267 | 0.392 | 0 | 7.813 | 0 | 0 | 0.451 | 1.035 | 1.15 | 0.224 | **11.7117** |
| **Total** | **11.15** | **8.0683** | **20.491** | **14.161** | **22.957** | **2.878** | **3.303** | **60.981** | **19.875** | **33.54** | **11.479** | **208.8833** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Other Current Storage Capacity on Campus** |  |  |  |  |  |  |  |  |  |  |  |  |
| Monographs | 0 | 0 | 0.384 | 1.8 | 0 | 0 | 0 | 1.148 | 0 | 0 | 0 | **3.332** |
| Serials | 0 | 0 | 2.329 | 0.64 | 0 | 0 | 0 | 0.695 | 0 | 0 | 0 | **3.664** |
| Archives/Special Collections | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.72 | 0 | 0 | 0.7 | **1.42** |
| Others\* (please specify) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | **0** |
| Unspecified |  |  |  |  |  | 0 |  |  |  | 3.5 |  | **3.5** |
| **Total** | 0 | **0** | **2.713** | **2.44** | **0** | **0** | **0** | **2.563** | **0** | **3.5** | **0.7** | **11.916** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Current Storage Capacity in any Off-Campus Store** |  |  |  |  |  |  |  |  |  |  |  |  |
| Monographs | 0 | 0 | 0.403 | 0 | 6.746 | 0 | 0 | 50.371 | 6.6 |  | 0 | **64.12** |
| Serials | 0 | 0 | 0.426 | 0 | 3.975 | 0 | 3 | 23.784 | 4.387 |  | 0.06 | **35.632** |
| Archives/Special Collections | 0 | 0 | 0 | 0 | 0.7 | 0 | 0 | 5.124 | 0 |  | 0 | **5.824** |
| Others\* (please specify) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.971 | 0.465 |  | 0 | **3.436** |
| **Total** | **0** | **0** | **0.829** | **0** | **11.421** | **0** | **3** | **82.25** | **11.452** | **n/a** | **0.882** | **109.834** |
|  | **DCU** | **DIT** | **NUIG** | **NUIM** | **NLI** | **RCSI** | **RIA** | **TCD** | **UCC** | **UCD** | **UL** | **TOTAL** |
| **Total Current Unused Storage Capacity (on or off campus) \*\*\*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Monographs | 0.14 | 0 | 0 | 0 | 0 | 0.16 | 0 | 1.959 | 0 |  | 0.102 | **2.361** |
| Serials | 0.53 | 0 | 0 | 0 | 0 | 0.167 | 0.44 | 0.84 | 0 |  | 0.377 | **2.354** |
| Archives/Special Collections | 0 | 0 | 0 | 0 | 0 | 0 | 0.01 | 0 | 0 |  | 0.152 | **0.162** |
| Others\* (please specify) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.815 |  | 0.024 | **0.839** |
| Unspecified |  |  | 1.033 |  | 2.584 | 0 |  |  |  |  |  | **3.617** |
| **Total** | **0.67** | **0** | **1.033** | **0** | **2.584** | **0.327** | **0.45** | **2.799** | **0.815** | **n/a** | **0.655** | **9.333** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Estimated Additional Storage Needs in 2017\*\*\*\*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Monographs | 1.11 | 3.096 | 3.41 | 0.411 | 2.25 | 0 | 0 | 24.49 | 0 | 3.47 | 3.725 | **41.962** |
| Serials | 1.04 | 0.578 | 0.633 | 0.297 | 0.507 | 0 | 0 | 10.5 | 0 | 2.31 | 1.34 | **17.205** |
| Archives/Special Collections | 1.14 | 0.0228 | 0.5 | 0 | 8.376 | 0 | 0 | 2.55 | 0 | 0 | 0.65 | **13.2388** |
| Others\* (please specify) | 0.07 | 0.2399 | 0 | 0 | 1.15 | 0 | 0 | 15.75 | 0 | 0.5 | 0 | **17.7099** |
| Unspecified |  |  |  |  |  |  | 0.31 |  | 9.693 |  |  | **10.003** |
| **Total** | **3.36** | **3.9367** | **4.543** | **0.708** | **12.283** | **0** | **0.31** | **53.29** | **9.693** | **6.28** | **5.916** | **100.3197** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Estimated Additional Storage Needs in 2027\*\*\*\*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Monographs | 1.83 | 4.841 | 5.396 | 0.522 | 4.125 | 0 |  | 49 | 0 | 6.14 | 11.453 | **83.307** |
| Serials | 1.88 | 0.939 | 0.921 | 0.342 | 0.912 | 0 |  | 21 | 0 | 3.94 | 2.788 | **32.722** |
| Archives/Special Collections | 2.29 | 0.0036 | 1 | 0 | 16 | 0 |  | 4.95 | 0 | 0 | 1.3 | **25.5436** |
| Others\* (please specify) | 0.31 | 0.3774 | 0 | 0 | 2.3 | 0 |  | 25.75 | 0 | 0.25 | 0 | **28.9874** |
| Unspecified |  |  |  |  |  | 0 | 0.61 |  | 27.25 |  |  | **27.86** |
| **Total** | **6.31** | **6.161** | **7.317** | **0.864** | **23.337** | **0** | **0.61** | **100.7** | **27.25** | **10.33** | **15.541** | **198.42** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| \*Others - for example microfilm, AV material, photographic collections, institutional records | | | | | | |  |  |  |  |  |  |
| \*\*Library storage capacity - please include all open access shelving as well as closed access areas within the Library | | | | | | | | | |  |  |  |
| \*\*\* Storage capacity should only be included here if it is available to the Library and suitable for the Library's purposes | | | | | | | | | |  |  |  |
| \*\*\*\* Estimated future storage needs. Guidance on estimating future storage needs - Collection Growth formula | | | | | | | | |  |  |  |  |

### 5.3 Methodology

This section of the Survey focuses on the current storage capacity and estimated additional storage needs in 2017 and 2027 for CONUL member libraries. Libraries were asked to provide their current storage capacity in linear kilometres of shelving space, within the library, on campus and any off-campus storage capacity. They were also asked to provide current unused capacity (on or off-campus). They were requested to include all library storage capacity, both open and closed and to include only storage capacity available and suitable for library purposes.

The estimated additional storage needs were calculated using a Collection Growth Formula and this formula was provided in the form of two Excel spreadsheets, one for monographs and one for serials (See Appendix I). An average percentage increase per annum was calculated based on the previous five years intake for monographs and serials and was used to calculate the estimated growth for the next 10 and 20 years. The estimated decrease in the additional storage needs due to electronic conversion was also calculated based on a British Library commissioned report (Shenton, 2005). This was then deducted from the estimated growth. The British Library figures for electronic conversion were adjusted downwards, to take into account the Irish context. Finally, the average number of volumes weeded per annum was calculated and also deducted from the estimated growth to arrive at the estimated total additional storage needs in 2017 and 2027.

### 5.4 Discussion

Six of the eleven libraries surveyed already use off-campus storage facilities to varying degrees. TCD is the biggest user with 56% of its material stored off-campus; followed by RIA with 48%, of which all are serials; then UCC with 37%; NLI with 33%; NUIG with 3.5%; and UL with 0.5%, of which all are serials. Despite the use of off-campus storage by these libraries, they have very little unused storage capacity. They account for 8.336 km of the 9.333 km of unused storage capacity. DCU and RSCI have the remainder of the unused storage capacity and DIT, UCD and NUIM have no unused storage capacity.

RCSI is actively pursuing a policy of zero growth and this is reflected in its estimated additional storage needs in 2017 and 2027 of zero. The RIA used its own growth formula based on consistent year on year monograph figures and a drastically reduced journal intake policy for its estimated additional storage needs. All the other libraries used the Collection Growth Formula to calculate their estimated additional storage needs (See Appendix I). With the exception of the RCSI, the other ten libraries all need additional storage space in 2017 and 2027. By 2027 six of the eleven libraries (UL, UCC, DIT, TCD, NLI, DCU) will need to more than double their current storage capacity to meet their estimated additional storage needs. The highest of these six is UL at 113% increase over current storage capacity and the lowest of the six is DCU with a 53% increase. The highest of the other four libraries (UCD, NUIG, NUIM, RIA) is UCD with a 34% increase over current storage capacity to the RIA with a 9% increase.

**6. Costs – Overall Analysis**

### 6.1 Key Points

* A wide variety of approaches have been taken to dealing with storage needs to date.
* Costs where available vary greatly depending on the type of storage facility involved and the staffing requirements of that facility.
* It is not possible to draw out cost projections for any potential collaborative store from the current costs of existing store given the variance.

### Discussion

This section of the Survey focused on the current and anticipated costs of storage for CONUL libraries. The current costs vary greatly depending on how the libraries have dealt with their storage needs. The Libraries that use off-site rental storage with retrieval services include NLI and NUIG. UCC operates a rented off-site store including staffing the facility for retrieval services. UL and TCD use off-site commercial storage with retrieval services. In addition, TCD owns and operates an off-site storage facility. NUIG and TCD operate an on-campus closed-stack storage facility which includes staffing for retrieval services. UCD has recently acquired and commissioned a vacant building on the edge of campus which is furnished with mobile shelving. This UCD facility is operated by existing Library staff (but not included in stats).

The future costs predictably vary depending on the future solutions being considered. This ranges from additional rented off-campus storage (UL), on-campus or on-site extensions (NLI, UL), and/or a completely purpose-built automated book-stack facility (TCD).

If the option of a collaborative store is considered a possibility for meeting the future needs of the CONUL libraries, then we would have to cost such a venture. There are a number of Libraries in the UK that are currently building high-density fully-automated robotic book-stack facilities and this may offer opportunity for further exploration.

