

**Developing a National Database  
of Resources in Accessible Formats**  
: a feasibility study

A report to  
the British Library Cooperation and Partnership Programme  
from  
the STV Reveal Development Steering Group

By

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22<sup>nd</sup> September 2000

*THIS IS AN EDITED VERSION OF THE FULL REPORT AND  
INFORMATION OBTAINED UNDER A 'COMMERCIAL IN  
CONFIDENCE' AGREEMENT HAS BEEN OMITTED*

22<sup>ND</sup> November 2000

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A number of people were consulted during the course of this study and gave generously of their time by participating in formal and informal discussions and by providing information and data.

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## Executive Summary

The development of a web-based national database of accessible formats is crucial to the Share the Vision programme for improving library and information services to visually impaired people. The 1999 review of NUCAF set out a substantial development strategy to achieve this. The current study investigated the feasibility of making the proposed Reveal service a reality.

Web-based catalogues are increasingly used for libraries and union catalogues, but there are some specific issues relating to accessible formats that system suppliers do not generally face.

- Works existing in multiple accessible format versions
- Holdings that need to be related to specific accessible format versions
- Requirements for additional data on production history, production masters and copyright permission
- Ability to limit searches by format type or intellectual level
- Requirement to reduce duplication of data in search result displays
- Accessible design of user interfaces

Any system considered for hosting Reveal will require customisation to hold the additional information, to provide suitable search strategies for visually impaired users and to provide accessible user interfaces.

For Reveal to use the UKMARC format will require the addition of a small number of either MARC21 fields or local fields. Areas where this is required are work content, material format, and retrieval indexing. Some additional data (production history and copyright permission) may be better attached to the bibliographic record in some form of system record.

Reveal is a cluster of services; while the primary tool – the bibliographic database – can be accommodated in a library management system, this may not be the best solution for some of the ancillary datasets.

The best management placement for Reveal is still with the RNIB/NLB joint library service. However, it must be remembered that this is still at the stage of a pilot project. Should the partnership not be renewed at the end of the current agreement, consideration must be given to an alternative host organisation.

RNIB and NLB between them account for two-thirds of the data that would be held on Reveal. If they are using the same library management system, this is a strong argument in favour of using that system for Reveal to avoid extensive duplication of data. However, joint usage of the same system cannot be assumed at this point. With the two organisations using different systems, the system used by either could be used (if suitable) or a third and separate system might be required.

The next stage is to develop an operational requirements document for issue to prospective suppliers. The number of suppliers approached to consider the proposal will depend on regulations of the body funding the database.

Further funding is required for Reveal. Firstly, to develop the operational requirements document. Secondly, funding for a system to host Reveal, migrate the data from NUCAF and to staff the new service. Thirdly, funding for the ancillary services (collections and copyright); these may be part of the main system implementation or be developed separately.

Although the primary beneficiaries of Reveal will be visually impaired people and those who support them, this work will also contribute to two national initiatives. It will assist Full Disclosure by ensuring machine readable records are available for the holdings of a specific sector within the UK library community, and the UK National Union Catalogue is interested in incorporating Reveal at phase 2.

In addition to this, the project has encountered and had to address issues that are transferable to other projects and areas of library and information work.

## Notes

1. Some of the material in the full report has been obtained from commercial organisations, and is subject to a confidentiality clause. In this version such material has been edited out. This largely applies to section 4, section 5, and parts of section 3.8, where specific systems are under consideration. Requests regarding dissemination of the full report should be referred to the Reveal Development Steering Group.

2. This report for members of the Reveal Development Steering Group, and appropriate staff at the British Library, Royal National Institute for the Blind and National Library for the Blind results from a feasibility study, and necessarily contains much detailed and technical information.

## Recommendations

### 1. The Reveal Development Steering Group should:

- Take steps to obtain funding for the next stages of the project.
- Commission next stages of Reveal development.
- Appoint a Reveal Project Manager to co-ordinate further activity on the project, and the retrospective conversion project.
- Decide on the issues relating to the legal status of the Reveal service, the ownership of its component parts and the operational responsibility for delivering the service. This report recommends that Reveal operates as a separate unit within the joint library services of RNIB/NLB.
- Review the concept of Reveal. It should be seen as a cluster of services and not just a union catalogue; this will require minor rewording of the mission statement.
- Point out to government and other relevant bodies the cost in time and money to the specialist non-commercial sector of processing applications for permission to make accessible format transcriptions given the estimated cost of setting up and maintaining a central agency to do this.
- Given the commercially sensitive nature of some parts of the report, decide with the British Library as funders of this study, how widely this report should be disseminated outside the organisations involved in the Reveal project. *Decision: this edited version of the report has been produced for wider dissemination.*

### 2. Phase 1 work

- Initial work on Reveal should concentrate on the bibliographic database and the collections register.
- An operational requirements specification should be commissioned for the database. With the specification completed, the next stage would be procurement and then commissioning of the chosen system.
- The collections register would form a useful new source of information for end users, especially in the period before Reveal is operational, and should be taken forward as soon as funding can be obtained. A specification for the collections register should be commissioned, and system developers approached.

### **3. Phase 2 work**

- Other work on Reveal should form a later phase of development, and in some cases will be dependent on the Reveal database being operational. Further development work is required for these components.
- Initial work in this phase should focus on the production of a Reveal CD, creating an In Print file for commercially produced materials in collaboration with a book trade data supplier, and working on Z39.50 interoperability with the British Library, LASER, and Unity.
- Consideration should be given to new proposals such as those that have emerged during this study, i.e. the database of transcribers and transcription services, and the option for users to submit suggestions for accessible format production.
- Work on the Copyright Register should be deferred until government decisions have been made on possible changes in copyright legislation relating to accessible format transcriptions.

### **4. The Reveal service**

- All user interfaces should be designed in accordance with accessibility guidelines.
- Results displays should not make additional barriers for users through the display of duplicate data.

### **5. The Database**

- The database should record non-commercially produced accessible format versions of monographs, serials and other materials originally issued in standard print, and materials in production.
- Records should include details of transcriptions, format information, holdings and masters.
- The UKMARC format should be used with a small number of MARC21 and local fields.
- Library of Congress Subject Headings (LCSH) should be used for topic and place indexing in fiction and non-fiction.
- Guidelines on Subject Access to Works of Fiction, Drama, etc (GSAFD) should be used for genre and form indexing for fiction.
- Fiction should be indexed when relevant for characters, settings, themes and series.
- Forager indexing for fiction should be included at a later stage; this will require some development work and upgrading of system software.



## **6. Relationships with other databases**

- Where possible the capacity for simultaneous searching of Reveal and another database using Z39.50 should be developed. This will reduce, if not eliminate, the cost of exporting and importing records between Reveal and other databases.
- Where such search capacity is being developed, hyper links on web sites should be set up to enable users to move from one database to another.

## **7. Relationships with specialist non-commercial producers**

- Partnership agreements should be made with all producers whose output and holdings are listed on the Reveal database.
- Reveal must be promoted to specialist non-commercial producers.
- Retrospective conversion project work has started this process. Work on the collection register will take this further.

## **8. Long term support for Reveal**

- Further approaches should be made to relevant bodies for a commitment to establishing Reveal as a part of national library and information services. This commitment should include funding for both setting up the service and then maintaining it.

## **9. BL Cooperation and Partnership Programme Call 2**

- There is a possibility that some further work could be funded under this scheme; the timetable is likely to require bid submissions in January 2001, with successful work starting in May 2001. However, success of bids is not guaranteed and timing of work is dependent on the funding. Possible bids would be:
- Operational requirements specification and procurement stage for Reveal system. (As this is a priority, application for DCMS funding is probably better.)
- Collections register. This is a discrete element, which can be progressed earlier.
- In Print file (commercial production). Although designated a phase 2 element, this could be progressed earlier.
- It would be useful to have feedback from the BLCCP as to whether any of these options would be outside the remit of the Call.



## 1. Introduction

### 1.1 Background

In 1999, the Department for Culture, Media and Sport (DCMS) made a grant of £200,000, to be administered by the Library and Information Commission (LIC), now part of Resource: the Council for Archives, Museums and Libraries, to improve library and information services to visually impaired people. Share the Vision (STV) produced a number of proposals to achieve this. Of the proposals approved, Project One focused on improvements to the National Union Catalogue of Alternative Formats (NUCAF).

UKOLN was contracted to explore

- (a) how the existing service provided by NUCAF could best be developed, defining the vision and setting out the aims for such a service
  - (b) produce a technical specification for the metadata requirements in order to maximise the utility of the database for independent end users and library/agency staff
- and
- (c) within this to address the need to provide expanded and descriptive cataloguing entries which permit visually impaired people to browse through an easy to use single source of information.

The report was submitted in January 2000 and the LIC/STV steering group in charge of the DCMS funding accepted all the recommendations in the NUCAF review, and has also made the delivery of the proposed Reveal database its first priority.

The report concluded that to take the initiative on, a further study would be needed to develop the strategic recommendations into a service and management structure that would support the new database, and to investigate the costs of developing and maintaining the proposed service. Accordingly a proposal was made to the British Library Co-operation and Partnership Programme for funding for a feasibility study. The programme awarded a grant for the full amount requested and work on the study began on 1<sup>st</sup> May 2000.

In parallel with the NUCAF review, a second study undertaken by the National Library for the Blind, the Royal National Institute for the Blind and an independent library automation consultant investigated how many entries, for accessible format material in existence, were missing from the current NUCAF file. In addition to identifying the quantity of

missing entries, the study also examined methods for retrospective conversion of data held about these materials into electronic records. A pilot project to begin the capture of the missing data is currently in progress.

## **1.2 The Feasibility Study**

The scope of the study is to investigate how a National Database of Resources in Accessible Formats might be developed, implemented and supported.

The objectives of the feasibility study are:

- to investigate the technical developments necessary to implement and manage the national database
- to estimate the resources necessary to implement and manage the service
- to draw up an outline business plan which can be used as the basis for securing funds for setting up and maintaining the service

The study covers three areas:

- a technical specification for the service
- a management structure for the service
- an outline business plan

The recommendations of the NUCAF Review formed the basis of the feasibility study. In turn, possible ways of achieving the different recommendations have been examined, and the feasibility and consequences of specific solutions considered. Underlying the whole of the study there are some basic principles.

1. Reveal will be a cluster of data and services for a range of users. The primary tool will be the bibliographic database. Further databases should only be added where data cannot be accommodated satisfactorily within the bibliographic database.
2. It is better to use a standard library or information management solution for systems, software and bibliographic standards where possible as there is a greater degree of external support and interoperability with other systems.
3. Duplication of effort should be eliminated where possible, unless service functionality is compromised.
4. Solutions should enable scarce resources to be exploited as widely as possible.

Throughout the study it has proved important to be clear about the terminology. A Glossary of terms is included (Appendix A).

### **1.2.1 Technical Specification**

Working through the technical recommendations in the NUCAF Review enabled a specification of requirements for a system to support the database to be created. Although the Review did not identify a specific system for the new database, there were significant reasons for particular investigation of the Geac Advance system. Already in place at NLB, it may also support aspects of RNIB library services.<sup>1</sup> The specification was therefore matched against the Geac system, and areas where enhancements or developments were needed were identified. Solutions were discussed with Geac, Talis, LASER, Unity, Fretwell Downing, ILRT and the British Library. The specification appears as the Functional Specification (Appendix C).

