1 Introduction

1.1 This framework document aims to guide both applicants and funders on strategic priorities for the retrospective conversion of catalogue or documentation data and the retrospective cataloguing or documentation of non-current acquisitions which together will provide improved access to heritage collections in libraries, archives and museums. It sets out the key elements which should appear in retroconversion applications and the associated costs. It provides a context within which applicants can place projects and funders can make informed decisions. References to libraries and archives and to printed and archival material should be taken to include collections of printed and archival material in museums. References to museums and to artefacts should be taken to include collections of artefacts in libraries and archives.

(Thoughout this document the broader term domain is used to refer to the library, archive or museum communities and the narrower term sector to groupings within a domain, for example higher education or local authority sectors.)

2 Widening access to heritage holdings

2.1 Much of our national intellectual and cultural wealth is hidden from sight. Large parts of our library, archival and museum holdings are not described properly and some are not described at all. Once brought into the light by description, the use of such material rises substantially, benefiting users and maximising the return on investment by the holding institutions.

2.2 The national intellectual and cultural record resides in many libraries, archives and museums, physical and - increasingly - digital. These organisations have always created catalogues, finding aids and documentation which disclose information about their collections in structured ways, and release the value of their collections by promoting their use; they support their users by saving their time, and by bringing them together with useful and interesting resources. Effective disclosure is the key to encouraging effective use of the collections. This becomes even more important for the distant user accessing the records of a collection through a website, where discovery is entirely dependent upon effective disclosure through catalogue data. Moreover, catalogue data contributed to public access union catalogues or made freely available via public networks not only enable institutions to share and re-use the records, but also considerably enhance the opportunities for retrieval of resources and information from a variety of sources by public users.

2.3 Increasingly, unless it is described in a catalogue or finding aid, a resource will remain invisible to the user and its value will be nullified. The user's information universe is defined not by what is in the collection, but what is in the catalogue. What is lost through deficiencies in the catalogue means an inevitable loss of imaginative, informational or learning opportunity.

2.4 There is an approaching future where the public user will expect, as a matter of course, to retrieve not only the record, but in certain cases an electronic surrogate of the document or artefact they require. The investment in record conversion and creation is a necessary prerequisite to such access which will radically affect the nature and scope of personal study.

2.5 Further, full and effective disclosure of material held in libraries, archives and museums by making it accessible through digital catalogues and finding aids will be a significant factor in meeting government concerns about access, social inclusion, education, learning, regionalism and modernising government in the information age. It will contribute to a number of current initiatives and in particular it will:

- provide access to a wider range of information and resources in the most convenient location and promote their use by a broader cross-section of users
- provide new educational resources and new learning opportunities
• underpin the access and educational benefits outlined in the recent government statements on a policy for social inclusion in museums, libraries and archives
• contribute resources to the National Grid for Learning, the People’s Network and the emerging Distributed National Electronic Resource and facilitate access to them
• contribute to the development of local and regional identity and promote the culture and history of minority groups by facilitating identification of relevant resources and information
• promote coherent government policy in areas concerned with the nation’s intellectual and cultural heritage
• provide a coherent approach to retrieving information and resources across the library, archive and museum domains
• exploit new developments in information communication technology.

3 Recent developments

3.1 Full Disclosure, a report from the UK Office for Library Networking (UKOLN) to a pathfinding group of the British Library (BL), the Library and Information Commission (LIC) and the Library and Information Co-operation Council (LINC), recommended setting up a national co-ordinating focus for retrospective conversion of catalogue data and retrospective cataloguing of non-current acquisitions to digital format, and putting in hand a phased programme of activities to work towards the full disclosure of library, archive and museum resources.

3.2 The UKOLN study found that most support was for placing the focus within the new Museums, Libraries and Archives Council (MLAC, now Re:source) either as part of it or constituted by it. However as Re:source would not be operational until April 2000 the BL agreed to host a shadow focus, supported by its new Co-operation and Partnership Programme and named the Full Disclosure Implementation Group, to take on and progress the initial elements of the workplan. One of the Group’s earliest priorities was to prepare a document to provide a strategic framework.

4 A framework

4.1 A framework is necessary to facilitate a common approach by funding bodies - no one funder will be willing or able to fund the whole programme. The need for retrospective conversion and retrospective cataloguing in libraries and archives has been demonstrated and the scale of the task has been identified (see sections 1 and 2 of Appendix 1). A critical path must now be plotted and a programme element added. The framework will enable the co-ordinating focus to break the overall picture into manageable and achievable packages to be directed at individual funders.