Costs would include: (i) land, (ii) building, (iii) equipment, and (iv) staffing to administer and provide services.

This idea will require further discussion to explore the extent to which a collaborative storage option would be acceptable and feasible, with CONUL Libraries sharing set-up and operating costs.

### 6.3 Summary of responses

(Only libraries who responded to this question are included)

|  |  |  |
| --- | --- | --- |
|  | **Capital and operational costs of current storage** | **Projected capital and operational costs for adding new storage capacity** |
| **NLI** | Capital costs for off-site storage do not accrue to the Library.  Operational costs for 2006 (including costs of retrieval of material for readers) totalled approximately €63,000. | With planning permission now in place for the new repository building, our immediate focus will be on putting in place the planning team for this major capital project. We are not in a position to respond at this point on the composition of storage, etc. |
| **NUIG** | Rented off campus storage in Ballybane costs €58,000 per annum, plus service charges (servicing and insurance) of €5,000 per annum. | No - new on-campus purpose built store in planning, but no costs available as yet. |
| **RIA** | No current capital overheads.  Operational costs: €170 per annum | No |
| **TCD** | a) Santry Book Repository & Campus Bookstacks =  €270,000 per annum approx.  b) Courier Service to and from Santry = €15,000 per annum approx.  c) Commercial Storage = €23,500 per annum approx. | €50 Million for a new automated bookstack facility + costs (for necessary book moves, etc.) |
| **UCC** | Current operational costs for Library Store at Pouladuff (approx. 11,000m) per annum are:  Staffing €110,000 + Rental €223,000: Total = €335,000 | No |

|  |  |  |
| --- | --- | --- |
|  | **Capital and operational costs of current storage** | **Projected capital and operational costs for adding new storage capacity** |
| **UCD** | Capital costs to furnish store with mobile shelving to house 200,000 vols (7,862 metres) = €400,000  (Operated by existing staffing)  It was noted that costings in UCD for storage were calculated at €2 per volume. | Quotation from Storage Systems for Compactus Power mobile shelving at €400,000 for 200,000 volumes. |
| **UL** | Current off-site commercial storage costs = €22,500 per .annum. (approx.)  The above figure does not include once-off charges of c. €5,000 (e.g. new boxes, new box intake charges, collections etc.) for extra material (approx. 830m) stored off-site in 2008. | The projected need for extra short-term storage off-campus is c. €15,000 per annum. This amount is for rental charges only and does not include any occasional access and delivery charges. This should be a temporary arrangement until extra storage is provided with the new Library extension due in late 2010/early 2011.  The Library is also embarking on a shelving upgrade and repair programme. Extra as well as new shelving will be needed to accommodate collection development in the near future in advance of the Library expansion programme (phase 2). This programme is estimated at €50,000 – not including staff or cataloguing costs. |

**F. Options for Ireland**

**Introduction**

In the following section the committee have outlined the various Options for Ireland with definitions, and illustrated these with examples of current models of collaborative or co-operative storage where appropriate.

**Option 1: Shared Regional Stores**

***“Shared Regional Stores, where individual HEI’s rent space for their own materials in a shared building and each institution arranges its own delivery, access and services.”* (CHEMS, 2005: 4)**

**Description:**

This option is where a group of institutions wishing to collaborate rent space in a store (which may or may not be owned by an academic institution) and organise their own access to it. There is no common policy, and libraries retain the full ownership over the stock they deposit. Tenants of the store only have access to their own collections. The number of stores could vary, depending on the number of institutions participating. One central store would be possible, although a number of regional stores would be more likely.

**Advantages:**

* Potential reduction in storage costs – group of institutions could negotiate a better deal in purchasing storage space and the final product would reflect the reality of planned facilities.
* Economies of scale achieved through high-capacity, modular construction
* May require a reduced level of capital investment
* Storage efficiencies – use of automated storage equipment and latest warehousing technologies
* Release space on-site for other collections or activities
* Older print material can be preserved if appropriate temperature and humidity conditions are provided
* Participating libraries retain ownership and control over their own materials
* Offers a regional solution – might be more politically acceptable than a national solution

**Disadvantages:**

* No access to other partner libraries’ stock without supplementary agreements
* Lack of long-term commitment to retention, preservation etc. without additional agreements
* Does nothing to encourage the disposal of duplicated low use material, thereby incurring unnecessary storage costs
* Inefficient use of storage space
* Less likely to attract funding support
* Decisions on disposal taken by individual libraries – no guarantee of preservation of material without additional agreements
* Leasing arrangements may not be satisfactory to all parties

**Summary:**

This option could best be described as being “cooperative” in nature, rather than “collaborative”. In this approach, two or more libraries share a facility, but do not collaborate on what is placed in the store. Ownership of material is retained by the parent library. The storage facility thus acts as a depository, rather than a repository. In other words, it is only a more efficient type of institutional storage approach, with the efficiencies being achieved through the sharing of costs.

As noted in the CHEMS Report, the overall national effect in the UK of adopting this model, would be of extensive duplicate material being stored in different places (and sometimes in the same building), with varying standards of access. This would also potentially be the case in Ireland although our collecting history and therefore the profile of our collections differs somewhat from the UK.

The option is inefficient in that it has no collaborative element, and a lack of agreed policies on access, retention, and management can lead to problems. It is flexible in that depositors can come and go. The option does nothing to open up research collections to users outside the depositor’s own institution without additional agreed policies. While cooperative storage solutions were a feature of early ventures, the collaborative storage approach dominated the literature from the early 1990’s onwards.

**Examples:**

1. **TCD’s Santry Bookstore** – Dublin City Council rent space on behalf of its Public Libraries Department. Collections are housed separately. There are no common access, delivery, or policy arrangements.
2. **CASS Project in Scotland** – but only at the early stages when seven institutions placed their materials in spare space at the National Library of Scotland. (<http://cass.nls.uk/>)
3. **University of London Store at Egham** – one element of this store is where some colleges and non—London University institutions rented space to deposit their materials, and had no interest in other types of collaborative arrangement. However, changes in the use of the facility following the re-organisation of the University, and the fact that that the repository was effectively full at the end of 2004, have necessitated a review of its future. The M25 Consortium of Academic Libraries has conducted a feasibility study of its use as a cooperative venture - **COOLPerStor** (Collaboratively Owned and Operated London Periodical Store) (<http://www.m25lib.ac.uk/>)

The shared facility approach also featured in the planning stages of some US examples, including:

1. **PASCAL** (Preservation and Access Service Centre for Colorado Academic Libraries) (<http://pascal.uchsc.edu/>)
2. **ReCAP (Research Collections and Preservation Consortium)** (<http://recap1.princeton.edu/about/general.html>)
3. **WRLC (Washington Research Library Consortium)** (<http://www.wrlc.org/>)

**Option 2: Collaboratively Managed Stores**

# Description:

A Collaboratively Managed Store (CMS) is a facility, which is shared by a number of institutions, and in its operation there is an element of collaborative management. This collaborative management would include delivery and access to the material held in storage and if required, the operation of a reading room. Under the CMS model of ownership, material held in storage is not normally ceded and there is no de-duplication of the material. The CMS is part of a continuum sandwiched between the Cooperative Store, which is essentially the sharing of space in a facility with no collaborative management and a Fully Collaboratively Managed Store in which ownership is ceded, there is de-duplication of material and it is commonly managed by the participating institutions. A CMS may be constructed, purchased or leased and may be regionally located. Within the definition used by CHEMS Consulting in its document, users cannot access each other’s holdings in the same store (CHEMS, 2005).

**Advantages:**

* There may be significant cost savings, as the cost of the store, whether constructed, purchased or leased will be shared.
* Costs can be apportioned by the space each institution uses to deposit its holdings.
* There are cost savings as services provided are managed commonly such as the delivery of material, access, the catalogue and the operation of a reading room.
* Can release space in each participating institution to other uses such as new acquisitions, study and social space etc.
* Institutions don’t have to cede the ownership of the material they have deposited. This may be seen as an advantage if there is reluctance by the institutions to cede this ownership.
* There is also an exit strategy for institutions wishing to leave, which is not part of the Fully Collaboratively Managed Store model.

**Disadvantages:**

* There is no incentive towards de-duplication of the material held in store. This means that there could be many copies of the same material held and this is an inefficient and costly use of the space.
* There is also no shared policy on what is to be kept, its condition or formats. So this makes the preservation of the material more difficult as there is no central control.
* Users cannot access each other’s holdings in the same store.
* The existence of an exit strategy weakens the commitment of partners towards longer term strategies.

**Summary:**

The CMS model will achieve cost savings as the costs of the store are apportioned and can release space on-site for the participating institutions. It does take away the worry of ceding ownership but does not lead to de-duplication, to a shared policy on what is kept, or to the sharing of each other’s holdings. The opportunity is lost to make significant savings in costs and space due to a lack of de-duplication.