During the work on the operational requirements and the technical specification, it has emerged that some recommendations need to be revised because of a changing situation and to take advantage of new technology and other developments. For instance, the use of Z39.50 clients now seems a better approach to simultaneous searching than the original recommendation that Reveal should be available as exported records.

### **1.2.2 Management Structure**

In this part of the study, the team worked through the NUCAF Review recommendations relating to the management of the service. These include creating, enhancing and maintaining records, quality control, control of requests, and maintenance of Copyright Permissions and Collections registers. Possible solutions were investigated.

### **1.2.3 Business Plan**

The creation and development of this new database cannot be achieved without some additional funding. At this stage the figures can only be estimates and agreements have yet to be made on where the responsibility and financial support will lie for creating and maintaining this essential service. This part of the study presents estimated costs of all the elements associated with the development, implementation and support of the national database, including:

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<sup>1</sup> Position at June 2000. Pilot to host RNIB bibliographic data on Geac Advance. Investigation of suitability of circulation module for RNIB Braille and Cassette libraries. Geac Advance to be used for all functions of RNIB Research Library. Investigation of Geac Advance for RNIB Talking Books Service.

- software costs – capital and maintenance/future development
- hardware costs – capital and maintenance/future development
- staff costs
- development costs
- implementation costs
- support costs

### **1.3 Summary**

The feasibility study has established what will be required to make Reveal a reality. The next stage is to move to development and commissioning. The overall project has been broken down into a number of smaller sub-projects, some of which could be progressed independently. For each project the operational requirements must be defined, and funding negotiated, to enable systems and software to be commissioned, and staff to be appointed.

## 2. The Service

### 2.1 Service Specification

#### Recommendations of the 1999 NUCAF Review

##### *Mission Statement*

***Reveal: the National Database of Resources in Accessible Formats is an integral part of a network that links local, regional, national and international resources in serving the library and information needs of visually impaired and print handicapped people in the UK. Reveal provides a resource that can be used by anyone with a need to identify, locate and obtain expressions of knowledge, intellect and creativity in accessible formats. Reveal is available through a range of access methods to ensure the widest possible outreach to visually impaired and print handicapped people in the UK.***

- The database and its associated services must combine the functions of a union catalogue, a stock selection resource, an inter-lending tool, a sales and hire catalogue, a copyright permission register and an in-production file, and form part of the national bibliography.

##### Notes

a. Within the review and this study the concept of Reveal is a cluster of services, though with the database as the primary service, but the mission statement focused only on the database. There may need to be some revision of the mission statement to reflect this.

b. The mission statement refers to a range of access methods for the widest possible outreach. Accordingly, this study has concerned itself with web-based solutions, CD-Rom applications etc., but at the infrastructure level rather than the user interface. It is, however, fully recognised that any system(s) serving Reveal will need to have accessible user interface.

##### **2.1.1 Introduction**

The present level of library service and bibliographic information to visually impaired people comprises a patchwork of services, largely in the voluntary sector, with no overarching structure or supporting network. Reveal is an ambitious attempt to address a number of the gaps and limitations of the present situation. It is intended to benefit visually impaired people themselves plus a whole range of people who currently assist and support them.

The one existing tool which attempts to bring together the resources available to visually impaired people, the National Union Catalogue of Alternative Formats (NUCAF), is currently hosted and maintained by the Royal National Institute for the Blind (RNIB). It is in effect an extension of the catalogue of RNIB's own resources, and is held on an integrated in-house system (Infoflo), which is closely integrated with a number of departments and procedures within RNIB.

The review of NUCAF identified the need for a single, accessible, source of information on materials in accessible formats. It concluded that NUCAF was the right idea but suffered from limited resources, restricted access and low visibility to its potential users. The review recommended that in order to fulfil all the functions of the single, accessible source of information a new database was required. This would primarily be a web-based resource, supported by CD-Rom products and downloadable files. The current database for NUCAF works well for what it was designed to do but cannot easily accommodate the additional requirements of the proposed new database. Consequently a new system will be needed to hold the database.

**The needs of the user must remain a primary requirement in developing the new bibliographic database and the ancillary databases and services.**

### **2.1.2 A Service Overview**

The concept of Reveal is as much about services and establishing a support structure for the sector, as it is about upgrading the content of NUCAF and widening access to it. While a union bibliographic database is the primary focus of Reveal, not all the additional functions recommended need to be held within a bibliographic database, although some aspects may be best handled in this way. Reveal will become the co-ordinating focus for the sector, linking producers, reproduction rights holders, library services and a variety of end users. Reveal should also be forward looking and examine all opportunities for extending its service range; one extension already suggested is a database of transcribers and transcription services.

For this reason it is important that Reveal is established as a national service and therefore not linked solely to a single organisation. But neither can Reveal function in isolation and some linking with existing organisations is not only inevitable but important for the success of Reveal. As a national service, it will function as a virtual extension of the



British Library (BL) to record the published output of intellectual and artistic content in the UK. The NUCAF Review also recommended that the government should fund Reveal via the BL. This raises the issue of the legal status of Reveal, which will need to be determined by STV and the funding body. It can either be a part of a larger organisation (STV, BL or RNIB/NLB joint library service) or an independent but externally funded organisation.

Reveal should support the producers and collection holders as an alliance of members, and partnerships will be a vital element in the success of Reveal. Any non-commercial specialist producer or holder of accessible format materials in the UK could become a Reveal partner. This alliance will be a two-way process, with benefits to all. While the various organisations will contribute data about their holdings and services, Reveal will act in a supporting role for some of their activities (e.g. cataloguing, copyright clearance).

As an alliance of members, there will be a need for partnership agreements, which will set out what the partner is expected to contribute, and what services it will get from Reveal in return. Various issues will need to be dealt with here. For instance, some organisations have had reservations about their holdings being made public on NUCAF (one reason for this is copyright restrictions that prevent loan of items outside the producing institution, another is concern that publicising their holdings will lead to large increases in requests for their stock). However, by June 2000 some 30 organisations had signed agreements with RNIB allowing their holdings to be recorded and displayed. Reveal would need to renegotiate agreements with these organisations and then work on negotiating agreements with other organisations. Where organisations have particular concerns, they can be addressed in the agreement negotiation process; for instance, on the copyright issue, the fact that bibliographic records can contain a note such as 'availability restricted to those meeting the eligibility criteria of the holding institution' could be sufficient to reassure organisations. Inevitably, the partnership agreement work will require a lot of effort in the initial stages of setting up Reveal.

Since around 66% of resources for visually impaired people is produced and made available by just two organisations – the National Library for the Blind (NLB) and the Royal National Institute for the Blind (RNIB) – it is logical to build on their long and extensive experience in this area. Their joint library service is the obvious choice to manage and maintain the service. One possible solution is to use the joint library management

system for at least the bibliographic database, since there will be extensive duplication of records if there is a separate Reveal database. However, distinctions will need to be made between requirements for the joint library service which are not requirements for Reveal, and vice versa. There are four possibilities.

1. The Geac system can accommodate the bibliographic database and all other Reveal data.
2. The Geac system can accommodate the bibliographic database and some Reveal data. One or more data sets require additional software or systems.
3. The Geac system can accommodate only the bibliographic database and all other Reveal data sets require additional software and systems.
4. The Geac system cannot satisfactorily accommodate the bibliographic system. In this case, despite the duplication, a separate Reveal bibliographic database is required plus software or systems for the other data sets.

Where possible, Reveal should use existing standard library and information systems and software. If it proves necessary to use more than one system to support Reveal data and services, they must be compatible with each other at the point of interface. Reveal should also use appropriate national and international bibliographic standards.

### **2.1.3 User group requirements**

There will be a range of users of the Reveal service and they have different requirements of the service but inevitably there is an overlap of requirements between the different users groups. Some data will be accessible by all user groups, while other data will be accessible only by specified groups using some form of authentication such as passwords.

All public access interface (e.g. web displays, CD-Rom displays) and staff interface should conform to accessibility guidelines

#### **2.1.3.1 Individual Users / Readers**

- A database of resources in accessible formats in the UK
- A database of resources that are in production
- Database widely available through a range of access routes
- Database searchable for known items and focused subject searches
- Search results can be downloaded in accessible formats as well as displayed on screen

- Records contain sufficient information to assist users in making choices
- A database of the collections of accessible format materials in the UK
- A database of transcribers and transcription services (new proposal)
- An inter-lending node through which requests can be routed

### **2.1.3.2 Librarians in the public, academic and special sectors Staff at schools and colleges**

- A database of resources in accessible formats
- Database widely available through a range of access routes
- Database searchable for known items and focused subject searches
- Search results can be downloaded in accessible formats as well as displayed on screen
- Records contain sufficient information to assist users in making choices
- A database of the collections of accessible format materials in the UK
- An inter-lending node through which requests can be routed

### **2.1.3.3 Customer Service Staff at NLB and RNIB**

- A database of resources in accessible formats
- A database of resources that have been selected for production
- A database of resources that are in production
- Database searchable for known items and focused subject searches
- Search results can be downloaded in accessible formats as well as displayed on screen
- A database of the collections of accessible format materials in the UK

Other functions and processes at NLB and RNIB may be supported by the joint working platform for the combined library service, but do not form part of Reveal. Thus production control, stock control (acquisitions, circulation, sales, subscriptions), and maintaining reader profiles are clearly not part of Reveal. In some areas there is an overlap, and copyright clearance and inter-lending are part of Reveal and part of NLB/RNIB library services. And parts of Reveal, for example the Collections database, are outside the remit of the joint library service.

### **2.1.3.4 Specialist non-commercial producers of accessible formats**

- A database of resources in accessible formats
- A database of resources that have been selected for production
- A database of resources that are in production

- A database of titles, or types of material (e.g. appliance instructions) for which general or 'blanket' copyright permissions to accredited producers has been granted
- A database of copyright rights holders contact details. Need to restrict or control open display of personal addresses but Reveal could forward correspondence.
- A variety of methods of contributing records and notifying additional copies and withdrawals to the database
- Contract allowing Reveal to hold and display records for holdings

#### **2.1.3.5 Copyright rights holders and licensing agencies**

- A database of copyright rights holders contact details. This could be available to publishers, CLA, etc, if a reciprocal agreement to access their databases is agreed.
- A central agency for making applications to rights holders

#### **2.1.3.6 Other data providers (e.g. LASER, Unity, BNB, MIRACLE, NLS)**

- A source of bibliographic records for resources in accessible formats
- Use of appropriate bibliographic standards for record format and content
- Z39.50 capability for simultaneous searching of Reveal and another database.
- Appropriate methods to export records if required

## **2.2 MANAGEMENT STRUCTURE FOR REVEAL**

### **Recommendations from the 1999 NUCAF Review**

- Ownership and management
  - The British Library be asked to accept responsibility for recording these materials as part of the national bibliography
  - The new database should be established as an independent resource
  - It should be maintained by the joint library service of NLB and RNIB
- Funding
  - Via the British Library, government should fund the setting up of the national database of resources in accessible formats
  - Via the British Library, government should maintain the service

There is general support from the BL, RNIB and NLB for Reveal, and staff from all three organisations contributed to this study.