4.2 The following section sets out a series of criteria against which individual applications can be assessed and funding decisions made. It provides a series of objective elements which can be weighed against each other and according to the remit of individual funding bodies. No one overall answer to setting priorities is proposed: the balance of the different criteria will vary from project to project, from sector to sector, from domain to domain, and from funding body to funding body. This approach should ensure that grant-aid from all sources is put to the best, the most appropriate, and the most effective use. The Full Disclosure Implementation Group wishes to work with funding bodies to achieve the optimum balance.

4.3 Sections 6 and 7 briefly outline the essential elements of a typical retrospective conversion or retrospective cataloguing project in libraries and archives and the various cost considerations. Documentation of artefacts in museums, libraries and archives is discussed in section 8. The origins of the framework are set out in Appendix 1. This describes the different strands which have contributed to the development of a national strategy for retrospective catalogue conversion and retrospective cataloguing, outlines the case for a national strategy and provides supporting data.
5 The framework: criteria for assessment

5.1 In the context of developing a national strategy for retrospective conversion of catalogue or documentation data and for retrospective cataloguing or documentation, projects can no longer be conceived as discrete and isolated initiatives, but must be positioned with reference to the overall strategic context.

5.2 The criteria then to be taken into account in assessing an application for funding for retrospective conversion of catalogue or documentation data or for retrospective cataloguing or documentation - and which need to be understood in advance by the applicant - will concern: the material which is the subject of the application, the target audience, access, the institution which is making the application and technical issues. The balance of these will vary from project to project, from sector to sector, from domain to domain, and from funding body to funding body. The following criteria have been developed initially within the library and archive domains, but many are equally applicable to the museum domain. They should be read in conjunction with section 8 below.

5.3 The strategic context

5.3.1 It is essential that applications for funding should demonstrate clearly how the project:

- relates to funding bodies' vision, strategy and priorities
- relates to current government policies, in particular the learning age, life-long learning and access to content
- fits into the institution's own strategic plans and priorities
- relates to existing or emerging regional and local plans for the heritage and for cultural organisations
- relates to existing retrospective catalogue conversion or retrospective cataloguing projects and initiatives
- will further the aims of a developing national strategy

5.4 The material which is the subject of the application

5.4.1 Not every catalogue record necessarily needs to be converted nor every item to be retrospectively catalogued, and within a national strategy the fundamental justification for all projects must be the importance and value of the collection, material or subject in UK-wide, regional or local contexts. This may be measured in terms of:

- heritage merit
- and/or
- current and potential demand

5.4.2 The case for focusing on the "most important collections", ie mainstream heritage collections of nationally known political, artistic, literary, historical or topographical works, is perhaps the most obvious, but the danger should be avoided of equating "importance" solely with "national" merit at the expense of collections primarily of local and regional interest. More desirable would be a mix of large, nationally important projects with small projects relating to special and local collections which together would serve the full range of users. There is general agreement in both the library and archive domains that local studies should be a priority area because many people's understanding of the past first derives from contact with local collections. There is, however, scope for further research, in collaboration with funding bodies, to identify systematically other priority areas for retrospective catalogue conversion and for retrospective cataloguing.

5.4.3 In the archive domain with its unique items and collections, the generally accepted principle for selection of priorities is to respond first to greatest user need and demand. In the case of local archives it is expected that they should be of demonstrable regional, national or international significance and either on their own or taken with other related material from
other repositories contribute to cultural enrichment, historical or other research and broader life-long learning.

5.4.4 In the library domain, where printed books usually exist in more than one copy, a national programme for converting manual records or creating new electronic catalogue records is the basis for resource sharing and improved collection care. It enables users to locate the most convenient copy and to search collections from a distance and, as the national database increases and more records are available for re-use, should cause the unit costs to fall.

5.4.5 Below the level of national significance, it is expected that the benefits of catalogue conversion would be the bringing together of resources from previously diverse locations for use in new ways, the added value given to items and collections by making them more widely accessible via networks, the contribution the new records would make to the national database, the potential for gap-filling at the national level, and the scope for bringing local material into the regional and national framework and for the better organisation and improved and wider accessibility of local and regional collections.

5.5 The target audience

5.5.1 A national programme of retrospective catalogue conversion and retrospective cataloguing must be based on national information, learning and cultural initiatives. Projects should be expected to demonstrate their importance, relevance and contribution to current government initiatives on education, access, social inclusion, regionalism, the knowledge economy and modernising government in the information age and should where appropriate:

- include material of direct educational value to schools, higher education or life-long learning, possibly in association with content creation projects
- have the potential to open collections to a wide range of new users
- allow users without an institutional base to identify and gain access to material for heritage study
- be user-friendly

5.5.2 It is also desirable that projects should where appropriate:

- contribute to the People’s Network (new library network)
- encompass the special needs of ethnic communities and those with disabilities
- relate to the development of local communities
- contribute to local and regional cultural, business and tourism agendas