**Examples:**

1. **Washington Research Library Consortium (WRLC) (**<http://www.wrlc.org/>) **-** This is an offsite storage facility constructed for seven universities to free space for newer or more heavily used materials. It is a high-density facility with retrievable storage for books, audiovisual, microforms and journals and a reading room. The material is catalogued and users of the WRLC libraries may submit online requests for items stored. Journal articles are transmitted electronically to the requester at a password-controlled website. The facility was constructed in 1993 on donated land and funded by the U.S. Department of Education. WRLC members pay an annual members fee, which covers the cost of building utilities, maintenance and for the staff that retrieve and deliver requested materials. There is no additional charge for storage but member institutions pay a once-off cost for accessioning items into the storage facility. It does allow duplicates but varies slightly from the CMS model described above in that it does allow items on the shared online catalogue to be accessed by users of all WRLC libraries.
2. **Collaborative Academic Library Store for Scotland (CASS)** (<http://cass.nls.uk/>)**-** Another example nearer to home is the pilot scheme for the storage and delivery of little used materials by seven Scottish academic libraries known as the Collaborative Academic Library Store for Scotland (CASS). The first phase of this pilot scheme ran from February 2004 to July 2006 as an initiative of the Scottish Confederation of University and Research Libraries and the National Library of Scotland. Space is leased from the National Library of Scotland which also provides operational support. The libraries supply catalogue records for addition to the CASS catalogue. Again there is no de-duplication of items and ownership was not ceded but like the WRLC all CASS members can borrow items. During the pilot over 5km of stock were deposited in CASS and it did enable one of the participating members, Glasgow Caledonian, to create an additional 1,000 study places. Funding for the pilot scheme came from the Scottish Funding Council but the aim in the future is to meet ongoing recurrent costs by spreading the costs equitably between the members. Also, in the future it will be looking at either joint ownership or ceding ownership to a third party and the elimination of duplicates.

**Option 3: Fully Collaborative Store**

# Description:

A Fully Collaborative Store is where member institutions manage a collection collaboratively according to mutually agreed policies on retention, disposal, delivery and preservation that meet the needs of their user communities. A core principal would be that members accept that they will cede ownership and control over everything they deposit with the organising group of the consortium. This means that in a Fully Collaboratively Managed Store ownership is ceded, there is de-duplication of material and it is commonly managed by the participating institutions. This definition is based on CHEMS Consulting: Optimising Storage and Access in UK Research Libraries: A study for CURL and the British Library (CHEMS, 2005).

**Advantages:**

* There may be significant capital cost savings, as the cost of the store, whether constructed, purchased or leased will be shared.
* There are additional running cost savings as services provided are managed commonly such as the delivery of material, access, the catalogue and the operation of a reading room.
* There is de-duplication of material held in store. This means that there are a limited number of copies of the same material held and this is an efficient and cost effective use of the space.
* There is a shared policy on what is to be kept, its condition and formats. So this makes the preservation of the material more efficient and effective given this central control of policy.
* The participating institutions have access to all the holdings of the store which expands the collections of all.

**Disadvantages:**

* Institutions have to cede the ownership of the material they have deposited.
* The process of reaching agreement is likely to be lengthy with many issues, such as ceding ownership, being contentious.
* Institutional advantage may be eliminated when holdings of all are accessible by all.
* There is de-duplication of material held in store. This means that there are limited copies of the same material held and this may hamper access.

**Summary:**

The Fully Collaborative Store model is the most cost effective and efficient storage model. This is achieved by the ceding of ownership which leads to de-duplication, to a shared policy on what is kept, a joint preservation policy and access or sharing of the store’s holdings. This provides an opportunity to make significant savings in costs and space due to de-duplication.

**Examples:**

1. **CAVAL Archive and Research Materials (CARM) Centre** (<http://www.caval.edu.au/carm.html>)In summary, the main messages from CARM are that it succeeded as a result of a combination of pressures both from the Vice-Chancellors of the participating institutions and the government of the state, and this provided the rationale for funding of the capital costs of the project. CARM also shows that such collaborative ventures are possible, and that if access and delivery services can be offered to a high standard the academic community will be content. The financial implications of CARM are that substantial de-duplication has been made possible in member libraries, and that the last copies in CARM are being stored at a much lower cost than they would be on any member’s campus.
2. **Collaborative Academic Library Store for Scotland (CASS) -** Although the CASS is currently a collaboratively managed store, it is interesting to note that in the future the members will be looking at either joint ownership or ceding ownership to a third party with the elimination of duplicates.
3. **The Five College Library Depository (FCLD)** (<http://www.fivecolleges.edu/sites/depository/>) **-** The Five Colleges, Inc. was created in 1999-2000 and is the first Fully Collaborative Store in North America, in summary; the Five College Library Repository serves Amherst College, Hampshire College, Mount Holyoke College, Smith College, and the University of Massachusetts at Amherst. It has taken the storage of little-used research materials a step further than simply storing it in a collaborative off-site store. It calls for the de-accessioning of duplicate copies and joint ownership of the remaining collection. It requires a level of interdependence and trust that would not be tested in a collaborative storage arrangement. It is interesting to note that this Five Colleges, Inc. had the backing of the each of the Presidents of each College as a response to significant storage issues. The Presidents saw the cost benefit of the arrangement of a Fully Collaborative Store.
4. **PASCAL, the Preservation and Access Service Center for Colorado Academic Libraries** (<http://pascal.uchsc.edu/>) **-** Colorado’s high-density facility for low-use materials, Preservation and Access Service Center for Colorado Academic Libraries (PASCAL) is jointly operated by four libraries which came into being in 2000: the University of Colorado at Boulder, the University of Colorado at Denver, the University of Colorado Health Sciences Center, and the University of Denver; a public-private institution partnership. PASCAL goes further than the Five College, Inc. by committing to collaborative collection management and by offering collection access and delivery to a large number of non-depositing libraries. By doing this it has become a state-wide resource for both academic and public libraries.
5. **The Center for Research Libraries (CRL)** (<http://www.crl.edu/>) **-** Although for all intents and purposes this is a collaboratively managed store, it does have the ear-markings of becoming a Fully Cooperative Store. The CRL has a collection development policy and actively collects research materials for its members. CRL members can relegate items to storage within the strict guidelines and collection policy of the center. ‘Since the basic purpose of the CRL is to augment the research resources of the member libraries, there is no value in its holding what is commonly available within the member libraries themselves, nor is there value in keeping what would be worthless in a member library’s own collection’ (CRL 2000).

## Option 4: Distributed Collaborative Storage

While most attempts at collaborative storage worldwide involve a shared physical space where material is stored collaboratively, there is an alternative approach to collaborative storage worthy of consideration. This involves distributing the responsibility of storing copies of last resort between libraries, such that participating libraries are free to discard material, unless theirs is the designated copy of last resort.

This model would involve no physically shared store as such. Libraries would maintain their own on or off campus stores as is currently the case. However, the Libraries would share the burden of storing low use research materials. Each Library would guarantee to permanently retain, preserve and make available to the other CONUL Libraries a copy of last resort of a particular set of material. One or more guaranteed copies of last resort of all material would therefore be permanently retained by one of the CONUL Libraries, with the burden of total retention shared between the Libraries. For example, NUI, Galway might agree to retain a full print run of Chemical Abstracts, while NUI Maynooth agree to retain the full print run of Biological Abstracts, etc. The other CONUL Libraries would then be free to discard their copies of this material, knowing that a copy, or copies, of last resort is being permanently retained and preserved by another member Library.

This model would require a great deal of coordination and negotiation via CONUL in deciding who would retain what material. The allocation of retention responsibility could be based proportionately according to available space or by some other method to be agreed by the CONUL Librarians. A decision would have to be made regarding the number of copies of last resort felt to be required. This would probably be affected by the availability of secure electronic access to the same material and by developments in the UK.

**Advantages:**

* Significantly lower capital costs involved although operational costs may increase.
* The pragmatism of this solution reflects the current economic reality within the academic sector.
* Shared access arrangements exist between the CONUL Libraries, meaning that users would be free to consult the copy, or copies, of last resort in its home library or perhaps under agreed conditions to request it by Inter-Library Loan.
* Existing storage capacity could be freed up by the ability to discard material whose permanent retention is committed to by other CONUL Libraries.
* This model could provide an interim solution which would solve some of the more immediate storage issues currently experienced in some CONUL Libraries.

**Disadvantages**

* The majority of low-demand materials are likely to be retained by a small number of larger libraries.
* The quality of the environmental storage conditions will vary from library to library depending on the age and suitability of their existing stores. Were a new collaborative store to be built, it could be ensured that necessary environmental standards e.g. BS 5454: 2000 could be met.
* CONUL Libraries would have to trust the holder of the copy, or copies, of last resort to preserve their copy in suitable conditions.
* There would have to be a significant degree of certainty that the retaining libraries permanently abide by their commitment to retain the copy of last resort regardless of future space and financial constraints.
* There may be a variance in document delivery times depending on the staffing levels of the ILL service in particular Libraries. There is already great variance in the staffing levels of ILL in each of the CONUL Libraries, and this will affect the speed of document delivery.
* The ability to provide electronic delivery of documents requested will also vary from library to library depending on the technical abilities of the staff involved and the hardware available to them.
* It is possible that partners may not be happy to discard material being held by another Library, since “the raw number of volumes held is a deeply rooted index of library prestige. As CONUL Libraries are competing as well as collaborating, it is possible that the perceived loss of prestige relative to the library which is retaining the material in question, may deter libraries from participating. However, it is in the users’ interest to move towards measures of quality of service given and of the range of titles to which access is promptly provided wherever and however housed, and away from indiscriminate counting of all volumes ever acquired. (Buckland, 1990: 47-48) IReL has already partially lessened the extent to which we compete in terms of available collections. Our competitive advantage may be more likely to be in the terms of quality of service in this scenario.
* This model may only be effective in the short-term