### **2.2.1 Managing Reveal**

In addition to setting up the database, migrating records from NUCAF and designing the web interface, there has to be a management structure in place that will maintain the service. The NLB and RNIB have begun to develop a shared library service, and the NUCAF review recommended that this joint service should maintain Reveal. While NLB and RNIB are working towards the shared service, this is still in its early stages. It would not be appropriate to be too prescriptive at this point on the management structure, and the numbers and categories of staff. However, an initial examination of this area is required because of the funding implications.

A number of factors are involved in how the Reveal service can best be managed. Staff employed at both RNIB and NLB not only have basic cataloguing skills, but have built up a wealth of experience over the years in specific application to accessible formats. The bibliographic record staff are based at two sites, Peterborough for RNIB and Stockport for NLB; it is not necessarily a problem to continue this division if the service structure is designed well. At present, NLB staff tasks are related only to NLB production and cataloguing, but RNIB staff tasks include some work for other producers in addition to RNIB production and cataloguing. As the retrospective conversion work gets under way, contacts will be made with other producers and relationships strengthened with existing producers. This is likely to result in an

increase in workload; more titles will be added to the database, and there may be a transfer of copyright clearance work to Reveal from individual producers. If the inter-lending aspect is developed, again this will increase workloads.

### 2.2.2 Current workload at RNIB

At present RNIB has a total of 6 posts at Peterborough (including 1 part time post) on bibliographic recording and copyright permission applications. The current staffing establishment is fairly stretched, as in addition to routine work for RNIB and NUCAF some effort is allocated to other projects. Thus up to 2.5 days per week is allocated to editing NUCAF for missing records and previously unreported withdrawals, and staff are contributing to Reveal development work and the MIRACLE project (an international Braille music project). BNB records are used as source records (which are then enhanced with transcription specific data, RNIB indexing and synopsis) but these are not always available and some records are entirely keyed in.

- 1 Systems Librarian (25 hours per week)
- 2 Cataloguers (full time)
- 1 Bibliographic Support (full time; vacant at June 2000 but recruitment in process)
- 1 Copyright Officer (full time – development work re copyright clearance)
- 1 Assistant Copyright Officer (full time – copyright clearance applications)

<b>Task</b>	<b>Est. Annual Workload</b>	<b>Recorded Workload</b>
New Cataloguing Internal RNIB	c. 2000 p.a.	657 in 4 months
New cataloguing External	c. 1200 p.a.	388 in 4 months
Adding stock to existing records RNIB	c. 300 p.a.	97 in 4 months
Adding stock to existing records External	c. 700 p.a.	232 in 4 months
Proof reading entries / checking	c. 2000 p.a.	662 in 4 months
Copyright applications RNIB *	c. 3780 p.a	315 in 1 month
Copyright applications External	c. 360	30 in 1 month

Table 1. Current workload at RNIB.

\*Includes applications for individual request transcriptions (e.g. knitting patterns) as well as lending collection production

### 2.2.3 Current workload at NLB

At present NLB employs 6 people full time on stock management, bibliographic recording and copyright permission applications. In contrast to RNIB, cataloguing and copyright permission application work is not undertaken through specifically designated posts. Instead the stock officer work covers ordering of originals for transcription production, applying for copyright clearance for NLB production, ordering accessible format materials produced elsewhere, and creating catalogue records for materials added to stock. All records are keyed in.

- 1 Stock Manager (full time)
- 2 General Stock Officers (full time)
- 2 Stock Assistants (full time)
- 1 Music Libraries Stock Officer (full time)

<b>Task</b>	<b>Est. Annual Workload</b>	<b>Recorded Workload</b>
New Cataloguing NLB	c. 1529	379 in 4 months
Adding stock to existing records	c. 1419	287 in 4 months
Copyright applications	c. 280	159 in 4 months

Table 2. Current workload at NLB.

### 2.2.4 Accessible format production in the UK

It is the intention that the Reveal database will hold records from all specialist non-commercial producers in the UK. While records for existing items will be acquired through the NUCAF migration and the retrospective conversion project, these producers will continue to make new transcriptions. Records for continuing output will therefore need to be added to the database.

The estimates for current production are shown in the following table:

<b>Producer Type</b>	<b>Annual Output</b>
RNIB and NLB	3,500
Other specialist producers	994
Schools and LEA services	1,565
Other organisations (e.g. Action for Blind People, British Diabetic Association)	787

Table 3. Estimates for current production (taken from the NUCAF Retrospective Conversion Project (1999) audit)

It is known that this figure is an underestimate, as several potential contributors were also identified in the audit, but the volume of their output is unknown at present. RNIB and NLB would continue to create records for their own output as at present, contributing them to Reveal. However, records for the output of other producers would be contributed in a variety of ways, and some input from Reveal staff would be needed.

The NUCAF Review envisaged more direct input through electronic means from some producers while still supporting producers for whom hard copy reporting will remain the notification medium.

The intention is for the Reveal web-site to offer a data input screen for producers, to allow them to submit details of titles selected for production, currently in production, added to stock and withdrawn from stock. Since the majority of these organisations do not have staff with either library experience or qualifications, the records created through this method will need to be assessed and upgraded as appropriate by Reveal staff. The editing and amending of in-process records as they progress through different stages will also be a Reveal staff task.

For those producers not making direct entry through the web-site, records may be submitted to Reveal as electronic files, email messages or hard copy. It may be possible for electronic files (and perhaps structured email messages) to generate a Reveal record, but as with producer direct entry these will need to be assessed, upgraded and flagged by Reveal staff. There will also still be a requirement for some keying in of data by Reveal staff.

Sometimes a producer has notified NUCAF of new and withdrawn titles by sending a complete data dump or printed listings. RNIB staff need to verify the status of each entry in turn, before creating new entries and deleting those for withdrawn items. This is very labour intensive when the listing is more than just a few titles. From the point where a producer's complete stock to date is on the database, there needs to be an agreement with the producer to continuously, or at regular intervals, notify additions and deletions. This would form part of the partnership agreement.

### **2.2.5 Separating Reveal from other work at RNIB and NLB**

In the new scenario of the Reveal service, there will need to be a clear understanding and separation of work which relates to Reveal and work which relates to NLB and RNIB sections. This may entail a degree of re-organisation within NLB and RNIB. This should be regarded as an



opportunity to review current work processes and how objectives can best be achieved. For instance, copyright clearance work is undertaken at both organisations; at one it is a dedicated set of posts, at the other staff undertake this as one task of a number. At both organisations, copyright clearance relates to other sections (e.g. production) within the organisation. The recommendation is that Reveal should provide a single, dedicated unit to make applications on behalf of accredited producers; NLB and RNIB would then be clients of the Reveal unit alongside all other accredited producers. This will necessitate a different interface with production sections. On the other hand, setting up the new unit should build on the best approach of the existing situation, in this case using the RNIB approach and basing the new unit at Peterborough.

### **2.2.6 Creation of the Reveal database**

The creation of the Reveal database will necessarily be a staged process and will require additional, but largely temporary, effort.

RNIB will continue to clean up the NUCAF file, subject to staff time being available; an application has been made to the NUCAF Retrospective Conversion Project for another cataloguer to work on NUCAF on specific areas of the project. If changes to conform to Reveal practice are agreed, which can be implemented through global changes, and Infoflo can handle global edits, it may be possible to do this in advance of migration. Such work will require staff time to analyse the change and make any mappings required, and to write the software to accomplish the task.

The initial set up of the database will entail the migration of existing data. Data must be migrated from NUCAF to Reveal. If the chosen platform is the Geac Advance system, then de-duplication will be needed to avoid NLB records appearing twice. The retrospective cataloguing project will continue in parallel with the development of Reveal. Close contact has been maintained with the project team, and the template drawn up for data recording takes Reveal practice as the standard. Records created under the project will be held either in electronic form, for which a migration of data to Reveal will need to be made, or in paper form, which will require keying in. Staff effort will be required in mapping, migration software and data entry.

With the Reveal database operational, records will be created for new transcriptions. Because accessible format materials are transcriptions of standard print items, bibliographic records for standard print items form a valuable source of base data for Reveal records. The system must

therefore allow the import of records from other sources, e.g. BNB records.

Reveal will be encouraging producers and holders to add details of new holdings or new titles to the Reveal database. While direct input via a screen on the web-site will be used by some organisations, some will wish to use transfer electronic files. The system will therefore need to accept these records into a holding file for Reveal staff to enhance where required and move into the database proper. One possible source of imported records is from schools and colleges using the Alice library management system.

### **2.2.7 Staffing Reveal**

The identification of tasks and work loads at NLB and RNIB and a corresponding identification of the tasks and processes required for Reveal have been made. Using this information, the following outline of a suggested staffing structure for the service has been drawn up. With the given scenario that the NLB/RNIB joint library service manages and maintains the Reveal service, there will be some areas where staff work on both Reveal and joint library service tasks. The exact proportion of time spent on Reveal will need to be established as this should be funded by external sources and not by NLB and RNIB. (For example, if the Reveal technical officer post forms part of the duties of the NLB technical services post, and Reveal tasks amount to a day a week, then Reveal will need to fund a 0.2 post.)

A possible Reveal service structure might be as follows:

#### **2.2.7.1 Reveal Manager**

- Day to day management of the Reveal database(s) and services
- Quality control for the Reveal bibliographic database
- Line manager for Reveal staff
- Management of partnership activities
  - External partnerships in general
  - Reveal Partner agreements with other producers
  - Collections Register

*Full time post*

*Appoint as Reveal Project Manager during development phase.*

## 2.2.7.2 Reveal Officers

Maintain the bibliographic database

- Transfer bibliographic records from electronic files supplied by outside organisations to the Reveal database
- Input bibliographic records from paper formats supplied by outside organisations

*Note: Bibliographic records for base organisations (RNIB and NLB) continue to be input by their own cataloguers*

- Edit and amend records submitted by outside organisations, applying authority control and enhancing records with additional data
- Edit and amend records with further details and production history status when items go into stock
- Maintain data entry guidance for producers
- Monitor need for new terms for genre, fiction topics and moods, etc.

Additional services

- Responsible for ILL routing through Reveal
- Maintain Collections Register
- Create and maintain additional datasets (e.g. proposed transcribers database)

Technical development

- Technical contact between Reveal and the system supplier
- Responsible for production of CD product (alternatively Reveal Manager task)
- Responsible for export of records on pre-arranged schedule
- Responsible for import of In Print and Library Stock files from originating sources

*Initial estimate is for 1 to 2 full time equivalent posts for bibliographic and additional services work, and 1 part time post for technical development (possibly as part of the duties of an existing post at RNIB or NLB).*

### **2.2.7.3 Copyright Agency**

It is hoped that government will change copyright requirements, but some form of Reveal Copyright Agency might be needed as discussed in section 3.9, where details of possible operation and staffing requirements can also be found.