5.6 Access

5.6.1 Improved access to related resources in libraries, archives and museums by new and wider audiences underlies the whole initiative. Access issues should therefore be addressed and applications should:

- demonstrate that the material concerned is used or has the potential to be used by a wide range of users, but is not used to its full potential
- demonstrate demand and support from users or potential users for improved access to resources
- indicate potential new uses of the material concerned
- indicate which new audiences are being targeted
- describe how the project is to be promoted to users and potential users
- describe how the project will improve access to and retrieval of resources, particularly cross-sectoral and cross-domain access
- include a commitment to allowing free or at-cost re-use of records
- include a commitment to allowing on-site access to the originals which the records describe to any adult wishing to use them for learning purposes; in the case of institutions where unqualified free access would be unduly disruptive to the purposes
of the organisation (such as a learned society), applications should demonstrate, as clearly as possible, how maximum beneficial use would be delivered

- include a commitment to allowing remote access to the originals which the records describe
- indicate how the original is to be protected against damage from increased availability

5.7 The institution which is making the application

5.7.1 It is essential that applications should address the following:

- value for money
- what resources the institution can make available to support the project; in the case of archives, libraries and museums which are part of a larger organisation this should include an indication of the central support services which are available
- how they will achieve sustainability
- what progress on retrospective catalogue conversion and retrospective cataloguing has already been made with the institution's own or other resources
- what arrangements are there/will there be for public access to material
- what would be the consequence of not funding the project
- what partnerships with institutions in other sectors/domains would external support facilitate
- what is the institution's track record
- what commitment is there to long-term retention and preservation of the material

5.7.2 If the institution is able to address these issues satisfactorily, but the material which is the subject of the application, while important, is not of the highest priority, the value of a retrospective conversion or cataloguing programme should be considered in the wider context. In the early stages of a national programme, in particular, such a project may contribute to the provision of a cost-effective critical mass of records for free or at cost re-use and thus benefit more institutions than the applicant institution alone.

5.7.3 Collaborative projects, in particular cross-sectoral and cross-domain projects, are especially desirable as they:

- enable institutions to build on the experience and expertise of others which have already undertaken retrospective conversion programmes
- encourage cost-effective use of limited resources
- encourage sharing and re-use of records
- create resources which a single institution could not create alone
- enable institutions with a traditionally narrow user base to promote much wider access to their collections at the local, regional or national level
- demonstrate that a variety of "publics" have been engaged in raising awareness of local material and in enhancing access
- promote related materials in a variety of organisations
- promote coherent government in areas concerned with the nation's intellectual and cultural heritage by a seamless approach to cross-sectoral and cross-domain retrieval of resources and information

5.8 Interoperability and standards issues

5.8.1 A national programme must be underpinned by the adoption of nationally agreed principles which should be demonstrated in project proposals:

- an agreed minimum record standard based on recognised national/international standards and capable of enhancement
- the production of records which are capable of re-use by other institutions
- a commitment to contributing records to appropriate physical or electronic public access union catalogues (such as the archive hubs or to the Consortium of University Research Libraries (CURL) online public access catalogue (COPAC) in the higher
education library sector or to the V3. Online database in the public library sector) or at least making the converted catalogue freely available across public networks

- use of existing databases wherever possible
- an awareness of, as yet, unresolved licensing issues relating to the free exchange of records with particular provenances (such as the CURL or British Library databases)

- **5.9 Post-application impact**

5.9.1 It is also desirable that projects should demonstrate: · how they will deal with future access, preservation, conservation, security and staffing implications · an awareness of the new access opportunities which might be opened up when the project is completed · the existence of contingency plans in case an application is unsuccessful · a realistic awareness of the consequences of doing nothing

**6 Elements of retrospective catalogue conversion or retrospective cataloguing project**

6.1 In order to help applicants and funders assess the contribution of individual retrospective catalogue conversion or retrospective cataloguing projects to the national strategy it may be helpful to identify the components and options within a typical project.

6.2 A library or archive repository which is retrospectively converting catalogue records will be undertaking a relatively complex process but using proven technology. For retrospective catalogue conversion projects it will be converting records held in manual form, which may be manuscript, typescript or printed, on cards or in book or loose-leaf format, to machine readable form by one or more of the following methods: converting or creating records de novo in-house by keyboarding or scanning using its own staff or staff specially employed for the project; downloading records from other databases, tailoring to meet its own requirements and adding local data; outsourcing the operation to a commercial agency which specialises in catalogue conversion. The aim for archives would be to provide internet access to key resources at least at collection level, and at item level as far as possible.

6.3 A library or archive repository which is retrospectively cataloguing items and collections will be undertaking some of the above tasks: creating electronic records de novo by keyboarding using either its own staff or staff specially employed for the project, downloading records from other databases, tailoring to meet the its own requirements and adding local data; outsourcing the operation to a commercial agency which specialises in cataloguing.