**Examples of Distributed Collaborative Storage:**

1. **UK Research Reserve (UKRR)** (<http://www.ukrr.ac.uk>) **-** The UKRR is a collaborative storage project amongst UK Higher Education Libraries currently in its second phase. The model presented by the UKRR is that one copy of all affected material be kept by the British Library (the access copy) and that two additional copies of last resort be kept by two participating libraries. Thus the UKRR combines a collaborative physical store and distributed collaborative storage. The model works thus: any participating library wishing to discard a significant periodical run applies to SCONUL for permission to do so. SCONUL checks the BL and UK HE holdings of that title via SUNCAT. If the BL and two other participating libraries have a complete run of the title, then permission is given to discard. If there are gaps in existing holdings, the discarding library provides the volumes to fill the gaps where possible and can then discard the remainder. If the title is not held by two other libraries, the requesting Library will not be given permission to discard and theirs will become one of the two copies of last resort. Over the medium term it will be ensured that the retention of copies of last resort will be fairly distributed across the HE sector. To achieve this it may be necessary to transfer material from one library, already committed to retaining significant amounts of material, to another Library who hasn’t yet had their share of material to retain. The BL’s copy of all material will be considered the ‘access copy’ and the well established BL document supply centre will be the mechanism for ease of access to material in the UKRR (Wright, 2007)**.**
2. **Bibliotheksverbund Bayern (Regional Library Network Bavaria)** (<http://www.bib-bvb.de>**) -** In Germany two national stores are already in existence, which attempt to collect all material published in or about Germany. In addition within Bavaria, two regional stores collect all relevant material. Other libraries are expected to de-duplicate multiple copies available in the regional stores. Indeed, capital funding for storage space will not be given to German libraries unless they are actively participating in a shared storage or collection development initiative. The existence of an excellent regional union catalogue, including an integrated ILL service greatly facilitates this system of distributed collaborative storage. It is also supported by the Bavarian Book Transport System for ILL. (Kempf, 2005).
3. **Structure Regionale pour le Livre (SRL)** <http://bbf.enssib.fr/consulter/bbf-2003-02-0018-004>) - Many French regions have Structure Regionale pour le Livre (SRL) which include a regional shared conservation and weeding scheme for periodicals. Within these schemes there are two types of library involvement. Conservation centres agree to conserve as complete a collection as possible of certain periodicals, including maintaining a current print subscription. Member libraries keep in touch with the conservation centres and don’t discard material without checking if it can fill gaps in conservation runs of the same title.

One problem of the SRL approach is reported to be that each member must have adequate premises, good conditions for conservation and good organisation for efficient document delivery. Because of its distributed nature it is not really known what the operating costs of the distributed system are. The advantages however are that such a scheme can be launched without major initial investment and that “it is by its nature a dynamic and genuinely cooperative approach” (Sanz, 2005).

**Summary:**

Distributed collaborative storage is an attractive model that involves no capital set-up funds. In the absence of funding for a physical collaborative store this may be a solution to the chronic space shortages experienced in all of the CONUL Libraries. At the very least, this model may offer an interim solution pending the availability of funding to build or lease a physical collaborative store according to one of the other models outlined by the CONUL Collaborative Storage Sub-Committee. Another possibility (reflecting the UK Research Reserve approach) would be that this model could complement a collaborative physical store, by providing a second copy of last resort, backing up the primary copy stored in a collaborative store. Developments in the UK Research Reserve should certainly be taken into account whichever model is adopted by CONUL Libraries. The availability of three secure copies of last resort in the UKRR could be considered sufficient back-up to allow CONUL Libraries to discard all bar one copy of the same material.

# Option 5: Collaborative Storage based on the British Library or a Central Repository

**Description:**

The CHEMS Consulting report ‘Optimising storage and access in UK research libraries' commissioned in 2005 by the British Library and CURL Consortium of Research Libraries, outlined several options for tackling the shortage of research library storage. The development of a ‘UK Research Reserve’ (UKRR) to store low use print collections was the recommended option. The latter arrangement has at its core the collection of the British Library (BL), which will form the largest part of a UKRR. The BL would guarantee to hold the low-use print material “in perpetuity” for researchers to access in either hard copy or e-format. Research libraries would be encouraged to send to the UKRR any materials they possessed that were not already held by the BL.

It was agreed that the UKRR will be implemented in two phases. In phase 1, a small number of ‘early adopter’ libraries in HEIs, together with the BL would establish the UKRR and test an operational service for researchers. This phase focused on low use journals in all disciplines. In phase 2 the UKRR has been extended and opened to all HEIs. The CURL/BL Task Force (now disbanded) was also charged with developing sustainable business, governance and service models that could be implemented.

It was reported in March 2007 that the UKRR had received key support from the research and library communities, which will help to ensure a fully representative, collaborative and coordinated development. A new Advisory Board (replacing the CURL/BL Task Force) led consultations, discussions and advocacy with both communities to guide the development of the UKRR prototype during phase 1 of the project.

SCONUL agreed to act as the body which will co-ordinate the retention of an appropriate number of copies of print journals across the sector. As the “early adopting” HE libraries (8) select journals for withdrawal, the UKRR will ensure that a minimum number of copies of print journals remain fairly distributed across the HE sector. This process of “co-ordinated de-selection” is new and is one of the elements of the UKRR, which will ensure the long-term retention and access to print material for the research community.

**Advantages:**

* Initial estimates by the BL are that they already hold c. 90% of the serials required by the research community so that in the long term extra space would only be needed to accommodate the remaining 10%. This identifies it as a more cost effective model than many cooperative/collaborative storage options
* The initiative builds on the BL’s existing UK research infrastructure role
* There would be a BL guarantee and confidence that the items would be preserved in perpetuity.
* The standard BL access and delivery services would be available for all the UKRR, and consequently, there may be reductions in the current pricing structure, which ideally would move away from transaction-based charges, and could result in a saving in administration and a simpler payment model. Physical access to the reading rooms at Boston Spa or St Pancras would also be available
* Any libraries depositing items would incur little or no costs for the items deposited.
* The CHEMS study predicted that up to 17.3 km of journal material may be disposed of through phase 1, and over £100 million could be saved to the HE sector over 10 years in capital expenditure and generate savings up to £300,000 in recurrent costs
* Efficiency gains through de-duplication and the movement of low use materials would free up existing storage capacity in many institutions and the space reclaimed could be re-purposed for new opportunities and higher priority research, teaching and learning uses.
* A national solution versus dependency elsewhere
* Researchers can rely on access to physical items – even if an e-version is also available. In addition, low use material across all disciplines should be more visible and easy to access
* The service model is to be based on fit-for-purpose storage, appropriate access and ease of use.
* The UKRR could develop in the long term into an e-store for current copies with print copies for legacy items only. New services could be developed around UKRR.
* The Advisory Board for the project includes membership from key stakeholders spanning experience from the research community, the Research Information Network (RIN), SCONUL, CURL, BL and the funding councils

**Disadvantages**

* There is some concern about the perceived ‘monopoly’ position of the BL, and any unknown future changes of policy or funding, which might affect the current BL strategy. This may be diluted by the involvement of both the RIN and the HE funding bodies in supporting this approach
* The cost of access and document supply. The delivery service must be better than the existing BL supply.
* Participating libraries cede ownership and control over their own materials to the UKRR. Collection size has been a traditional performance measure for libraries within the university sector and ownership issues can be politically charged.
* The meaning of “in perpetuity” – the academic community may need to be persuaded of the strength of the BL’s guarantees on preservation and access into the future
* The appropriate number of copies to be retained – although the model being proposed by the UKRR is that one copy be kept by the BL (the access copy) and that two participating libraries retain two additional copies of last resort.
* There may be a high level of support “in principle” but no buy-in “on the ground”. The crucial issue is the extent to which libraries will dispose of their little-used materials, if they are available from other sources
* General distrust and lack of confidence in the BL to achieve services required. The implementation of this scheme would be a test of HE commitment to and trust in the BL.
* Difficulty on reaching agreement on management issues i.e. there are too many stakeholders
* Flexibility as regards to those HEIs wishing to exit from the scheme
* Libraries wishing to add materials to the UKRR will have to invest time in checking their serials against SUNCAT or BL catalogues to ensure that they are not already held by the BL before depositing them with the UKRR.
* The BL would incur increased costs and these would need to be reimbursed in some way. Such funding would need to come from the research and/or HE sectors.
* What are the effects of increasing availability of digital information? Library planners continue to assume ever increasing print collections and regular requirements to build/rent storage facilities, but “how long buildings will remain the principal repository of information is no trivial question”.
* There is a real need for the development of comprehensive and connected policies establishing the place of the storage of the physical item in conjunction with the delivery of the “born-digital” resources.
* Competitive research interests in academia may militate against benefiting from real collaborative storage initiatives and inhibit investment.
* Removing materials to storage eliminates browsing – this is frequently noted as an impediment to relegation. It can be compensated to some degree by scanning tables of content and linking them to catalogue records.

**The Irish Environment:**

In the Irish context, the above model could be adapted by either (1) substituting the BL for a well-resourced (legal deposit) central repository in Ireland e.g. Trinity College Library on a standalone basis, or in combination with the National Library of Ireland. The CONUL Libraries could represent the role of the ‘early adopting’ libraries – extending membership over time to other HE institutes and possibly the public library sector. In this model the central repository e.g. TCD Library would hold the ‘access copy’ and another participating library a second copy of last resort for back-up purposes. Similar consultation and advocacy with the research community and funding agencies – as in the UK - would be critical here too. The smaller scale in terms of geography and economy should mean greater efficiencies, easier communication and access models.

The second variation on this model (2) could be simply choosing to ‘piggy-back on’, or formally negotiating to ‘opt in’ (if membership was permitted) to the UK scheme, whereby the availability of three secure copies of last resort in the UKRR could be considered sufficient back-up to allow CONUL libraries to discard all bar one copy of the same material. This option may offer a very cost effective solution to chronic space shortages in nearly all of the CONUL libraries but would have significant implication from the perspective of a national policy relating to print collections.

Developments in the UKRR should certainly be taken into account whichever model is adopted by CONUL libraries, to ensure the long-term retention and access to print material for the research community.