#### **Notes**

a) The number of Reveal staff and Reveal Copyright Agency staff will depend on the workload and may need to be increased from the initial estimates in the future.

b) Once the new database is operational, user demand for materials is likely to increase. Although the extent of this is currently unknown, the effect will be some increase in the workload of the holders of the materials. There is thus an indirect and hidden staffing element. It would be useful for Reveal to monitor changes in demand.

## **2.3 The Scope of the Reveal Database**

### **Recommendations of the 1999 NUCAF Review**

- Phase 1
  - The database should record monographs, serials and ephemera in tactile, audio, enlarged print and electronic media
  - The database should concentrate on material produced by specialist non-commercial organisations.
  - The database should record accessible format materials that are in stock and in production
  - The database should record masters and copies
- Phase 2
  - The option of an in-print file supplied by a book trade database service should be investigated
  - The option of a locations file for mainstream library stock supplied through the regional library systems should be investigated.

#### **2.3.1 Introduction**

The basic premise in developing the Reveal database, and its accompanying services, is that it should be an accessible resource for visually impaired and print handicapped people. They have the same need for information and intellectual stimulation as the rest of the population. Any consideration of the extent of the coverage of the Reveal database must keep this in mind.

#### **2.3.2 Format Coverage**

Accessible formats are transcriptions of materials originally produced in standard print text or images. A range of accessible formats is already in use, and others may be developed in the future. The database should include material in all accessible formats, giving appropriate and sufficient detail specific to the format in question. Accessible formats currently fall into the following groups.

- Tactile materials: Braille and Moon text, specialist Braille (e.g. Music Braille) and tactile diagrams and maps.
- Sound recordings: Talking Books, audio cassettes, CDs.
- Large print: printed texts, music scores and images in font sizes 14 or above.
- Video recordings: audio described video recordings.
- Electronic files: transcription files and master files.

- Electronic resources: web pages and web sites.
- Mixed media resources.

### **2.3.3 Collection Coverage**

A major function of the Reveal database is to be a union catalogue that brings together details about items held by more than 230 specialist non-commercial producers of accessible format materials. Reveal should seek to include the complete holdings of all these organisations. It will need to make individual agreements with each organisation for holding and displaying records reflecting the organisation's stock.

### **2.3.4 Production Masters Coverage**

For many accessible format versions, a master copy or file is produced. For some items, the master is held against the need to replace loan copies that have worn out. In other cases the master is used to generate sale and loan copies on demand. A master may be either a physical unit (e.g. master tape of a sound recording) or an electronic file. The physical unit master is only used for generating a specific accessible format. An electronic file master can generate one or more accessible formats, and may also be available as an accessible format in its own right.

### **2.3.5 Coverage of Text-based Materials**

#### **2.3.5.1 Monographs**

The database should include accessible format versions of monograph standard print texts. Fiction and non-fiction titles for adults and children will be included. Where titles are abridged, or otherwise incomplete (e.g. a non-fiction title which excludes appendices) the record should include a statement indicating this.

#### **2.3.5.2 Serials**

The database should include accessible format versions of standard print serial publications for adults and children. Records should include details of the frequency of appearance of the standard print title. The accessible format versions are often available on subscription not loan, and producers may not archive past issues. Additionally, the accessible format version may not be a complete transcription of the standard print issue (typically adverts would be omitted), while in some cases additional text is added for the accessible format version. Records should therefore note the frequency of issue of the standard print title, what issues are available in the accessible format version, whether the accessible format version is for loan or subscription, and note the extent to which it varies from the original in content.

### **2.3.5.3 User request generated transcriptions of non-book materials**

In addition to monographs and serials that would form part of a typical library collection, a variety of materials (examination papers, knitting patterns, articles, poems, domestic appliance leaflets, diet sheets, etc.) are transcribed in accessible format versions, usually in response to an individual request. Some of these transcriptions may be of interest to people other than the original requester.

If the transcription is sent to the individual and there is no master, there is no point in recording the transcription in Reveal. However, if a master exists, copyright permission has been granted<sup>2</sup>, and it falls into a category of material likely to have multiple use, then it should be recorded in Reveal. There are four categories of material that would be likely to have multiple use.

- Examination papers: SAT papers. The majority of children sit SAT tests, and working through past papers is usually part of the preparation for the tests.
- Examination papers: GCSE and A level papers. The majority of children sit GCSE papers and many sit A level papers, and working through past papers is usually part of the preparation for the examinations.
- Poems and short stories.
- Domestic appliance instruction leaflets. This category includes computer, phone, TV and audio equipment as well as kitchen and laundry appliances. Many visually impaired people, including children, will have such items.

Records will need to include notes on the content of the item. Guidelines identifying the appropriate data for inclusion (e.g. type of appliance and model number, examination board, subject and level, etc.), standard ways of describing materials, and the relevant MARC format fields for data will be required for cataloguers.

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<sup>2</sup> Transcription services will often undertake an extract transcription or a complete work transcription, even when there are difficulties over copyright permission (e.g. when the rights holder cannot be traced, or there is no response to the request). In the event of legal action they would argue justification for an individual transcription (whether work or extract) but would not wish to openly display a record for the item.

#### **2.3.5.4 Extracts**

Some accessible format transcriptions are for sections of the original item. These originate in specific transcription requests; for example, a student who is told to read chapter 5 of a set text. In the majority of cases, the number of additional people who would also be interested in an extract transcription will be low. However, for some types of materials, extracts may be of wider interest (e.g. individual poems or short stories).

Some incomplete transcriptions in fact only omit material such as diagrams, otherwise containing the complete text of the item. Such a transcription would be included in the database, with an indication of the missing elements in the record.

- Include extracts when they comprise an intellectual unit (poems, short stories) and copyright clearance has been obtained.
- Include transcriptions which are complete except for specific missing elements such as diagrams.

#### **2.3.6 Coverage of Image based Materials**

##### **2.3.6.1 Music**

The database should include accessible format versions of standard print music scores. Records should include details of the score layout, and the instrument(s) or voice(s) for which it is intended. Details of the specific Braille music type and the master format are also required.

##### **2.3.6.2 Maps**

If the images produced are held in a collection for loan, or for the production of copies on request, they should be included in the Reveal database.

##### **2.3.6.2 Graphic images**

If the images produced are held in a collection for loan, or for the production of copies on request, they should be included in the Reveal database.



### **2.3.7 Additional content**

The Reveal web site should include a link to the MIRACLE web site (a database and delivery system for digital files of music in accessible formats) when this is operational.

Once the Reveal database is operational, book trade database services should be approached regarding the In Print file for Phase 2 recommended in the NUCAF Review.

The other recommendation for Phase 2 was for a locations file on Reveal for mainstream library stock (e.g. commercial large print and audio materials) supplied by regional library systems. It now seems that if simultaneous searching of Reveal, LASER and Unity using Z39.50 can be achieved, this will not be required. Whether Reveal holds a locations file, or there is simultaneous searching, the limiting factor will be the extent to which holding libraries contribute records for these materials to the regional library systems.



### **3. Operational Feasibility**

#### **3.1. Introduction**

This section analyses the various aspects of Reveal as both a database and service from an operational viewpoint. It examines the issues and possible solutions for these.

The main component of the Reveal database is the set of bibliographic records which record the items which have been produced or are in the process of being produced in an accessible format, and which also record information about the holders of specific items. The various types of data needed have been identified (Appendix B lists the data elements). Issues relating to searching, record export and migration, and notification are all considered.

There are a number of other components of the Reveal database, which may or may not be held in the same system as the bibliographic database of transcriptions and masters records. The requirements for each component have been identified, and possible solutions are discussed.

Two files, an In Print file for commercially produced accessible formats, and an In Stock file for mainstream library holdings of accessible formats, were recommended as Phase 2 developments of the Reveal database. As Phase 2 developments, these two files have not been investigated in this study. Further work will need to be done on these components once the Reveal database is operational, though it appears that successful implementation of simultaneous Z39.50 searching of regional library system catalogues and Reveal would eliminate the need for the In Stock file.

Since the 1999 NUCAF Review, two suggestions have been made for further components for Reveal: these are (a) a database of transcribers and transcription services, and (b) a way for end users to submit suggestions for future transcriptions to specialist producers. There has not been time to include work on these in this study, but they should be considered in future development work on Reveal.

## 3.2 Records in the Reveal Database

### Recommendations of the 1999 NUCAF Review

- The database needs to act as a union catalogue and an in production file.
- The database must provide data rich records that support known item searching and target area searching through adequate and appropriate indexing
- The database should record monographs, serials, and ephemera in tactile, audio, enlarged print and electronic media. It should record masters as well as copies.
- Bibliographic records should be held in UKMARC format, extended when essential and preferably by adoption of MARC21 fields.

#### 3.2.1 Background

The National Union Catalogue of Alternative Formats (NUCAF) is a bibliographic file (the 'live' file), with transcription specific data held in media records attached to the bibliographic records, held on the internal data management system Infoflo at the Royal National Institute for the Blind (RNIB). In addition the bibliographic file is highly integrated with a variety of processes, functions and other data within RNIB. There is a separate 'in production' file and records are moved into the 'live' file when production is complete.

The NUCAF Review recommended that a new enhanced database, Reveal, should replace NUCAF and that it should be held on a web accessible platform. The review also recommended that bibliographic records on the database should use nationally agreed standards. Since visually impaired people themselves will be using Reveal, all end user interfaces should be designed in accordance with accessibility guidelines.<sup>3</sup>

The Review recommended that Reveal should contain a number of files. These do not necessarily need to be physically separate files but if different types of record are held in a single file, there would be a requirement to identify record types for access and display purposes.

For some proposed Reveal files, the type of data and its purpose might require that is held as a separate file within the chosen system, or held outside it using some other software and database structure. These files are dealt with in the sections on collections and copyright.

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<sup>3</sup> W3C Web Accessibility Initiative: Web Content Accessibility Guidelines. 1999

**Note: It is important to keep in mind the requirements of visually impaired users. Users must be able to choose search options for specific format, and intellectual level, as well as subject and genre. Results displays should not make additional barriers by display of duplicate data. When full record display level is reached, records should contain data to assist user choice.**

### **3.2.2 Database records**

The objective of the Reveal database is to bring together bibliographic records for all titles available in accessible formats from the specialist non-commercial producers, in a union catalogue (n.b. this term may not be understood by end users). It will allow users to identify specific works, in which formats they are available, and who holds copies of each format.

In order to do this, records for accessible formats need to contain different types of data.

- Standard bibliographic data for the intellectual work in question. This includes author, title, multi-volume, imprint, series details, ISBN, ISSN and ISMN, contents notes, summary or abstract text, target audience notes, plus fiction and non-fiction indexing.
- Transcription specific details. A number of data elements are required, beginning with the specific format, and including levels/grades for tactile materials and number of tracks for audio tapes. For spoken word recordings, the narrator (and sometimes further details of the recording) must be noted. For all items the producer and production date of the transcription are required, and although these accessible format items typically do not have any ISBN, ISSN or ISMN assigned, there may be unique numbers allocated by the producer.
- Holdings. The records must in some way indicate the holdings of each transcription. This is also separately discussed in the section on Holdings.