6.4 As part of a national programme it would also be expected that institutions would contribute records from retrospective conversion or cataloguing projects to appropriate physical or electronic public access union catalogues or, where this is not possible, that the catalogue should be freely accessible across public networks to facilitate sharing and re-use of records by institutions and their retrieval by users. Funding for a national programme is sought to enable effective sharing of resources and not solely for the benefit of individual institutions.

6.5 The main reason for using externally produced records for printed material is to reduce in-house cataloguing effort. Factors which need to be taken into account are the overlap of the library's stock with the database concerned (the "hit rate"), and the quality of the records. There will, however, always be a proportion of records which do not find a hit and which have to be keyed from scratch. In retrospective cataloguing projects all original items will have to be examined, in retrospective catalogue conversion projects it may be necessary in some cases to go back to the original material. The use of externally produced records derived from earlier cataloguing is not an option in the archive domain where records are, by their very nature, unique.

6.6 In-house conversion or creation of records for both printed and archival material allows for local control and immediate resolution of problems, interactive use of local authority files and reference to the items themselves as necessary. However, there are management overheads associated with the recruiting, training and accommodation of staff.
6.7 The advantage of using a service agency for retrospective conversion of records for both printed and archival material is that it can complete the actual conversion much more quickly than a library or archive repository could on site. However, additional staff time is needed at each end, for preparatory work and for checking/resolving problems on delivery of records. Service agencies are particularly useful for large-scale retrospective projects which would not be feasible in-house. Because of the need to examine all original material for retrospective cataloguing, agency staff would either have to work on-site alongside the institution's own staff with added accommodation overheads, or work with originals or copies elsewhere and make frequent site visits.

6.8 Quantity, quality and accuracy are required in record creation and conversion. A quality record should be defined as fulfilling at least the mandatory requirements in all respects; the record may be fuller than this if there is a proven user need. It is important to distinguish between material which can be dealt with the minimum intervention, and material which requires greater attention by professional cataloguers or archivists. It is equally important that retrospective conversion or retrospective cataloguing should be a "one time" undertaking which should never need repeating and be of a standard to enable re-use of records by other organisations.

6.9 The exact methodology will vary according to the type of material and the scope of the project. Searching and importing of records could be carried out by clerical staff; creating and upgrading records would be the work of professional staff.

6.10 An organisation planning a retrospective catalogue conversion or retrospective cataloguing project would be expected to determine and justify its broad methodology taking into account the relevant merits and costs of the above factors and of any local factors which may also have a bearing on the choice of approach.

7 Costs of a retrospective catalogue conversion or retrospective cataloguing project

7.1 Libraries

7.1.1 The most important factors to be taken into account when costing the retrospective catalogue conversion or retrospective cataloguing of printed material are: the quality of any existing records, the hit rate with the database concerned, the matching/keying rate, and the level of staff required.

7.1.2 Unit costs for conversion of catalogue data for printed material from two studies by Philip Bryant using data collected in 1994-5 and 1996-7 were within the range of £1 to £5 with a mean of £1.50 to £2 (see section 1 of Appendix 1). Figures from the 1999 draft study for the Consortium of University Research Libraries (CURL) are broadly comparable with an average record cost of £4.54 for material in the target areas of early printed material, maps and printed music which fell to an average £2.62 for straightforward retrospective conversion with high hit rate and few language or format problems (see section 4 of Appendix 1). Unit costs for retrospective cataloguing will inevitably be at the higher end of the range and are equally dependent on the complexity of the material involved and the availability of existing records.

7.1.3 For printed material the average cost will vary depending on the composition of the staff team, which in turn will depend on the hit rate. Higher hit rates would allow for more clerical staff to be employed, thus reducing the average cost; lower hit rates would mean more professional staff time, thus increasing the average cost. The hit rate will also depend on the choice of database, on the type of material for which records are being converted or created, on the degree of professional intervention and on the amount of checking back to original documents. A higher hit rate would, eg, be expected for 19th and 20th century printed books where there are already many machine readable records in existence than for printed maps and music where there are comparatively few records and the amount of de novo cataloguing correspondingly higher. The costs of retrospective cataloguing could also be expected to be higher as each item will have to be inspected. Where there is a low hit rate, say of less than 30%, it may be considered more cost effective to key from scratch.
7.2 Archives

7.2.1 The cost of conversion for archives with unique items and collections depends significantly on the extent to which old manual catalogues need enhancement to modern international standards. In one of the few large retrospective conversion projects to be undertaken so far, the Public Record Office (PRO) found that only minimal enhancement was essential and that conversion costs as low as £2 per page containing an average of 20 records could be achieved. A desk study by Birmingham City Libraries, however, suggested some repositories could face much higher costs, even if the most deficient existing lists were excluded from consideration. Estimates for Access to Archives projects (A2A) are based on the higher average cost of £4 per page (see section 2 of Appendix 1). The costs of retrospective cataloguing for archives will also be higher because all archival material not previously catalogued will have to be catalogued from scratch.