**Summary**

From the UK national policy viewpoint this option is a sound one if it can guarantee the preservation of materials to the satisfaction of the research community, and make access to them available in reasonable time and at an appropriate price. The proposal also makes financial sense in that it would save considerably on capital and construction costs for the HE sector. It also builds on the BL’s world class collections combined with their strengths of document supply. However, the BL would incur increased costs and these would need to be compensated in some way. The UKRR Advisory Board is working on sustainable service and business models to ensure that document supply costs for each institution should not exceed current costs for the same amount of business. It is also committed to managing and minimising the risks and concerns outlined above in its governance model. The latter will also monitor and evaluate performance and ensure that goals, targets and objectives will be achieved, and that the interests of customers and stakeholders are safeguarded.

**Option 6: The Status Quo**

This option assumes that no central action is necessary to encourage collaborative storage and the de-duplication of materials will remain the responsibility of individual libraries. This option assumes that research libraries will gradually begin to de-duplicate their serial holdings, and find alternative solutions to their own storage problems.

**Advantages**

* Minimal cost outlay.
* Under current arrangements some libraries are already disposing of materials and/or operating a no-growth collection policy whereby low use stock is disposed of and replaced by new material. In addition, the availability of the BL’s Document Supply Centre (BLDSC) service and other resources already means that, where low use items are required, they can already be efficiently obtained under existing arrangements.
* If some are taking steps to reduce their storage capacities and costs, why should public funds be made available to support those who choose not to do so?
* There is some evidence as space pressures increase and full economic costing becomes more prevalent, that the pressure on libraries to act in this way will also increase without the need of central action.
* It is suggested that attitudes towards the holding and preserving of underused material will change. A common feature of institutional library policies has been the difficulty of getting institutions to look outside their own holdings and think of collaborative approaches. It may have been imagined that, given the existence of the BL holdings as a last copy reserve, more libraries would already have de-duplicated their own holdings against the BL holdings. However, in the absence of full cost charging for library space there is little or no evidence of de-duplication against BLDSC holdings. One reason for the slow adoption of large scale de-duplication might be doubts about the ability of the BL to continue to retain its document supply holdings in perpetuity.
* Possible potential cost savings and guarantee of high quality access.

**Disadvantages:**

* Under current arrangements, there is no guarantee about the continued and permanent availability of low use materials at reasonable costs. The BL is under no statutory obligation to hold its document supply holdings in perpetuity. This is significant for librarians who are thinking of de-duplication but have to guarantee availability of supply to their researchers. In addition, reliance of the BL to provide access to low use materials may be outside the strategic research interests of Irish Libraries and their public, even with a specific commitment from the BL to do so.
* In Ireland, the sector would miss the opportunity to widen access to a defined national resource through the creation of the National Research Repository.
* Libraries reluctant to de-duplicate and address the cost of storage would not receive the stimulus to action that would be achieved by a more collaborative model.
* No guarantee for preservation of material, or provision of access to the whole national research collection, option doesn’t encourage de-duplication.

**Summary:**

In the absence of full economic costing and strong institutional pressure to reduce library space and storage costs, this option scores poorly since it’s difficult to predict or manage the outcome nationally. A likely scenario is that some regional shared storage solutions would emerge and most research universities will rent cheap off-campus space rather than de-duplicate. Therefore, materials will still be preserved but access will vary according to location and apart from the BLDSC, users will only be able to draw on their local stores.

**G. The Next Steps – Strategy and Implementation**

It is proposed that this or another committee via CONUL be assigned the role of co-ordinating the implementation of the Distributed Collaborative Storage model. A preliminary scoping study has already been undertaken by this Committee to analyse the extent of overlap between libraries in holdings of low-demand periodicals which are also available via IReL. An interim proposal on de-duplication which is proposed by this Committee has been included as an appendix to this report.

**How an option might work? Some observations.**

Following from our extended discussions and debate, it is clear to the Committee that many of the supports and policies e.g. agreed collection development policies (regional or national) that facilitate the successful operation of collaborative storage schemes are not currently in place within the Irish research library sector.

In addition we do not have a clear understanding of the full extent of our periodical collections in a national context and therefore it is difficult to identify any certain savings without further analysis of the operational costs of such as scheme, and the potential savings to partner institutions.

The Committee have made some observations regarding the implementation process and identified further issues that require further detailed consideration:

* How will a proposed option work in practice?
* Who will manage the project? The chosen option will require a clearly defined management board
* Who will fund the project? The cost to retaining libraries should be identified – where does compensation for this cost come from?
* Can a business case be made for the chosen option?
* Access - research materials which are preserved must be made easily accessible
* Can agreement be reached on a secure standard for preservation of an electronic version of low demand print periodicals
* Service level agreements must be agreed and clearly communicated
* The viability of a document supply service?
* Potential savings should be made nationally, either in recurring or capital costs.
* National collection development and collection management policies should be in place
* What are the risks?

**Critical issues**

The Committee have also identified some critical issues which, it is agreed, require further discussion and agreement for any selected option to be successful.

* Consensus – there should be a unified national approach
* The question of a national print archive or an alternative
* Agreement on management systems, services, commitment of resources and technological infrastructure
* Extent to which libraries will dispose of copies of their low demand materials, if they are available from other sources
* Question of ceding ownership to achieve maximum storage density and eliminate duplication
* The future of legal deposit collections
* Confidence of the academic and library communities
* Prompt access to the stored materials when required
* Preservation of the materials
* A long term guarantee of security for ‘last copies’ or unique copies
* A collaborative approach is only possible with the correct structures for leadership, coordination and advocacy

**Conclusion**

The Committee has taken the time to consider and analyse international examples of collaborative approaches to storage in various stages of development. As part of this analysis, additional issues specific to the situation in Ireland have been identified which will require further consideration in a subsequent analysis.

It is apparent that as a library and research community we do not have a full awareness of the extent or indeed the weakness of our collections. In an international context, Ireland has significantly fewer research collections with a consistent collecting history, and this may significantly mitigate against the viability of a co-operative approach to the storage of library collections unless a fully collaborative model is adopted approach Following from this, the uniqueness in Ireland of some of our collections, especially in the context of the delivery of services to the fourth level, may be more significant due to the varied history of our collecting. Therefore, the scope for a collaborative project may be limited by the critical mass of materials that we can agree to be included in any selected model.

This raises the question of savings which may result from any proposal. It is clear that for significant savings to be accrued, a comprehensive approach will be required which include discussion and agreements on collection development, collection management and perhaps the strategic priorities of the participating institutions. Perhaps in the current economic climate we are better place to meet these challenges.

**H. Bibliography**

Agee, J. & Naper, S. “Off-site Storage: an analysis”, Collection Building Vol. 26 No. 1 pp. 20-25.

Ameen, K. (2005) “Developments in the philosophy of collection management: a historical review” Collection Building Vol. 24 No. 4 pp. 112-116.

Baker, D, Evans, W (2007), “From holdings to access – and back”, Interlending & Document Supply Vol 35 No. 2, pp.85-91

Baudinette, K.L. (n.d.), “The Flinders University and University of Adelaide Joint Library Store”, available at: www.caul.edu.au/caul-doc/store-choate.doc (accessed 2 April 2007).

Bazin, P. Desmarais & Schuster, J. (2006) “Periodical Collection Management”, Library Management Vol. 27 No. 9 pp. 590-599.

Bridegam, Willis E. A Collaborative Approach to Collective Storage: The Five-College Library Depository. Council of Library and Information Resources, Washington, D.C., June 2001. pp. 3-41.

Buckland, M.K. (1990) “Little –used duplicates, Cooperative Collection Development, and Storage” Collection Management, Vol. 13 (4) 39-52.

Casey, M. Libraries and the Information Society: Towards a National Policy for the Republic of Ireland. A Proposal for Policy Formulation and Implementation, Final report. Dublin, Euro-Focus on Libraries, 1996.

CAVAL Ltd (1999), The Case for a National Information Research Centre: Toward a Business

Plan (CAVAL), available at: www.caul.edu.au/caul-doc/store-caval.doc (accessed 7 May 08).

CHEMS Consulting (2005), Optimising Storage and Access in UK Research Libraries: A Study for CURL and the British Library, available at: www.curl.ac.uk/about/documents/

CURL\_BLStorageReportFinal-endSept2005.pdf (accessed 12 May 2008).

Collections Council of Australia (2006), The Collections Plan 2006-2009, Collections Council of Australia Ltd, available at: http://www.collectionscouncil.com.au/corporate þ documents.

aspx?DMXModule ¼ 544&EntryId ¼ 469&Command ¼ Core\_Download. (accessed 17 May 2008).

Council of Australian University Librarians (1999), “A national cooperative store network:

workshop convened by CAUL: Flinders University, Adelaide, 6 August 1999”, available at:

www.caul.edu.au/meetings/Store990806.min.doc (accessed 17 May 2008).

Council of Australian University Librarians (2001a), “CAUL Strategic Plan: Report to CAUL, 20 February 2001”, available at: www.caul.edu.au/caul-doc/RRA20011.doc (accessed 17 May 2008).

Council of Australian University Librarians (2004a), “National collaborative library storage

strategy”, available at: www.caul.edu.au/caul-doc/caul20041store.doc (accessed 17 May 2008).

Dempsey, L. (2006), “Libraries and the long tail: some thoughts about libraries in a network age”, D-Lib Magazine, Vol. 12 No. 4, available at: www.dlib.org/dlib/april06/dempsey/

04dempsey.html (accessed 25 March 2007).

Genomi, P. (2007) Towards a national print repository for Australia: where from and where to? Library management Vol. 29 No.3, pp. 241-253.

Harris, K. G. E. Death and transfiguration, or Conservation and self-renewal in academic libraries. London: Library Association Colleges of Technology and Further Education Section, 1977.

Henden, J. (2005), “The Norwegian repository library”, Library Management, Vol. 26 Nos 1/2,

pp. 73-8.

Joint Funding Council’s Libraries Review Group (1993) “ The Follett Report” , available at <http://www.ukoln.ac.uk/services/papers/follett/report> accessed 12 May 2008.