The quality of records in the Reveal database will be maintained by applying relevant national and international bibliographic standards. However, the records from NUCAF and from the retrospective conversion programme are likely to lack some elements defined in the Reveal data element set, particularly as regards fiction and subject indexing using GSAFD and LCSH. It is proposed that records are flagged in some way as of Minimum, Standard or Full status. Such identification will facilitate possible later upgrading work.

### **3.2.2.1 Transcriptions In Production**

In addition to listing items that are in existence and so available for use, the NUCAF review recommended that the Reveal database also needs to list titles that have been chosen for production and titles that are in the process of production. These records will assist title selection by producers by allowing them to see if anyone else is producing a title they are considering, in either the same format as themselves or in another format.

Therefore in addition to the bibliographic elements normally held, the record needs to identify the production process status of a transcription, and it should be possible to limit searches by production status. In production records may be for titles which are already available, (e.g. a Braille version exists and Calibre intends to produce an audio version), or may be for a title for which there are currently no accessible formats available.

Most transcriptions will have a record created at the selection stage, when producers notify intention to transcribe. Where this is not done, records may be created at the production stage, or when production is completed, depending on when the producer supplies information.

For all production stages, records need to include a projected date of availability, specific format in which it is to be produced, and the name of the producer. The MARC format provides limited coverage of this data, but imprint and terms of availability fields could be used to hold text such as 'selected for production' or 'in production' plus projected date of availability. Alternatively, since production data is 'housekeeping' data rather than bibliographic description data, it could be held in local fields or as attached data.

### **3.2.2.2 Transcription Masters**

In the NUCAF review, the issue of recording production masters was considered. As noted in the review, 'it is not normally a function of library and book trade databases to record the existence of master plates and tapes used in the production of copies'. In the case of accessible format materials there are a number of reasons why it is essential to know whether masters exist, and whether they can still be used to generate a new copy.

Firstly, all loan copies may have been withdrawn from stock having deteriorated in use and being no longer of suitable quality. The producer

may have reviewed likely further use and concluded that this is unlikely and not economically viable; however, they may keep the master where this can still be used, and produce another copy should there be a request for it.

Secondly, prison service workshops usually retain the master, as producing additional copies is a source of work for them. However, these units are sometimes shut down temporarily in response to prison security issues, and on occasions it may not be possible to respond to urgent requests for another copy. The NUCAF review also proposed that where the master is in electronic form, a further master copy should be held by Reveal for use in exceptional circumstances.

Thirdly, some items are produced not for loan, but for distribution on request. The master will then be the only item held permanently, but copies will be generated on demand in response to user requests.

Masters exist in a variety of forms. Older masters for Braille and Moon can be metal plates or embossed card, and for audio recordings will be in tape format, while newer masters for any form of output may be electronic files. Electronic file masters may be specific to one output format or be generic and allow production of a number of output formats. Some of the older masters may now be unusable for generating a new copy. Given the effort involved in producing a new transcription when copies have been withdrawn and no usable master exists, RNIB is now investigating the option of scanning the older plate masters to produce an electronic file, so some older masters may be replaced.

The following data needs to be included:

- Format of the master
  - Can only be used as a master
  - Is an accessible format in its own right
- Formats that can be generated by the master
  - Whether master still capable of being used
- Unique identifier for the master
- Holding organisation of the master
- Existence of Reveal deposit master for prison workshop output

### **3.2.2.3 Holdings**

A union catalogue brings together the resources of a number of collections. It therefore needs to identify specific versions of individual works and to indicate which organisations hold copy (or copies) of an

item. Within the Reveal database, many items will be produced and held by a single organisation, but some items are produced by one organisation and held by a number of organisations. In addition, holdings data for serials has to indicate the specific issues available (current issue only, or past 5 issues, or run from a specific date or issue) and whether it is available on loan or only as a subscription title.

Bibliographic records were not originally designed to contain holdings data. Automated library catalogues have either included local fields (9XX) in the bibliographic record to record copy data, or have attached some form of holdings record to bibliographic records. The issue is further complicated by the fact that some transcriptions will produce a number of components; for instance, a non-abridged audio recording of a single volume novel may comprise 5 standard audio cassettes (NLB refers to this as a copy-set).

MARC21 has a holdings record format, which can be attached to a M21 bibliographic record. Holdings records can be used to generate fields 850 (for the holding institution) and 852 (for the location within the institution) in a linked bibliographic record. The holdings record contains information on the format, the number of copies held, the holding institution and the specific location. It can also hold a limited amount of other information; details of reproduction could be used to hold transcription specific data. UKMARC at present does not include holdings records, but fields 850 and 852 are currently not defined so do not present a potential conflict.

### **3.2.3 The bibliographic record and transcription data**

The union catalogue needs to record details about specific works, for which versions have been produced in one or more formats other than standard print. In the case of older, classic materials a number of standard print versions may have been used as the original for accessible format transcriptions. For newer titles, it is more likely that a single standard print text is used as the basis of a number of transcriptions. While for many users details of the original used will be irrelevant, on occasion (particularly in the case of students) a transcription of a specific original will be required.

The separation of bibliographic data into details about the work and details about the physical manifestation is a new concept and current cataloguing rules and bibliographic record formats still focus on cataloguing the item in hand. While library management systems have



used work + copy approaches, in general they have not also had to consider multiple versions of works, for each of which there are copies.

However, experience from this study indicates that libraries are now having to confront this issue. In the past they worked around the issue with regard to microforms, but are now having to reconsider this with the advent of electronic formats. However, systems designed to accommodate such concepts are still in the future, and Reveal is restricted to considering systems available at present.

There are two approaches to holding bibliographic records that could be used within the union catalogue, though each has its problems.

In one approach, separate bibliographic records are created for each transcription. In terms of 'good' bibliographic management practice, this is the recommended approach. Most transcription specific data can be held in a MARC format record, but some extension of the format would be needed. There would need to be some way of linking the various accessible format versions of a single standard print original, perhaps using the standard print imprint and standard numbers. Holdings data or records would also be held in or attached to the record. This approach is the simplest for exporting records to external databases.

**Pro:** Uses the MARC format as designed. Holdings data is more easily held or attached. Exporting records is easier.

**Con:** Much duplication of data in records relating to one standard print title. Standard displays lead to multiple entries for titles with multiple transcriptions, making it making it less accessible for visually impaired users.

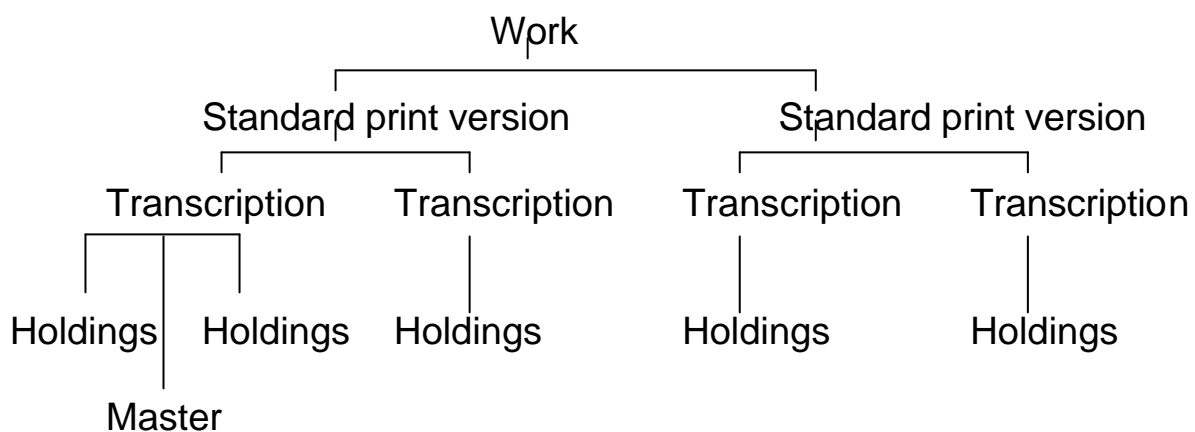
In the alternative approach, a single bibliographic record is created for the work. This may simplify the linking of the various transcriptions available for a work, but is likely to require more extension to the format. The single record contains some fields relating to the work, and a number of additional fields detailing the specific transcriptions available, and the holdings of each. The transcription specific data might be held in records/fields (not necessarily MARC format) attached to the core record, or it could be held in locally defined fields. Holdings data needs to be related to a specific transcription. In order to export records to external databases, either this form of record has to be converted into separate bibliographic records, or the export process has to convert the attached records/fields into one or more fields in the core record.

**Pro:** Links transcriptions from a given original (though there may still be a number of versions of the original), resulting in better display. This is the approach already adopted by RNIB for NUCAF, and by NLB in the Geac Advance system. The Canadian National Institute for the Blind (CNIB) are also considering moving to this approach.

**Con:** Additional conversion process is required for export of records if attached records/fields used. Using locally defined fields may produce a large record. It may be more complicated to link holdings data to the specific transcription.

A related issue is that of incomplete transcriptions. Some transcriptions lack certain elements of the original work (e.g. diagrams) and this can be recorded in appropriate fields within the bibliographic record. However, some items are part works. Where the transcription is a single poem or short story, a bibliographic record can be made for the transcription with a note relating to the full work. Transcriptions of one or more chapters from a book would be better treated as one part of a multi-part item (in UKMARC 245 for the work title and 248 for the chapter number and title).

### 3.2.4 Relationships between work, transcriptions, masters and holdings



### 3.2.5 Using the MARC format

The NUCAF review recommended using the UKMARC format. It was recognised however, that some data elements cannot be accommodated in UKMARC and it was recommended that any extension to the format for Reveal should where possible use MARC21 fields, with the final option of local fields when MARC21 proved inadequate. A thorough examination of the fields has been made and the problem areas identified. A list of data elements required is included

in Appendix B. Solutions to the problems will be partly dependent on the system chosen to host Reveal.

Problem areas relate to:

- a) Physical format
- b) Production history / status
- c) Copyright permission details
- d) Details of narrator for audio materials

Format decisions must also take into account interoperability issues relating to exporting records, importing records, and simultaneous searching via Z39.50, and look at both the current situation and possible future scenarios. The decision on whether individual bibliographic records are held for each transcription, or some form of work+copy records are used, will determine which fields are used for some of the data.

### **3.2.6 Feasibility summary**

Although there are problems caused by the need to hold data that is not accommodated, or accommodated only partly, in MARC formats, there are options for holding this information within library management systems.

Production history data and masters data can be held in locally defined fields or in local system records attached to bibliographic records.

Library management systems have developed ways of keeping holdings data and some systems support MARC21 Holdings Format records. The MARC21 option may provide a way of keeping transcription data in a work plus transcriptions framework.

The issue of separate bibliographic records for each transcription versus work plus transcriptions records is complex, and each approach has benefits and drawbacks. However, the work plus transcriptions approach does offer a benefit to the user in reducing redundant display – an important feature for a tool intended for direct use by visually impaired people.

Taking this route will cause problems in other areas which should be fully recognised, and will need to be addressed in development work. Although developing Z39.50 interfaces will reduce the need to export records to other databases, there will be some need for this in the short

term, and for initiatives such as MIRACLE there may be a long term need. The approach may also cause problems with Z39.50. (For more details see 3.4 Export).