7.3 Average figures only indicative

7.3 These average figures for libraries and archives can, however, only be taken as indicative. While unit costs coming within these ranges could be considered acceptable, they must be backed up with detailed costings for specific bids using rates determined for the material concerned and based on staffing levels and on hit rate, keying, scanning and upgrading tests as appropriate. Consistent and shared standards are required to enable comparison of data between projects. Higher than average unit costs would need to be justified. Some further research may be needed to determine average unit costs for different types of material.

7.4 Standards

7.4.1 The standard of cataloguing to be adopted is also a significant cost factor. The minimum acceptable record is one that clearly describes and identifies the specific item or collection to which it refers, that is in a format which is compatible with other records and, for printed material, that is capable of being re-used by another organisation to describe another copy of the same item. There may be more sophisticated standards requirements in the case of the hand-printed book, to enable accurate comparison and discrimination between copies.

7.4.2 The more complex and detailed the cataloguing, the higher the unit cost and the more expensive the project. While it is agreed that retrospective catalogue conversion and retrospective cataloguing should be a "one-time" undertaking, and that appropriate national and international standards should be adhered to, funding bodies will also be looking for value for money and for a maximum return on their investment. Within the context of a national strategy and with limited resources, the minimum acceptable standard could be considered the norm.

7.4.3 It should be noted in this context that each domain is beginning to reach a consensus on how items should be described. In the library domain CURL and the BL are working together to develop a core bibliographic record for the National Bibliographic Resource, and the CURL minimum standard for Roman scripts has been adopted by the Research Support Libraries Programme (RSLP). In the archive domain it is agreed that the foundation for successful and mutually compatible retrospective conversion is an agreed mandatory subset of the International Standard for Archival Description (ISAD(G)) as a data structure standard with Encoded Archival Description (EAD) emerging as the standard for data exchange.

7.4.4 Some further research may be required to establish the elements of the minimum acceptable record for retrospective conversion and retrospective cataloguing projects in libraries and archives (see para 5.8), but where higher than average unit costs are the result of internal cataloguing requirements above the minimum standard, an applicant should normally be expected to find the cost of the additional work required from its own resources.
8. Documentation of artefacts in museums, archives and libraries

8.1 When the focus moves from the documentary heritage to artefacts held in museums, archives and libraries, there are differences in professional terminology, in the current state of play and in approach.

8.2 Terminology

8.2.1 Retrospective documentation of artefacts into electronic format mirrors the retrospective cataloguing of printed and archival material and comprises both the recording of data about artefacts for which there is no existing documentation or only inaccurate or incomplete documentation, and the conversion into electronic format of documentation for which there is no artefact. Retrospective conversion of manual documentation to electronic format mirrors retrospective catalogue conversion.

8.3 The current state of play

8.3.1 There have been no major surveys of retrospective documentation or of retrospective conversion of manual documentation in the museum domain comparable with those in the library and archive domains so that estimates of the likely scale and costs of a national programme are lacking. Nevertheless at regional level there have been various mapping exercises including that recently undertaken by the West Midlands Regional Museums Council and reported in the reports First Principles and Fast Forward (copies available from the West Midlands Regional Museums Council, Hanbury Road, Stoke Prior, Bromsgrove, Worcestershire B60 4AD).

8.3.2 The museum Registration scheme, set up by the former Museums and Galleries Commission (MGC) and now administered by its successor body, Re:source, covers over 1,800 national, local authority and independent museums (as at February 2000). Registered museums, and those working towards registration, are eligible to apply for funding to the 10 regional Area Museum Councils (AMCs). One of requirements for registration relates to documentation with the focus on retrospective documentation, though not necessarily in electronic format, and on good housekeeping rather than on retrospective conversion.

8.3.3 A museum can only be registered if it fulfils the Registration criteria. If there is a documentation backlog "museums must provide details of their plans to eliminate backlogs within a stated timescale and an estimate of the resources required to implement the documentation plan." No time-limit is specified.

8.3.4 The documentation requirements of Registration suggest that, in contrast with the library and archive domains, the immediate and pressing need in the museum domain is for documentation of artefacts and collections. The retrospective conversion of existing documentation to electronic format and their enhancement to appropriate standards is currently regarded as being of lower priority although the application of SPECTRUM: the UK Museum Documentation Standard is prescribed.