Joint Funding Council’s Libraries Review Group (1995) “ Report of the Group on a national/regional strategy for library provision for researchers (the Anderson Report)”, available at <http://www.ukoln.ac.uk/services/elib/papers/other/anderson> , accessed 12 May 2008.

JSTOR: Bound Volume Survey 1999-2003, available at <http://www.jstor.org/page/info/about/news/surveys/bvs2003.jsp> accessed 24 May 2009).

Kempf, Klaus (2005) ‘Storage solutions in a co-operative library system’. Library Management, vol. 26(1/2) pp. 79-88.

Library Council of Ireland (2000) Joining forces: delivering libraries and information services in an information age: Executive Summary.

Livingston, H. (2000), “National Cooperative Store: memorandum to CAVAL Board/CARM

Committee, February 11, 2000”, available at: www.caul.edu.au/caul-doc/store-RRA.doc

(accessed 10 May 2008).

McDermott, N. (2003) “Extending our reach: resource sharing in Irish libraries”, Interlending & Document Supply Vol. 31 No. 3 pp. 192-200.

Nicholson, C.M. (2005), “CASS: a collaborative academic store for Scotland”, Library

Management, Vol. 26 Nos 1/2, pp. 32-41.

Nicholson, C. M, Brown, S (2002), “A Collaborative academic library store for Scotland : final report of the CASS Project” , Scottish Confederation of University and Research Libraries.

Nitecki, D.A & Kendrick, C.L (eds.) (2001) Library Off-site Shelving, Libraries Unlimited Inc.

O’Connor, S., Wells, A. and Collier, M. (2001), “A Study of Collaborative Storage of Library

Resources” Library Hi Tech, Vol. 20 No. 3, pp.258-269.

O’Connor, S. (2004), “Collaborative strategies for low-use research materials”, Library Collections, Acquisitions & Technical Services, Vol. 28 No. 1, pp. 51-7

Payne, L. (1998) “The Washington Research Library Consortium : a real organization for a virtual library”, Information Technology and Libraries, Vol.17 No.1, pp.13-17

Payne, L. (2004), “Depositories and Repositories: Changing Models of Library Storage in the USA”, Library management, Vol. 26 No. 1/2, pp. 10-17.

The Publisher’s Association: Brief Statistics on the UK Book Publishing Industry and on it’s trade with China, Beijing Book Fair 2008, available at <http://www.publishers.org.uk/download.cfm?docid=E51A5CA0-382B-435A> B12889ACB23A69BA (accessed 12 December 2008).

Reilly, B.F. (2003), Developing Print Repositories: Models for Shared Preservation and Access, Council on Library and Information Resources, Washington DC, available at: www.clir.org/pubs/reports/pub117/pub117.pdf (accessed 24 April 2007).

Research Information Network (n.d.), “About the Research Information Network”, available at:

www.rin.ac.uk/about (accessed 7 May 2008).

Sanz, Pascal (2005) “Distributed collections and central repository in France – competition or complementarity?” Library Management, Vol. 26(1/2), p.55.

Science Direct The value of online journal backfiles to university libraries, 7 November 2005. (accessed at <http://www.info.sciencedirect.com/content/backfiles/> 23 May 2009).

Seaman, Scott. (2205) “Collaborative Collection Management in a High-Density Storage Facility”, College & research Libraries, Vol. 66 No. 1 pp. 20-27.

Shenton, H. (2005) Strategic Developments in Collection Storage of Libraries and Archives – Architectural, Technical, Political, Liber Quarterll Vol 15 Nos 3/4 available at <http://liber.library.uu.nl/publish/issues/2005-3_4/index.html?000143> (accessed 9 Jan 2007).

Task Force on the Artifact in Library Collections (2001), The Evidence in Hand: Report of the

Task Force on the Artifact in Library Collections, Council on Library and Information

Resources, Washington DC, available at: www.clir.org/pubs/reports/pub103/contents.html

(accessed 15 May 2008).

UK Research Reserve see <http://www.ukrr.ac.uk> accessed 21 May 2009.

see <http://www.rluk.ac.uk/node/85> accessed 12 December 2008.

Vattulainen, P. (2004), “National repository initiatives in Europe”, Library Collections,

Acquisitions, & Technical Services, Vol. 28 No. 1, pp. 39-50.

Washington Research Library Consortium, (http://www.wrlc.org/offsite accessed 23 January 2007.)

Western Australian Group of University Librarians (1999), Western Australian Knowledge

Centre: A Conceptual Framework for Future Western Australian Regional Cooperative

Development, WAGUL, available at: www.caul.edu.au/caul-doc/store-wagul.doc (accessed

10 May 2008).

Wright, Nicola (2007) ‘UK Research Reserve’. Workshop presented at UKSG Conference 2007, 16-18 April 2007.

# Appendix I

# CONUL Sub-committee on Collaborative Storage

# A Survey of current and future storage needs of CONUL Libraries

# February 2007

Version 4, 21st February 2007

## Introduction

There have been many significant developments internationally in the storage of library and archive collections in recent years. These developments range from the use of more energy efficient technologies to the adaptation of operational strategies from the warehousing and retail sectors. Perhaps more importantly, there are significant changes underway in publishing which will impact on the perspective of what collections are to be stored and the organisational perspective of who stores this material in the future.

In Ireland, as elsewhere, research libraries continue to be under severe pressure of space. In this context, CONUL has established the Sub-Committee on Collaborative Storage to consider the issue of high-density storage facility requirements.

As a preliminary stage in this investigative process, the Sub-committee has decided to conduct an initial survey to establish the current and future storage requirements of CONUL libraries. This short questionnaire will form the basis of a further in-depth investigation to determine the optimal solution for an Irish context.

The questionnaire has been divided in to parts:

Part 1 – Institutional Collection Development and Collection Management Policies

Part 2 – Institutional priority of space shortage issues

Part 3 – Storage options explored or currently being explored

Part 4 – Space shortage statistics

Part 5 – Costs

## Part 1 – Institutional Collection Development and Collection Management Policies

1. What are your policies on retaining materials?
2. What are your policies on retaining print serials above a certain age?
3. What are your policies on retaining print serials available to you electronically?
4. What is your policy and/or practice on locating stock in off-campus stores?
5. What are your policies as regards disposals? i.e. what criteria do you apply in selecting material for disposal?
6. What weight does regional thinking have in your future storage and retention policy options?
7. Do you expect these policies to change as space pressures grow (or space costs increase)? If so, please say how.

Policies will change depending on electronic availability and national storage policy.

1. Explain what impact, if any, the growing acquisition of electronic resources could have on these policies in 10 years and in 20 years time.

Policies will be constantly under review.

## Part 2 – Institutional priority of space shortage issues

1. What level of priority has the resolution of space shortage within your Institution? Please tick as appropriate.

|  |  |  |  |
| --- | --- | --- | --- |
|  | High Priority | Medium Priority | Low Priority |
| Library’s senior management |  |  |  |
| Institution’s senior management |  |  |  |

High Priority – solution is in progress or in planning

Medium Priority – solution is under consideration

Low Priority – this issue is not being considered at this time.

1. Please elaborate on the reasons for your answer to Question 1.
2. Are these views likely to change?

## Part 3 – Storage options explored or currently being explored

1. Please tick any of the alternative storage options that may have been considered by your Library.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Have recently implemented | Currently under active consideration | Have considered but decided not to implement | Have not considered | May need to explore in the future |
| Acquiring or building library extension with more storage space |  |  |  |  |  |
| Using part of a new/additional institutional store (on or off main site) |  |  |  |  |  |
| Significant disposals of stock |  |  |  |  |  |
| Taking space in a shared storage scheme off-campus |  |  |  |  |  |
| Collaboratively managed store\* |  |  |  |  |  |
| Fully collaborative store\*\* |  |  |  |  |  |
| Any other model? Please specify. |  |  |  |  |  |

\***Collaboratively managed store** – This is a store where collaborating institutions place their materials in a common store, but retain full ownership of them. The institutions agree on common management arrangements at the store, for example delivery, access and the operation of reading rooms (if any). Costs (rent, support services, etc.) are apportioned between the institutions according to an agreed formula.

\*\* **Fully collaborative store** – This is a store where member institutions manage a collection collaboratively according to mutually agreed policies on retention, disposal, delivery and preservation that meet the needs of their user communities. A core principal would be that members accept that they will cede ownership and control over everything they deposit with the organising group of the consortium.

(Definitions based on CHEMS Consulting: Optimising Storage and Access in UK Research Libraries: A study for CURL and the British Library, Sept. 2005)

1. Please elaborate on answers given above, in particular describing any recent storage solutions implemented and describing the reasons for non-implementation of any solutions considered but then rejected. Please specify any alternative storage options considered or implemented. Please specify if possible with whom you are collaborating on storage.

## Part 4 – Space shortage statistics

1. Please provide below your current storage capacity and total future anticipated storage needs in linear METRES of shelving space.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Monographs | Serials | Archives/ Special Collections | Others\* (Please specify) | Total  Linear  Metres |
| Current storage capacity within the Library \*\* |  |  |  |  |  |
| Other current storage capacity on campus (Distillery Road Store) |  |  |  |  |  |
| Current storage capacity in any off-campus store (Ballybane Store) |  |  |  |  |  |
| Total current unused storage capacity (on or off campus)\*\*\* |  |  |  |  |  |
| Estimated total storage needs in 2017 \*\*\*\* |  |  |  |  |  |
| Estimated total storage needs in 2027 \*\*\*\* |  |  |  |  |  |

\* Others – for example microfilm, AV material, photographic collections, institutional records, etc.

\*\* Library storage capacity – please include all open access shelving as well as closed access areas within the Library.