Treat texts lacking certain elements as a complete work, with relevant notes.

Treat texts comprising a single unit from a collected work as a complete work, with relevant notes.

Treat extracts as part of multi-item works.

### **3.3 Record Indexing**

The database must provide data rich records that support known item searching and target area searching through adequate and appropriate indexing

#### **3.3.1 Fiction indexing**

The NUCAF review recommended that records for fiction titles should include genre and other fiction indexing. Because they have to choose remotely, visually impaired users require more information in catalogue records about items to assist them in making choices, so more detailed indexing of themes, issues, characters, related titles, and settings needs to be included.

A number of sets of genre terms are in existence. In line with the recommendation to use existing standards where possible, the standard in this area is the Guidelines on Subject Access to Individual Works of Fiction, Drama, etc. (GSAFD) published by the American Library Association, 2<sup>nd</sup> edition July 2000. Both NLB and RNIB use their own sets of genre terms, as do the Canadian Institute for the Blind and the Royal Blind Society in Australia. These terms have been compared with the GSAFD and apparent missing terms noted. In addition, in some cases the GSAFD terms are obscure (epistolary fiction = novels in the form of correspondence) and there is a need for some cross referencing or additional entries from more appropriate terms.

Some apparent gaps relate to the question of what constitutes a genre. For instance neither 'gay fiction' or 'lesbian fiction' appears in GSAFD. The term 'lesbian fiction' can be interpreted as either a work about lesbians, or a work by a lesbian. The British Library guidance to its own cataloguers on this and similar possible genre terms is that it is better to use topical access points (subject headings) to indicate the theme of the story.

##### **3.3.1.1 Themes**

The advice from the British Library is that fiction theme indexing is best achieved using Library of Congress Subject Headings (LCSH) terms followed with the qualifier '(Fiction)'. Independently, one set of terms has been developed by RNIB specifically for the VIDE and ALP subsets of NUCAF which are used by schools and academic institutions. If these terms have usable equivalents in LCSH, it would make sense to adopt LCSH. The LCSH also provides a much wider set of authority controlled terms for fiction indexing in the future.

### **3.3.1.2 Characters**

Readers often wish to read other works with the same central character(s), including groups (e.g. the Hardy Boys) and sometimes organisations (e.g. SMERSH), and this data needs to be included in the record. Fictional characters and organisations can be entered in 650 with a qualifier [(Fictitious character) or (Legendary character) or (Imaginary organisation)]. If a work has a real person (e.g. William Shakespeare) as a central character, then a 600 heading is assigned.

### **3.3.1.3 Settings**

Readers may wish to read works set in a particular period of history and/or geographical location. If location and/or time period is a significant factor in the story, it should be included in the record. Places are entered in 651, and time periods are entered in 650. For real places and for time periods, the subdivision \$xFiction or \$xJuvenile fiction is added. For fictitious places, the qualifier (Imaginary place) or (Legendary place) is added to the name.

### **3.3.1.4 Series and Related Titles**

British Library guidance is that entries for publishers series or collective titles (e.g. Babysitter's Club and Barchester Chronicles) should be covered in normal descriptive cataloguing using 4XX fields. Where it is not possible to make a series entry, the desired linking can be achieved by the use of 650 terms for imaginary characters or imaginary places. There is also the issue of linking sequels and prequels for related novels, which are not indexed as series (e.g. The Hobbit and The Lord of the Rings). Best practice here is to use 780 (preceding title) and 785 (succeeding title); while originally designed for serials, use for sequel/prequel information is approved. In cases where items are companion volumes to a sequence, but not part of it, then 787 (non-specific relationship) is used.

### **3.3.1.5 Forager Indexing**

NLB has been involved in the Branching Out project on stimulating interest in a wide range of fiction, for which Forager indexing has been developed. Forager indexing allows assessors to code a book for main character aspects, settings, themes and plot types, and a number of sliding scales (e.g. on the gentle/violent continuum). The user is then able to specify a number of aspects about their preferred reading and for the system to suggest titles. Assessing and coding a title using Forager indexing is time-consuming, but the possibility of including this indexing in Reveal records has been considered.

Forager indexing is complex, and cannot be accommodated in any existing MARC field. An attempt to use a single field with 18 different sub-fields proved to be unworkable because some elements needed to be repeatable. It appears that a multi-field approach would work better, for example:

- Main character field (repeatable, no limit): gender, age group, sexual orientation, racial background
- Setting field (repeatable, up to 3): region, sub-region, country
- Themes and Plots field (repeatable): themes (e.g. family, money) and plots (e.g. quest, success against the odds)
- Continuum fields on sliding scales: continuum, scale rating

From a theoretical viewpoint, it does appear possible to develop a set of fields for this indexing. However, very little fiction is currently indexed in this way, and to include it for all Reveal records would be very effort intensive. Substantial work would be required to develop the fields noted above into a workable, and searchable element set. Inclusion of this data should be part of a later development of the database.

### **3.3.2 Subject Headings in Non Fiction**

The NUCAF review recommended that non-fiction titles needed subject headings to enable users to search for items on specific subjects.

LCSH is the standard for general collections but is not in use at RNIB or NLB at present, both collections using their own terms. Moving to LCSH for Reveal records would have advantages. LCSH headings are present in many - though not all - BNB records, which are expected to continue to be a major source of basic data. The set of terms is extensive and new terms are added as required in a controlled procedure. LCSH are held in fields 650 and 651 of the MARC format.

The review also recommended that alternative forms of indexing should be investigated for possible use and two sets of terms were reviewed.

Book Industry Communication (BIC) has developed subject indexing terms primarily for use in the book trade, and based on trade banding of subjects and the way they are presented in bookshops. These terms are coded using upper case letters. A single letter is used at level 1, two letters at level 2 and three letters at level 3. The BIC indexing could be accommodated in UKMARC field 668, primarily intended for subject terms for the book industry. On further consideration, adding this data did not offer significant advantages to Reveal.

RNIB at present uses mapped chain indexing for NUCAF records. This relies on the NUCAF record containing a Dewey Classification number, which generates a chain index entry through a pre-set mapping. Within NUCAF records, these index entries are held in field 655 (which is intended for genre headings only). The Dewey number is also used by RNIB for system searching of NUCAF and selection of titles for booklist and bibliography production from NUCAF. The Dewey number is not used as a shelf location.

On review of these terms, and the terms used by NLB in their records, it was concluded that there are no over-riding reasons for continuing either RNIB or NLB current practice if LCSH provides a satisfactory standard alternative.

### **3.3.2.1 Cross references and additional terms**

There still may be occasions where the GSAFD or LCSH term is considered inappropriate for Reveal (e.g. epistolary fiction) or for non-fiction indexing. Contact should be made with the British Library in case a term could be made a candidate for a new term within the existing schemes. Where this is not possible, alternative terms will be required in defined local fields. British Library guidance is to use the alternative term as a cross reference to the GSAFD or LCSH term. However, cross references are usually set up to display the term that should be used; doing this will only put a further obstacle in the way of a visually impaired person. The better approach for Reveal is for the system to support genre and subject heading searching across standard and local fields. If the searching is carried out on both a standard field and a local field, then the local field should be defined in the same way as the equivalent standard field and not as a cross reference.

### **3.3.3 Summary**

1. LCSH are included on BNB records; these records will, where available, form the basis of Reveal records.
2. Records in NUCAF do not contain LCSH. BL could assist in importing this data using the Catalogue Bridge service. Files of ISBNs and BNB numbers can be matched against the BNB and LC files on the BL database and the relevant fields (650 and 651) exported into the appropriate record.  
NB: some BNB records (created 1990-1994) do not contain LCSH, but matching records may be found in the LC file and again could be imported from BL.



3. NUCAF records hold both RNIB chain indexing terms and Genre terms in 655. The chain indexing terms need to be removed from 655. Depending on the final decision on subject indexing, the chain index entries may be moved to a local field and/or replaced by LCSH in 650 and 651. The migration conversion process will need to address this issue.
4. If the decision is to move to LCSH, it would be disadvantageous to remove the RNIB chain indexing terms until migration to LCSH is complete.
5. Few of the organisations contributing data to Reveal have professionally qualified staff, and in these cases it would be inappropriate to expect them to suggest subject terms, although for some organisations with a specific focus to their materials, it may be possible to provide them with a subset of terms. Reveal staff would add subject data to these records contributed by these organisations in the verification process. In many cases the LCSH terms will be either on an existing record (new format available) or be present in a BNB record (new title).
6. Fields
  - 650 Topical subject terms from LCSH
  - 651 Geographical subject terms from LCSH
  - 655 Genre terms from GSAFD plus LCSH
  - 697 RNIB chain indexing (if required)
  - 698 Reveal supplementary topical subject terms
  - 699 Reveal supplementary genre terms

#### Notes

1. Previous proposed use of 699 for Forager abandoned, as a single field will be inadequate. Instead a cluster of fields will be required and there are insufficient free fields in 69x. A better option may be to use a cluster of 9xx fields.

2. BL suggest it is better to use 69x local fields (so 699 instead of 659 Reveal genre terms).

## **3.4 Export of Records**

### **Recommendations of the 1999 NUCAF Review**

- A variety of access routes must be provided to the database
  - Web based OPAC
  - CD products
  - Downloaded files
  - Links to the database site from other sites

#### **3.4.1 Introduction**

The NUCAF Review highlighted the need to provide a variety of routes to the database. Some users will have direct access to the Internet, either at home or at work, and in the future more people will have access through public libraries with the implementation of the People's Network. While increasing numbers of people will have Internet access, there will continue to be a proportion of users for whom it is not available, or who find it difficult to get to an Internet facility.

The Review recommended that the database should be available via a number of access routes: held on a web-based system, but also be available as downloaded files on other databases and as a CD-ROM product. The implications of this have been discussed with the British Library (with specific reference to the national bibliography), and LASER and Unity (with reference to regional library systems and inter-lending issues). All three organisations support the need to make access as easy as possible for the widest range of potential users. However, the British Library and LASER have both queried whether exporting files to their database is the best option, since technology is now able to support simultaneous searching of virtual union catalogues. For each host database, there must be an evaluation of the most appropriate way of integrating Reveal and the host to support searching from either as the start point.

#### **3.4.2 Reveal and the national bibliography**

The British Library (BL) has agreed the principle that Reveal is part of the national bibliography but no decision has been taken on how this should function with regard to online access and to other products in print and CD-ROM. In order to take the process forward it is important to clarify the purpose for holding the records, and the purpose of the various BL files and products. The BL views the British National Bibliography (BNB) as both a record of what has been published in the UK, and a source of quality records for catalogues. It is used to verify whether an item exists, the records can be purchased for use in other

catalogues, and the print and CD-ROM versions are used in book selection.

The BNB is held as a file on the BL database. Reveal records could be merged into the BNB file or held as a separate file on the BL database that can be searched simultaneously with the BNB file. The BNB file is used by libraries to verify that items have been published and as a source of records for purchase. However, mainstream libraries do not purchase accessible format materials from non-commercial producers, and could use Reveal directly for ILL purposes.