8.3.5 Data about registered museums is available from DOMUS, launched in 1994. Data is gathered annually through survey forms sent to Registered museums and can be searched from the UK National Digital Archive of Datasets at http://ndad.ulcc.ac.uk/ndad/. An enhanced collections level database is searchable via Cornucopia (http://www.cornucopia.org.uk) which currently holds data relating to Designated collections, ie collections of national importance in museums other than national museums, but which will be extended to cover collections of all Registered museums during 2000. The picture gained from these sources is, however, incomplete: the registration scheme is based on submissions by museums which are not verified, and some museums are not registered.

8.3.6 The Survey of Information Technology in Museums conducted in 1998 by mda (formerly the Museum Documentation Association) found that, for objects recorded to Registration standard, 50% of all objects held by museums surveyed had records in paper format, only 29% were computerised and 21% were poorly documented or undocumented. National and
university museums had more computerised records, at 68% and 78% of objects respectively, in comparison with local authority (23%), independent (37%) and Ministry of Defence museums (3%). National, independent and university museums had fewer records only available in paper form, at 28%, 22% and 8% of objects respectively, in comparison with local authority (66%), and Ministry of Defence museums (35%).

8.3.7 The statistics suggest that smaller, less well resourced museums have fewer computerised records than national and university museums. However, although rough calculations about the overall national picture may be made using data from both Cornucopia and the mda Survey, neither sources are comprehensive. It is, therefore, recommended that research should be carried out in the museum domain to establish the amount of documentation held in manual form only, the extent to which data requires enhancement to modern standards and the numbers of artefacts and collections for which no documentation data exists as an essential preliminary to defining and costing a national programme for retrospective documentation and retrospective conversion of documentation to electronic format.

8.3.8 This is in line with the recommendations of the Re:source research strategy document which identified the need for robust and reliable, comprehensive, timely, periodic or frequent and flexible statistics in the museum domain and the need for “progress towards the digitisation of collections, the provision of metadata for collections and the inter-operability of catalogues etc.” (A Review of Research Priorities and Practice for the Museums, Libraries and Archives Council (MLAC), report by John Shepherd, November 1999, pp 37-8)

8.3.9 Previous poor response rates might be overcome by linking statistical data collection with possible funding opportunities.

8.3.10 Building the Digital Museum: a national resource for the learning age, published in August 2000 as a follow-up action report to Netful of Jewels from the National Museum Directors’ Conference in 1999 recommends the development of a content strategy for museums, libraries and archives (both reports are available on the mda website: http://www.mda.org.uk/). A robust survey of the museum domain would feed into the national content strategy which in turn would provide the strategic framework for setting priorities for documentation and conversion.

8.3.11 It is, therefore, encouraging that Re:source is committed to publishing a cross-sectoral Stewardship Strategy for museums, archives and libraries by April 2001. Stewardship includes documentation and cataloguing, and enabling physical and intellectual access to traditional and digital materials is one of the key issues which the strategy will address.

8.4 Approach

8.4.1 MGC Registration guidelines state that basic documentation records should be maintained so that “a museum should know at any time exactly for what items it is legally responsible (this includes loans and deposits as well as permanent collections) and where each item is located”. This is in contrast with the library and archive domains, where the primary aim of cataloguing is to enable the location of and retrieval of specific items and information.

8.4.2 The minimum requirements for museum documentation, in the order set out in the guidelines, are:

- entry/exit records
- location/movement recording records
- accession records
- security copy of accession records
- marking and labelling
- information retrieval
- loan records
8.4.3 Most of these requirements may be regarded as basic good housekeeping and thus the proper responsibility of individual museums. It is, however, in the area of documentation for information retrieval where the three domains come together, where the needs of users are targeted and which falls within the Full Disclosure initiative. The Registration scheme requires that each museum should maintain appropriate indexes or equivalent information retrieval facilities and that there should be at least one other retrieval method in addition to the accessions register, such as by location, donor, subject or categories appropriate to needs of museum users.

8.4.4 The importance of documentation in electronic format for information retrieval and its contribution to current government objectives is underlined in the recent DCMS consultation document Centres for Social Change: museums, galleries and archives for all, May 2000. The Executive Summary states that "Catalogues and key documents should be available on-line via the internet" and on pages 14-15: "It is important that potential users should be able to find out about the content or relevance of museums, galleries and archives, without having to visit them in person. Organisations should consider how they might be able to make copies of their catalogues available to internet users, for example through participation in the Access to Archives programme".

8.4.5 Cross-domain searching of museum, library and archive collections will, however, require further research to be conducted on the development and use of controlled vocabularies, both as cataloguing and retrieval tools. A particular challenge to be addressed is the object-oriented approach of museums with its greater emphasis on object name vocabularies when compared with the subject-oriented approach of libraries and archives. The use of thesauri as retrieval aids is being explored in projects such as the High Level Thesaurus project (HILT) and additional work will be required to develop public-oriented user interfaces to facilitate searching.