\*\*\* Storage capacity should only be included here if it is available to the Library and suitable for the Library’s purposes.

\*\*\*\*Estimated future storage needs: Please see overleaf for guidance on estimating future storage needs – Collection Growth Formula.

1. Please specify the other sort of materials requiring storage.

**Collection Growth Formula**

(A) Current intake **(r)**

(i) Monographs = current annual acquisition number **÷** 36 monographs per metre (SCONUL approved statistic) = current annual linear metre intake

***PLUS***

(ii) Periodicals = current annual acquisition number **÷** 18 periodical volumes per metre (SCONUL approved statistic) = current annual linear meter intake

***PLUS***

(iii) Additional collections = current actual annual linear metres of intake of university archives, manuscripts, microfilm reels, etc.

***TOTAL*** (i) **+** (ii) **+** (iii) = **(r)** total current annual intake in linear metres

(B) Estimated annual intake increases

Review the actual intake over the past 3-5 years to estimate the average % increase per year = **(api)**

(C) Estimated 10/20 year growth **(G1)**

Total current intake in linear metres (from A above) **multiplied by** the estimated annual % increase (from B above) **multiplied by** 10/20 years:

**G1** = **(r)** **X (api)** **X** 10/20 years

(D) Estimated 10/20 year growth decrease due to electronic conversion **(G2)**

Total current intake in linear metres **(r)** **multiplied by** theannual % decrease due to electronic conversion (take Helen Shenton’s figure of 40% reduced due to e-conversion)**(dpi)** **multiplied by** 10/20 years

**G2** = **(r)** X **(dpi)** X 10/20 years

(E) Annual weeding – in order to take this into consideration - you estimate the number of linear metres weeded each year **(aw)**

**G3** = **(aw)** X 10/20 years

(F) TOTAL storage space needed for next 10/20 years **(S)**

Total estimated 20 year growth ***MINUS*** estimated decrease due to electronic conversion = actual storage needed for 10/20 year period.

**S** = **G1** – **G2 – G3**

Please note that this formula has used the following considerations:

* this formula uses Helen Shenton’s prediction regarding electronic format estimates – which predicts that monographs will decrease by 40% in the period to 2015. We’ve used the 40% reduction for all material types for ease of arriving at estimated growth and storage space needs
* a quick way to arrive at current intake (r) – without having to count each item – is to look at the acquisitions budget for monographs and periodicals – and arrive at a % per material type – and apply this to your total intake count – in order to estimate linear metres.
* the estimated increases (api) is based on actual acquisitions over the past 3-5 years.

## Part 5 – Costs

1. What are the capital and operational costs of current storage?
2. Have you recently ascertained any capital and operational costs for adding new storage capacity? If so, please outline type of storage and costs involved.

Many thanks for your contribution to this survey, which will help to inform discussions of future storage needs of CONUL Library and will help us to propose a collaborative solution that will meet the needs of all CONUL Libraries.

**Appendix II**

**CONUL Subcommittee on Collaborative Storage**

**Interim Proposal on De-duplication**

The CONUL Subcommittee on Collaborative Storage has been tasked with assessing the feasibility of a collaborative national effort on addressing current and future lack of storage capacity in the CONUL Libraries. As one strand of this work, the CONUL Subcommittee have begun a scoping study to analyse the extent of overlap in holdings in particular material types between the Libraries.

This scoping study has begun with print Abstract/Index holdings whose e-equivalents are available to all University Libraries via IReL. This scoping study has identified considerable overlap in holdings in this area. For example, back-runs of Chemical Abstracts are held by DCU, NUIG, TCD, UCC and UCD. Analysis of the holdings tabulated below shows that across the libraries involved 644.15 meters of shelving space could be saved by de-duplicating these back-runs and retaining only one print run in the country.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **IReL (Scifinder Scholar)** | **DCU** | **NUIG** | **TCD** | **UCD** | **UCC** |
| **Holdings** | 1907 to date | 1926-1979, 1981-2001 | 1907-1923 (microfilm)  1920-2007 (in print) | 1909-2003 | 1907-2003 | 1926 to date |
| **Shelving Meters** | 0 | 130.5 | 189 | 170.65 | 192 | 205 |

It has become immediately clear even before the initial scoping is fully complete, that some libraries have already carried out extensive discarding of IReL related A/I material, while other libraries are on the verge of discarding it. The subcommittee is very concerned that should libraries continue to consider such issues independently of each other, no copy of last resort of valuable research material will be retained in Ireland. However, some libraries are chronically short of storage space and need to discard urgently. For this reason, the subcommittee would like to recommend to CONUL that work on de-duplication of certain types of material across the Libraries commence immediately, rather than waiting for the outcome of any recommendations on collaborative storage arising from the other work of the subcommittee.

The subcommittee would like to propose the following actions:

* Assessment of the extent of duplication of holdings in certain materials to continue up to the end of October 2009.
* This scoping to include:
* print A/I holdings of shared IReL e-resources,
* superceded editions of reference works,
* print holdings of journals securely accessible via JSTOR.
* Scoping to include the recording of declarations by libraries of resources they are committed to retain in perpetuity, e.g. due to legal deposit obligations.
* Libraries to also declare which resources they are willing to retain as a CONUL copy of last resort, until such time as a physical collaborative store is available or in perpetuity should there be no such store. This declaration would include a commitment to provide access to that material to users of other CONUL Libraries according to existing shared access schemes or ILL services.
* Following the scoping study, de-duplication of the material in question to commence as soon as possible. This would be overseen by this CONUL Subcommittee or another group as CONUL see fit.

It is envisaged that the de-duplication process would operate as follows:

* Libraries would alert the overseeing group to print holdings that they would like to discard.
* Other libraries would then declare their willingness or otherwise to commit to retain the copy of last resort of the same material (if this declaration has not already been made during scoping).
* All libraries would make a commitment to carry out the checking process at their libraries and make their declarations as quickly as is possible so as to facilitate the library wishing to discard its print holdings.
* The Library holding the copy of last report will amend its catalogue record to reflect this new status.
* Those libraries that undertake to hold the copy of last resort should, in the case of reference editions, periodicals and A/Is, request from the other libraries issues or editions that will fill gaps and/or extend the holdings of that last resort ‘copy’.
* The overseeing group would ensure that the burden of retention is shared equally and that no one library is left retaining all material. This process would enable libraries to discard with the security of knowing a copy of last resort is held securely elsewhere in the country.
* It should be noted that no library would be forced to discard any material that they wish to retain. It is anticipated that there would be many resources where several libraries would wish to retain print holdings.
* A list of agreed copies of last resort and their location will be made public through the CONUL website.

Should the outcome of the other ongoing work of the subcommittee result in a physical collaborative store, the copies of last resort identified and recorded by the de-duplication overseeing group would then be ready to move to this physical store, preparatory de-duplication work having already been completed.

CONUL Subcommittee on Collaborative Storage

January 2009

**Appendix III Scoping study showing the overlap of IReL collections**

**Summary:**

* The analysis of the holdings tabulated below shows that shelving space could be saved by de-duplicating the back runs and retaining only one print run in the country.
* Total savings from de-duplication, including pre IReL holdings - approx 1372 metres.
* Total savings from de-duplication, excluding pre IReL holdings – approx 1070 metres.
* Figures in blue are estimated as shelving metres have not been provided for these titles.
* Savings Metres in Red indicate that library holdings contain pre IReL material.
* Retention is based on holdings information, not metres provided as there are some inconsistencies re metres provided between different libraries.
* Issue of Legal Deposit needs to be considered. If TCD does not hold comprehensive run, it still has to retain any LD material?

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **IReL (Scifinder Scholar)** | **DCU** | **NUIG** | **TCD** | **UCD** | **UCC** | **Total Metres** | **Savings Metres** |
| **Holdings**  **(Chemical Abstracts)** | 1907 to date | 1926-1979, 1981-2001 | 1907-1923 (microfilm)  1920-2007 (in print) | 1909-2003 | 1907-2003 | 1926 to date |  | **Keep UCC + UCD (1907-25**) |
| **Shelving Metres** | 0 | 130.5 | 189 | 170.65 | 192 | 205 | **887.15** | **644.15** |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **IReL (Biosis Previews)** | **DCU** | **NUIG** | **TCD** | **UCD** | **UCC** | **Total Metres** | **Savings Metres** |
| **Holdings**  **(Biological**  **Abstracts)** | 1980 to date | 1982-1988 | 1963-2003 | 1926-2006 | 1925-2001 | 1923-2000 |  | **Keep TCD** +  **UCC (1923-25**) |
| **Shelving Metres** | 0 | 15.3 | 57 | 13.45 + dark storage (est. as 110 in total)  **123.45** | 105 | Not known (based on other holdings est. as **106**) | **406.75** | **290.06** |
| **Holdings (Biological Abstracts RRM)** |  |  | 1980-2003 |  | 1980-2001 | 1986-2000 |  | **Keep NUIG** |
| **Shelving**  **Metres** |  |  | 12 |  | 11 | Not known (based on other holdings est. as **7.28)** | **30.28** | **18.28** |

Biological Abstracts -If pre-IReL holdings maintained, then savings would amount to 105.75m (based on 1.35m growth per year).