Alternatively, there is the virtual solution where the Reveal records are not exported but the BL OPAC and BNB access screens provide a link to the Reveal database and Z39.50 searching of BL and Reveal files is set up. If simultaneous searching of the BNB file and the Reveal database can be achieved, there is no gain in exporting the records.

BNB is currently produced in a print version. Reveal records could be contributed to this electronically on a regular basis (as part of BL Strand E procedures), and could be output either merged with mainstream records or as a quarterly supplement. BNB in print is used in book selection and ordering; unless the Reveal items are generally available for sale, it might not be appropriate to include them.

BNB is also produced in a CD-ROM version. Reveal records could be merged with mainstream records in the BNB CD, or alternatively could be produced as a separate Reveal CD using BL production arrangements.

If Reveal records are to be part of the national bibliography, and officially recognised as such by the British Library, and appear in BL files, or print and CD products, they will need to conform to the standards set by the British Library. For inclusion in any of the BL products, the records need to be in UKMARC format. With regard to extensions to the UKMARC format from MARC21, in general problems only occur if Reveal usage conflicts with BL usage. Any local fields included in Reveal records will be screened out as invalid by the BL import verification process; if there is a requirement to display any of these fields they will need to be defined in the import profile. In addition, records should use agreed standards such as LCSH and GSAFD genre terms, and authority control on headings. The BL would require a bibliographic record for each version in an accessible format; for example, Pratchett/Equal Rites/Corgi/1987 could have 4 records for (a) Talking Book version, (b)

Calibre cassette version (c) NLB braille version and (d) SBP braille version.

If export of records to BL is required, BL would use its Catalogue Bridge system as the interface.

The preferred approach is not to export records into the BL database, or for inclusion in the print BNB, but to concentrate on developing Z39.50 software for simultaneous searching of Reveal and BNB. It also seems more appropriate to concentrate on a Reveal CD-Rom, rather than contributing to a BNB CD-Rom; however, using the BL production route might save on costs.

### **3.4.3 Reveal and LASER**

The LASER regional library system has developed V3.Online as a web based union catalogue for the region to support inter-library lending. LASER initially agreed to hold a version of the NUCAF file on V3.Online for one year free of charge, and is willing to extend this to cover the period until Reveal is operational.

At present NUCAF is not integrated into the union file, but is held as a separate parallel file. NUCAF records appear on the LASER CD version, always on disc 3. Updates take the form of complete uploads of the entire file, as electronic notification is not possible with NUCAF and there is no method of deleting records. If Reveal decides that its records should be physically on V3.Online, it would have to subscribe to V3.Online; in addition there would be the cost of any new software required for the export process.

In the long term, LASER queried the need to hold Reveal records themselves and suggested that V3.Online should provide a link to Reveal and that there should be joint LASER/Reveal development work on Z39.50 profiling to allow simultaneous searching of the LASER union catalogue and the Reveal database. As with any of the Z39.50 tie-ups being considered, this would require Z39.50 client/server profiling for both databases, and merged de-duplicated results lists.

### **3.4.4 Reveal and Unity**

Unity is the Combined Regions Database, which supports inter-lending within and between its member regions and also holds a version of the NUCAF file. The Unity database is currently hosted by Talis Information Ltd. and planning is under way to move from a PC based system to a web-based version in early 2001.

No updates of the NUCAF data have been made to Unity since it changed platforms. Though this has not been confirmed, it appears that some work to enable Talis to import NUCAF data may be required. Discussion with Talis also indicates that if records are exported to the Unity database, it is likely that separate bibliographic records for each transcription would be required.

Unity wishes to continue to offer access to accessible materials through NUCAF and later through Reveal. It can accommodate Reveal records within the Unity database, but since the web-based Unity platform will be Z39.50 compliant, would not see a problem in moving to a virtual solution. However, Unity noted that a hyper link to Reveal would be a limited solution and that simultaneous searching of Reveal and Unity would be an essential requirement. Having to search one database first and then repeat the search on another database is very frustrating for visually impaired people as the search process is necessarily slower for them.

#### **3.4.5 Reveal as a CD-ROM product**

NUCAF has not been made available in CD-Rom format and a Reveal CD-Rom product would be a new venture. It is therefore difficult to predict the possible uptake of such a product and an investigation into possible demand will be needed. The CD-Rom option was suggested for:

- Users who have a computer but not internet access
- Small branches, mobile and housebound services of public libraries, where internet provision is difficult or not possible at present.
- Schools and colleges where internet access is not yet available, or may be limited by connections available.

The NUCAF Review identified a Reveal CD as a desirable access route but made no recommendations on how this would be achieved.

Following discussion with the BL, there is merit in exploring the option of using the same software and template as the BL to produce a Reveal CD. For this Reveal records would have to be exported either to the BL or directly to the CD production facility. If the current BL template is used, records would need to be in UKMARC format and there would need to be separate bibliographic records for each transcription in an accessible format. Some local fields might need to be suppressed either in compiling the export file, or by flagging as not for display. If this proves not the best option, then Reveal would be produced independently.

As noted above, no figures are available on potential demand for such a product. An initial estimate is for between three and five copies per public library authority, and one copy per university or college. Some schools and local education authorities would also be potential buyers. On this basis a possible sales figure of 2,000 to 3,000 copies is suggested.

If take-up is low, the true cost per CD might be unacceptably high; Reveal (or its funder) would then need to consider whether to underwrite costs in order to keep the price down to affordable levels. The rough guide figure from the BL suggests around £10K for development (i.e. the set-up cost), plus the costs for each pressing at the agreed issue frequency (two or three times a year). Further work on possible take-up, production method and costs is required.

#### **3.4.6 Exporting Reveal files elsewhere**

There are currently a number of subsets exported from NUCAF to other databases.

##### **3.4.6.1 VIDE and ALP**

The VIDE subset is designed for schools, and the ALP subset for colleges. These subsets list materials identified as relevant for specific audience groups, identified within records by intellectual level codes. Exporting the records as subsets is currently required because schools and colleges do not have direct access to the NUCAF database. In the future this provision will not be required, as with the Reveal database accessible as a web-based OPAC, and the production of a Reveal CD-Rom, schools and colleges can have direct access to the whole database. However, it will still be important to them to identify materials in relation to audience groups, so records will need to record this information and the system must support search limitation using this data.

##### **3.4.6.2 NLS BPHP**

National Library Service for Blind and Physically Handicapped People (NLS BPHP) at the Library of Congress holds a partial set of RNIB holdings on its union catalogue. Records are exported from NUCAF as a comma-delimited file, and where multiple transcriptions are listed, additional records are 'spawned' by NLS. There has also been a recent export of NLB records to this file.

NLS wish to continue to import RNIB and NLB records into their union catalogue, and to include records for the holdings of other producers

where possible. Their preferred format is MARC21 and their practice is to hold separate bibliographic records for every transcription. They are interested in reciprocal Z39.50 searching, but would wish to continue to import records until this is established as a viable route.

### **3.4.6.3 MIRACLE**

Music Information Resources Assisted Computer Library Exchange (MIRACLE) is a European Commission project, and RNIB is a part of the project consortium. MIRACLE will provide an international catalogue of music scores in accessible formats, primarily in Braille but also covering spoken word music and large letter scores. There will be an ongoing requirement for records for music scores in accessible formats produced by RNIB to be exported to the MIRACLE database.

The export of records is in this case limited to a specific material type (music scores) which may exist in a number of formats, but the output of only one producer (RNIB) is involved. Since records on MIRACLE are held in UNIMARC format, a conversion programme will be required at some point in the export process. As a partner in the project, RNIB is already contributing records to the MIRACLE database, and a UNIMARC conversion programme for RNIB has already been written by Shylock Progetti (the software partner in the project). It is likely that this programme may only require minor modification for RNIB to continue using once their records comply with the Reveal standard.

### **3.4.7 Feasibility Summary**

1. Exporting records to other databases requires expensive programming for each host. (At present such costs for current exports of records are paid by RNIB and NLB.)
2. Exporting records to other databases requires a regular export procedure to be undertaken, with implications for staff and computer time, and in the case of LASER a subscription to the service is also required.
3. Exporting records to other databases may require separate bibliographic records for each transcription.
4. If host databases are also online, it is more logical to develop Z39.50 client/server capability to enable simultaneous searching of Reveal and another database. The Reveal database will therefore need to be Z39.50 compliant. Further work will be required to develop these clients.

5. Export of music records to MIRACLE will still be required. It may be possible to modify the existing conversion programme for Reveal.
6. Export of records for some RNIB stock to NLS will still be required, but NLS is interested in simultaneous searching via Z39.50 to replace this in the longer term.
7. The export of the VIDE and ALP subsets was required to compensate for the lack of direct access to NUCAF. The web-based Reveal database and the CD-Rom will provide direct access to the whole database. Target audience search restriction should produce the equivalent of the subsets.
8. Further work is needed on evaluating CD production. The BL production route could offer significant advantages in cost terms, especially if the BL template can be used with little or no modification. Using the BL template would require separate bibliographic records.

### **Recommendations**

- Continue the export of records from NUCAF to LASER and Unity until the Reveal database is operational.
- In partnership with BL, LASER, Unity and NLS BPHP, develop Z39.50 clients for simultaneous searching of Reveal and other databases.
- Stop record export to LASER and Unity once the Reveal database (and Z39.50 access) is operational.
- Further investigate the requirements of exporting records to MIRACLE and NLS BPHP.
- Evaluate CD production, especially the feasibility of the BL production route.



## **3.5 Migration of Records from NUCAF to Reveal**

### **3.5.1 NUCAF records**

The Reveal union file will initially be populated by records derived from the existing NUCAF file, and from the pre-production file. This will require a file migration process for the 87,000+ existing records, and will require conversion mapping where Reveal and NUCAF practice on fields differs.

The migration of existing records from the NUCAF file is not a simple transfer of records from one system to another. The migration process will require the mapping of NUCAF fields to Reveal fields, and for the NUCAF data to be as 'clean' as possible. The migration process will involve a minimum of 87,000 records – i.e. the records already held on NUCAF. During the period that Reveal is being developed, new records will continue to be added to NUCAF, so that figure will increase somewhat. If the retrospective conversion programme adds records to NUCAF in advance of Reveal being operational, then this figure will be even higher. The retrospective conversion study estimated that more than 85,000 titles had yet to be added to the database.

NUCAF fields and field usage are not identical with proposed Reveal fields and field usage, although they will be the same for most of the fields, and mapping between NUCAF and Reveal fields will be needed. This mapping of NUCAF fields with Reveal fields will be simple in the majority of cases. For instance, use of the author and title fields is the same in both cases and requires no change. In other cases, a change of field or subfield is required but can be achieved through a one-to-one mapping: e.g. NUCAF holds age categorisation / intellectual level in 008\$s but Reveal will use 008\$c. In some cases, however, the mapping will be more complicated.

NUCAF practice has been to place genre terms, fiction topic terms, and non-fiction subject indexing in field 655. Reveal practice will be to use 655 for genre and 650 and 651 for LCSH. The mapping will need to separate RNIB genre terms (a relatively small set) and RNIB subject indexing terms. RNIB genre terms need to be mapped to GSAFD terms and any required additional local entries. It will be a much larger task to map RNIB subject terms to LCSH; one option is to delete the subject entries, and replace them by acquiring the data from BL records via Catalogue Bridge. If RNIB chain indexing entries are required in the short term (to support RNIB Customer Services staff until LCSH fully in

place) or the long term (where the decision is to retain LCSH and RNIB chain indexing), the entries must be moved to a local field.