8.4.6 Under the Full Disclosure umbrella, it is expected that museums would seek to:

- improve access to museum collections for a variety of publics
- identify potential topics for exhibitions
- facilitate retrieval of knowledge related to artefacts for a variety of publics
- enable new links to be made between related collections of documents and artefacts in museums, libraries and archives
- enable resource sharing
- facilitate sharing of information about objects and collections
- raise standards of collections care and stewardship
- facilitate loans between local, regional and national museums

8.4.7 It is recommended that, in order to move towards these objectives, consideration should be given to ways of encouraging museums to commit to digital documentation programmes. This would best be achieved by a targeted phased approach.
APPENDIX 1

Origins of the framework

1 The Bryant report

1.1 The Bryant report, published in 1997 by the British Library Research and Innovation Centre (BLRIC), brought together data from two important studies on retrospective catalogue conversion in libraries in all sectors in the UK and recommended the adoption of a national strategy for the conversion of catalogue records to machine readable form.

1.2 The study led by Philip Bryant for BLRIC in 1996-97 covered a wide range of libraries outside the higher education sector and was the direct outcome of an earlier study undertaken in 1994-95, also led by Philip Bryant. This earlier study, commissioned by the Follett Implementation Group on IT (FIGIT) and funded by the higher education funding councils through their Joint Information Systems Committee (JISC), examined the justification for a national programme of retrospective conversion of library catalogues in higher education institutions and recommended that, as retrospective conversion of library catalogues was of major cross-sectoral interest, further work should be undertaken in public and other library sectors.

1.3 Quantitative data from the two studies revealed that in higher education libraries around 28 million records (representing around 6 million individual titles) have not been converted together with over 12 million records (representing around 6.5 million individual titles) in public libraries and over 9 million records in other types of libraries: almost 50 million records in all.

1.4 Libraries and collections surveyed showed an enormous variation in range and size of printed collections from the smallest at 80 items to the largest at over 5 million volumes. The report concluded that a national programme would benefit both individual institutions and the wider public, research and scholarly communities. It would maximise benefit from investment in stock, assist with decisions on collection care, facilitate remote searching, and help reduce the load on Inter Library Loan services by enabling users to locate alternative copies. In addition, the creation of records would provide a valuable resource that could be re-used by other libraries.

1.5 It was estimated that the total cost of retrospective conversion nationally would be in the order of £80-100 million. Since, as a general rule, matching funding up to 50% would be expected from institutions awarded external funding, it was calculated that the additional money to fund such a programme would be £40-50 million. A five year programme would cost between £8 million and £10 million each year. The unit cost of converting an existing manual catalogue record to machine readable form fell within the range of £1 to £5, the “mean” being within the range £1.50 to £2. Some possible sources of funding were identified, in particular the Heritage Lottery Fund (HLF).

2 Archives On-Line

2.1 In 1998 the National Council on Archives (NCA) report Archives On-Line, articulated a vision of a national network, which could both enable remote access to information about the location of archives, and enable thorough searches to be performed across the vast mass of data in archival catalogues to an extent and with an ease that the current largely manual arrangements do not permit. The principal obstacle the archive domain faces in achieving that vision is the need to retrospectively convert the vast mass of existing manual catalogues estimated at around 2 million pages (perhaps 12 million records) to electronic form and to upgrade the catalogue records where necessary to meet modern minimum standards.

2.2 The NCA did not undertake a large-scale survey of the retrospective conversion issue, but focused on the evidence available from three sources about the scale and likely cost of the profession's needs. The first was the volume of lists held by the National Register of Archives (NRA) which currently extend to about 1.5 million pages of text. To these must be added the substantial volume of catalogues held by repositories in formats such as card catalogues,
which are not suitable for copying for the NRA. Altogether it would be reasonable to estimate around 12 million catalogue entries (2 million pages) as the size of the archival retrospective conversion problem.

2.3 The average cost of the PRO's major retrospective conversion project was £2 per page with an average of 20 records. A desk study at Birmingham City Libraries, however, suggested some repositories could face much higher costs. On this basis, the total costs of retrospective conversion for archives were estimated at £33-£38.5 million. Subsequent experience would indicate that the latter figure is more realistic for the range of institutions involved. Although lower in cash terms than the total needs of the library sector identified by Bryant, these costs are far higher in proportion to the total national annual expenditure on archives. It follows that a much higher proportion of the costs of a retrospective conversion programme for archives will need to come from outside sources than Bryant proposed for libraries, and while there are a few repositories which may be able to redirect resources to cover these costs, many others will not be able to make any contribution from internal resources at all.