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **IReL (MathSciNet)** | **DCU** | **NUIG** | **TCD** | **UCD** | **UCC** | **Total Metres** | **Savings Metres** |
| **Holdings**  **(Current Mathematical Publications)** | 1940 to date | 1981-2001 | 1975-2004 |  | 1975-1998 |  |  | **Keep NUIG** |
| **Shelving Metres** | 0 | 4.05 | 4 | 0 | 3.17 |  | **11.22** | **7.22** |
| **Holdings (Mathematical Reviews)** | 1940 to date |  | 1940- | 1940- | 2000- | 1940-1986 |  | **Keep TCD**? |
| **Shelving**  **Metres** |  |  | 28 | 22.4 | 3.29 | 12 | **65.69** | **43.29** |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **IReL (Inspec)** | **DCU** | **NUIG** | **TCD** | **UCD** | **UCC** | **UL** | **Total Metres** | **Savings Metres** |
| **Holdings**  **(Physics Abstracts)** | 1969 to date | 1996-2000 | 1982-2005 | 1903- | 1903-2003 | 1933-2000 | 1980-1996 |  | **Keep TCD** |
| **Shelving Metres** | 0 | 4.95 | 23 | 39.15 | 99 | Not known (based on other holdings est. as **46**) | 13.5 | **225.60** | **186.45** |

Physics Abstracts - If pre IReL holdings maintained, then savings would amount to 86.34m (based on .67m growth per year).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **IReL (Inspec)** | **DCU** | **NUIG** | **TCD** | **UCD** | **UCC** | **UL** | **Total Metres** | **Savings Metres** |
| **Holdings**  **(Zentralblatt Math)** | 1868 to date |  | 1972-1993 | 1931-1984 | 1931-1991 (imp.) |  |  |  | **Keep TCD + NUIG (1985-1993)** |
| **Shelving Metres** | 0 |  | 13 | 19 | 37 |  |  | **69** | **44.69** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **IReL (Inspec)** | **DIT** | **DCU** | **NUIG** | **TCD** | **UCD** | **UCC** | **UL** | **Total Metres** | **Savings Metres** |
| **Holdings**  **(Index to Theses)** | 1716 to date | 1967- | 1981-2005 | 1951-2005 (except 82-85) | 1950-1993 | 1950-2007 | 1950-2008 | 1950  /51- |  | **Keep UL** |
| **Shelving Metres** | 0 | 5.5 | 1.35 | 2.5 | 6.2 | 4 | Not known (est. as 4.5) | 4.5 | **28.55** | **24.05** |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **IReL (Philosophers Index)** | **NUIG** | **NUIM** | **TCD** | **UCC** | **UCD** | **Total Metres** | **Savings Metres** |
| **Holdings (Philosophers Index)** | 1940 to date | 1967-2005 | 1967/68-2003 | 1967-2003 | 1971-1999 | 1967/2007 |  | **Keep UCD** |
| **Shelving Metres** |  | 3 | 2.5 | 3.2 | **3.2** | 3.15 | **15.05** | **11.85** |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **IReL (PsycInfo)** | **DCU** | **NUIG** | **TCD** | **UL** | **Total Metres** | **Savings Metres** |
| **Holdings (Psychological Abstracts)** | 1967 to date | 1975-2006 | 1970-1999 1986 not incl. | 1964-2004 | 1974-1996 |  | **Keep TCD (hold 3 years pre IReL holdings)** |
| **Shelving Metres** |  | 11.7 | 14 | 15 | 10 | **50.7** | **35.7** |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **IReL (SocIndex)** | **NUIG** | **UCC** | **UCD** | **UL** | **Total Metres** | **Savings Metres** |
| **Holdings (Sociological Abstracts)** | 1985 to date | 1984-2005 | 1973-2003 | 1953-1974 | 1977-1993 |  | **Keep UCC** |
| **Shelving Metres** |  | 5.5 | 8 | 5.5 | 3 | **22** | 14 |

Sociological Abstracts - If pre IReL holdings maintained, then, savings would amount to 3.04m, based on growth of .26m per year.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **IReL (CAB Direct)** | **NUIG** | **TCD** | **UCD** | **Total Metres** | **Savings Metres** |
| **Holdings (Rural Development Abstracts)** | 1973 to date | 1981-2001 | 1978- | 1978-2004 |  | **Keep TCD** |
| **Shelving Metres** |  | 1 | 0.85 | 1.23 | **3.08** | **2.23** |
|  | **IReL (CAB Direct)** | **NUIG** | | **UCD** |  |  |
| **Holdings (World Agricultural Economics(** | 1973 to date | 1971-1994 | | 1959-2004 |  | **Keep UCD** |
| **Shelving Metres** |  | 1.5 | | 2.93 | **4.43** | **1.5** |

World Agricultural Economics - If pre IReL holdings maintained, then savings would amount to 1.38 m, based on growth of 0.6m per year.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **IReL (MLA Bibliography)** | **NUIG** | **TCD** | **UCC** | **UCD** | **Total Metres** | **Savings Metres** |
| **Holdings (MLA Abstracts)** | 1963 to date | 1970-1975 | 1965- | 1921-? | 1970-1975 |  | **Keep UCC** |
| **Shelving Metres** |  | 0.5 | 5.4 | Store | 0.5 | **6.4+UCC Store** | **6.4** |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **IReL (Geobase)** | **NUIG** | **UCC** | **UCD** | **TCD** | **Total Metres** | **Savings Metres** |
| Holdings (**Geo Abstracts A,B,C,D**) | 1980 to date | 1970-1988 | 1979-1993 | 1972-1985 | |  | | --- | | A - 1966-1971 | | B - 1966-1988 | | C - 1972-1988 | | D - 1972-1986 | |  | **Keep NUIG (All Libraries contain pre IReL material)** |
| Shelving Metres |  | 4 | **3.1** | 3 | 2.95 (1.79 = IReL) | **13.05** | **9.05** |
| **Geo Abstracts A, B, C, and D - If pre IReL holdings maintained, then savings would amount to 3.08m, based on growth of .22m per year.** | | | | | | | |
|  | IReL (Geobase) | NUIG | UCD | | DIT | Total Metres | Savings Metres |
| Holdings (Geographical Abs. Human Geography) | 1980 to date | 1994-1999 | 1989-2006 | | 1989- |  | **Keep DIT** |
| Shelving Metres |  | 1 | 2.85 | | 2.59 | **6.44** | **3.85** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **IReL (WOS)** | **UCC** | **UCD** |  | **Total Metres** | **Savings Metres** |
| **Holdings(Science Cit Index)** | 1945 to date | 1945-1999 | 1961-1999 |  |  | **Keep UCC** |
| **Shelving Metres** |  | **15.12** (estimated based on other holdings) | **10.64** (estimated based on other holdings) |  | **25.76** | **10.64** |
|  | **IReL (WOS)** | **DCU** | **NUIG** | **UCC** |  |  |
| **Holdings (Soc. Sci. Citation Index)** | 1956 to date | 1966-1990 | 1966-1989 | 1971-1999 |  | **Keep UCC + NUIG or DCU 1966-1970** |
| **Shelving Metres** |  | 6.3 | 7 | **8.7** | **22** | **11.5** |
|  | IReL (WOS) | DCU | NUIG | UCC |  |  |
| **Holdings(Arts & Hum Index)** | 1975 to date | 1986-1990 | 1976- 1980  1982-1989 | 1976-1993 |  | **Keep UCC** |
| **Shelving Metres** |  | 1.8 | 5 | **7.2** | **14** | **6.8** |

Val Payne (NUIM) & Mary Kiely (DCU) November 2008

**Appendix IV *Extract from Draft Report***

**TCD-UCD Collaborative Storage Group**

**Report of Scoping Project**

**Context & Objectives**

As major research libraries TCD and UCD have over the last decade, invested heavily in subscriptions to/purchase of online resources thereby both broadening and deepening the access to information for researchers. Both institutions are now are faced with substantial ‘legacy’ collections of print academic journal back-runs, and are seeking to maximise the value of academic e-resources by releasing physical space currently occupied by print journal collections for other purposes

UCD and TCD hold the two largest collections of journals in the Irish universities and are in reasonable physical proximity to each other. There would seem to be potential to adopt a cooperative approach to the mutual benefit of both institutions for the disposal of journal back-runs and retention of ‘last copies’.

Following discussion and with the approval of the directors of both Libraries it was decided to carry out a small scale project to gather data in order to test the underlying belief that there is considerable overlap in holdings of academic journal titles between the collections of the two institutions and that cooperation of this type would have direct benefits to both institutions.

It was agreed that the study should be centred on a single discipline. It was decided that a discipline in the hard sciences offered the best potential for overlap. Chemistry was selected as the discipline to be sampled.

**Methodology**

An alphabetical title list of print chemistry journal holdings was generated by both libraries. Work was undertaken cooperatively using Google Documents

The following information was inputted about each title and by each institution

* Title of print Journal
* ISSN
* Print Holdings/coverage
* Location (s) within each institution
* Title of E-resource which includes the journal title
* Coverage of the print title within the e-resource
* Amount of space occupied by each print title
* titles acquired under UK legal deposit are identified (TCD)

No additional resources were allocated to the Project, but a record was kept of the hours committed by staff in both institutions.

This stage of the Project proved to be lengthier and more time consuming than initially anticipated. The work required to gather the data was very labour intensive and detailed. This stage of the Project was scheduled to be completed in September but due to other commitments was not completed until December.

**Summary of Project Outcomes**

* Overall 561 journal titles & holdings of back-runs were surveyed between the two libraries
* 222 titles showed some degree of overlap (40%) between the collections of the two libraries.
* Holdings of a number of titles held in common do not overlap to any great extent. The holdings could be amalgamated by the two institutions in a single location to create a ‘best copy’ sequence.
* It is estimated that approximately 666 linear metres of shelf space could be released. Holdings of Chemical Abstract represent 175 linear metres of this space.
* Empirical evidence indicates that this represents between 20% to 25% of the shelf space occupied by chemistry journals.

*As this report has not as yet been submitted to the Librarians of TCD and UCD analysis of the data and recommendations have not been included in the extract. With the permission of the Librarians the full report including the appendix listing the overlapping holdings of chemistry journal titles from both collections will be circulated at a future date.*

*Margaret Flood*

*TCD*

*10th January 2009*