2.4 The NCA is seeking funding for the retrospective conversion of a large body of catalogue data from English local authority and private repositories through Access to Archives (A2A). This project will seek to apply the Public Record Office's retrospective conversion methodology to data from widely varying repositories and it is currently anticipated that costs of around £4 per page will be involved. A2A will take a regional and local approach to selection of projects with a central co-ordinating body, to be located initially at the PRO.

3 The Pathfinding Group

3.1 In response to the Bryant report the British Library (BL) was urged to take action and define priorities and strategy more effectively, and it was agreed from the outset that it made strategic sense to include both libraries and archives. In May 1998 a Pathfinding Group was set up by the BL with representatives from the Library and Information Commission (LIC), the Library and Information Cooperation Council (LINC), the HLF, the NCA, the Consortium of University Research Libraries (CUR) and the Research Support Libraries Programme (RSLP). This group commissioned the UK Office for Library and Information Networking (UKOLN) and the NCA to outline a national strategy. Funding was from the BL, LIC and LINC and the research team's findings have been published by LIC as Full Disclosure: releasing the value of library and archive collections.

3.2 The major focus of the report was retrospective catalogue conversion but it was also recognised that there are substantial amounts of uncatalogued materials which need retrospective cataloguing. Libraries and archives will often need to do both retrospective cataloguing and retrospective conversion to provide machine-readable records of their entire stock. In addition, many retrospective conversion projects will involve some element of checking and upgrading of records. The proportion of retrospective conversion and cataloguing will vary: in the archives domain there will be a higher focus on retrospective cataloguing as all items are effectively unique and there is a very large cataloguing backlog in many repositories.

3.3 The report's recommendations lay at the heart of the major conference held at the British Library on 10th May 1999. Over 140 delegates from all areas of the library and archive domains were joined by others from a variety of organisations and government initiatives for whom retrospective catalogue conversion and retrospective cataloguing is highly relevant.

3.4 Conference delegates both welcomed and supported recommendations to set up a national co-ordinating focus and to put in hand a phased programme of activities to work towards full disclosure of library, archive and museum resources. While the museum domain was not within the remit of the study, it was agreed it should be included in a national strategy. Points raised at the conference were incorporated into the final report from the research team. It is now estimated that a period of 10 years would deal with around 80% of the existing catalogue records not at present in machine readable form. Within the overall timescale the initiative would be broken down into phases of between 1 and 3 years.
However, depending on the amount of funding likely to be available from all sources at any one time, it may be more realistic to consider carrying out the work over a longer period of up to 20 years. Taking the earlier figures quoted by Bryant and including the figures from the archive domain, the overall minimum cost, in addition to institutional funding would be in the order of £90-100 million.

3.5 There are benefits and advantages to a joint national strategy, but it is recognised that at some points in the programme there will be a need for library and archive projects to go forward in distinctive strands of development. There are specific needs in each domain to be considered and taken into account. In addition the inauguration of an umbrella strategy should not unnecessarily prejudice existing projects and opportunities. These need to be incorporated as part of the overall initiative.

4 The CURL Database Project

4.1 CURL has recently completed a feasibility study (September 1999), partially funded by the HLF, to investigate how a national programme of retrospective conversion of catalogue records in its member libraries could contribute to the nation's access to its documentary heritage in all formats but excluding manuscripts and archives.

4.2 Data collection was done in two stages. The first stage was a retrospective catalogue conversion needs survey of all collections of printed materials in CURL libraries which still had manual catalogue records. Manuscripts and archives were not covered in detail, but libraries were invited to supply general information about these collections. Libraries were also asked to assign priorities for retrospective conversion.

4.3 The second stage attempted to gather more detailed information about collections by asking libraries to complete a template broken down by type of material, date language and broad subject area. This was followed by structured telephone interviews to establish the suitability of the manual records for the different methods of conversion. Libraries were also asked which collections they considered rare or unique either regionally or nationally.

4.4 The study found that of the 10 million records in CURL libraries which had not been converted to machine readable form some 2 million records in a small number of target areas as potential early priorities for retrospective conversion in terms of the importance of the material and the likelihood of funding. The data collected has already proved useful in targeting collections for retrospective catalogue conversion and for putting together expressions of interest in response to the RSLP call. The draft report from CURL to the HLF has also informed this framework document.

5 The Full Disclosure Implementation Group

5.1 The May 1999 conference confirmed the findings of UKOLN and the NCA that most support was for placing the new national co-ordinating focus within the new Museums, Libraries and Archives Council (MLAC) either as part of it or constituted by it. However as MLAC would not be operational for another year, the BL agreed to host a shadow focus, supported by its new Co-operation and Partnership Programme and named the Full Disclosure Implementation Group, to take on and progress the initial elements of the strategy. The new Group includes, in addition to LIC and LINC, representatives from the higher education sector, and from the archive and museum domains.