An additional problem is that RNIB have, on occasion, been using the 500 notes field for administrative notes, which they will not want exported to Reveal. As 500 may have also been used as intended within the format, this may cause a problem with the migration conversion.

The current NUCAF file contains a number of records for items withdrawn from stock by the holding organisation without any notification to NUCAF. As far as possible, it will be important to 'clean up' the NUCAF file as much as it is possible and practicable to do before migration. RNIB is currently undertaking some clean up of the data by matching new listings from organisations with the records in NUCAF. The bibliographic support post devotes c.2.5 days per week to this task, although staff changes have meant that this work has been suspended for the moment. Records checked in this process can be identified by the check date note added to the record.

Not all records will initially be to full Reveal standards and any which fall below a specified level will need to be flagged in some way. This will facilitate both global change options and selected printouts/displays for manual upgrading to improve record quality at a later date.

### **3.5.2 NLB records on Geac**

If the chosen platform for Reveal is the Geac Advance system used for NLB bibliographic records, simply migrating all data from NUCAF will give rise to duplicate records. The migration process will need to find a way to avoid this and add holdings to existing records.

### **3.5.3 Retrospective conversion project records**

A further 85,000+ records for items in existence have been identified as missing from the NUCAF file. Details of these items will be collected as part of the retrospective conversion work. The project recommended that records are not added to NUCAF, since the data is being recorded using Reveal standards. These records will be transferred by either:

- a) Record details in catalogue records in an organisation's library management system for later electronic transfer to the Reveal union file (migration programmes will have to match and report on duplicates, since some records will already exist on Reveal)
- b) Record details on paper forms for later manual input to Reveal union file (very small producers without a library system)

### 3.5.4 Migrating other data

Although the bulk of the data migration from RNIB systems relates to the bibliographic records, other data (e.g. for the copyright rights holders database) may require migration as well.

### 3.5.5 Timescale for the migration

The migration to Reveal can be undertaken once the system is in place. The migration project will include the following stages

- Write specification for conversion of data
- Software development
- Software testing
- Parameter setting
- Test data migration
- Data migration
- Data validation
- Going live

NLB have recently migrated their catalogue records from their previous ALS system to the Geac Advance system. For them the above process took from August to November (a total of 4 months). This would be equivalent to migrating the NUCAF existing data.

A second migration project would be adding the data acquired during the retrospective conversion programme. This would require additional effort in direct keying of entries held in hard copy format and in developing software or enhancing import programmes for electronic migration of records already in machine readable format.

<b>Number of records</b>	<b>Type of records</b>
87,000	Records held on NUCAF at August 2000
7,000	Records added to NUCAF from 1 August 2000 to Reveal migration (at 3,500 records p.a.)
85,000	Records for existing titles not held on NUCAF
179,000	TOTAL

Table 4. Estimated number of records to be migrated to Reveal.

## **3.6 Notification**

### **Recommendations from the 1999 NUCAF Review**

- Record import
  - Set up a reporting system for producers and holders to notify the database of:
    - Intention to produce
    - Addition to stock
    - Withdrawal from stock
  - The reporting system should accommodate both electronic and paper based methods
  - Supporting information should be provided to producers and holders
  - Individual set up negotiations should be held with each producer or holder in order to achieve the maximum co-operation and successful implementation

#### **3.6.1 Introduction**

At present the only method of adding, amending and deleting records is through keyboard input by RNIB staff. Non-RNIB producers and holders supply data for records as typed and word processed lists, photocopies of catalogues and photocopies of title pages with or without accompanying documentation. Where a BNB record is found for the original text, data can be cut and pasted into the NUCAF record, but no other electronic transfer is possible. In the past, holders have not often notified RNIB of withdrawals resulting in an inaccurate database. RNIB has recently been working on cleaning up the database, but this editing work takes time.

#### **3.6.2 Reporting system**

Producers and holders need to be able to submit to Reveal details of stock additions and withdrawals, and titles they have chosen to produce. Any documentation designed for this purpose, whether electronic or paper based, needs to take into account that very few of the organisations have library-trained staff doing this part of their work. A set of forms should be available on the web and in print form for Production, Addition to Stock and Deletion from Stock. The print form would be sent to Reveal for input. The interface must use appropriate data entry screens for those without experience or training – i.e. using terms such as ‘surname’ ‘forenames’ and ‘title’ instead of field and subfield tags. Even with this sort of interface, there will be a need for Reveal staff to

verify the record created, by filling in missing data elements, and carrying out authority control and changing data where required.

Organisations should be encouraged to provide as much of the data as possible, but there will be limits to what they can manage. It would be unrealistic to expect them to provide LSCH terms, but they could be asked to indicate the main topic of the item; this data would be used by Reveal staff in applying LSCH terms. In some cases it will be possible to supply organisations with a list of terms to choose from, though where the output covers both fiction and non-fiction, or has no specific focus, this may not be possible. For instance a list of genre terms for fiction will be relatively small and could be supplied to any organisation producing fiction titles. Some organisations have a specific focus such as Sports Tapes for the Blind, whose stock will comprise texts about individual sports, events such as the Olympics, sporting venues, and biographies of sports personalities. It should be possible to come up with a small, targeted subset of LCSH for them to use.

A related issue is that where a notification by producer A at pre-production stage finds another transcription listed as in production by producer B. At present RNIB contact producer B to check it is still going ahead and advise the producer A accordingly. Reveal will need to consider how to manage such situations. And if any planned transcription notified to Reveal is later aborted, Reveal should be informed so that inaccurate information is removed from the database.

### **3.6.3 Notification types**

Notification will occur at pre-production, in production and produced stages. Pre-production notification (as with the current Notification of Intention to Transcribe (NIT) forms) may request Reveal to undertake copyright clearance. Organisations may not notify at all stages, with some omitting the pre-production notification, and some only notifying new stock. Notification may add a new title to the database, or add a new format to an existing title. Notification of addition to stock may be from producer as holder or from holder who is not producer. Notification of withdrawal may leave one or more copies available, or remove the last copy. In addition there will be occasional notification of cancellation of planned transcriptions.

- Title X selected for production
  - Other formats exist
  - No other formats exist
  - Copyright clearance to be undertaken
  
- Title X is in production
  - Title X has been notified as Selected for Production
  - Title X has not been notified as Selected for Production
  - Other formats exist
  - No other formats exist
  
- Title X has been produced
  - Title X has been notified as Selected for Production
  - Title X has not been notified as Selected for Production
  - Title X has been notified as In Production
  - Title X has not been notified as In Production
  - Other formats exist
  - No other formats exist
  - Number of copies in this format
  - Restrictions on access to this format
  
- Title X has been added to stock (holder is not producer)
  - Title X has been notified as Selected for Production
  - Title X has not been notified as Selected for Production
  - Title X has been notified as In Production
  - Title X has not been notified as In Production
  - Other formats exist
  - No other formats exist
  - Number of copies in this format
  - Restrictions on access to this format
  
- Title X has been withdrawn from stock
  - One or more copies withdrawn, some remaining copies this format
  - One or more copies withdrawn, no remaining copies of this format
  - One or more copies withdrawn, no remaining copies in any format
  
- Title X, planned production cancelled

## **3.7 Acting as an ILL Focus**

### **Recommendations from the 1999 NUCAF Review**

- User generated requests
  - Design a web platform to accept requests from users
  - Design a management routine for forwarding requests or supplying items requested

#### **3.7.1 Introduction**

Less than five per cent of UK publishing output is transcribed into an accessible format. These materials are held by around 230 organisations of differing types, and access to their collections is variously restricted. Most of the restrictions relate to specific issues. For instance, individual memberships may be restricted to people with some form of medical certification of visual impairment in order that advantage can be taken of postal concessions. Some organisations offer group or corporate membership in addition to individual membership. Some institutions, such as schools, may restrict loans to members of the institution. Some organisations charge a fee for all users, some for only group or corporate users, some charge only for loans of some types of material. Schools and colleges making copies under Copyright Licensing Agency agreements can be restricted to loaning such copies only within the institution. Each organisation has its own registration procedure. Most visually impaired people are aware of, and belong to, only a few organisations (sometimes only one) and this results in a severe restriction in the range of titles about which they have information. This is an extremely frustrating situation for any visually impaired person.

#### **3.7.2 Joined up working**

By putting together records for the stock of all these specialist non-commercial organisations, Reveal will allow users to find out about a wider range of titles. While this will be an improvement on the current situation, users will then wish to obtain the titles they locate in this way. At present this requires users to locate contact information about an organisation, and then make a direct request which may entail joining the organisation, and paying a fee.

The Pilot Interlending Project (PIP) has worked on increasing access to accessible materials through mainstream inter-lending. Under its successor initiative Bee Aware, a visually impaired person can now go to their public library and make a request for an item. Calibre, NLB, RNIB, and TNAUK have agreed to accept each others members for inter-lending.

### **3.7.3 Using Reveal**

The Reveal web site and database should also be able to allow a user to use the database to identify a title they wish to use, and make a request to the holder to obtain that item in the appropriate way (loan, hire, buy or get free copy). There should therefore be the ability to link data about an item, its holder and the requester, and to pass a request on to a holder. Initially the forwarding of the request might need to be done by manual intervention, and this might remain the case for some holders with limited technical capacity. For some holders it might eventually be possible for the system to automatically forward the request, say by generating an email.

If the requested item is in RNIB or NLB stock, the requestor is a member of either organisation, and the Geac system is being used for both their library management requirements (e.g. circulation) and the Reveal database, the system should process this as a reservation. There will be a need to authenticate users, perhaps by prompting for RNIB or NLB membership identification.

### **3.7.4 Further development**

A recent RNIB/NLB joint library management meeting has raised another issue. Since such a small proportion of titles is transcribed into an accessible format, Reveal users may find that titles they want do not exist. A further development would therefore be for the system to allow users to suggest a title for transcription. A number of issues would arise from this proposal. There would need to be an agreement between participating organisations on how requests would be managed, and who would administer and route them. Decisions would be needed on who decides which requested titles are produced, and where there are several possible producers for a format, which producer would carry out the production. Should the user be able to select the organisation, and what happens if that organisation says no?

Since this was not a NUCAF review recommendation, it has not been covered in this study. There is technically no reason why users should not be able to input this sort of request, but the management questions noted above would need to be addressed. If agreement between the producers produces guidelines for which requests are passed on and to which producers, the Reveal ILL focus could perhaps be widened to take on the administration aspects.



## **3.8 Collection Register**

### **Recommendations from the 1999 NUCAF Review**

- Database structure: Collection Register

#### **3.8.1 Introduction**

There are around 230 specialist producers and holders of accessible format materials in the UK. However, users of these materials are often only aware of one or two of these organisations. In order to provide people with information about all these organisations and collections, the NUCAF review recommended that the Reveal database should include a collections register. This would bring together a variety of details about the producers and holders of accessible format materials and their collections.

A set of data elements has been defined (see Appendix B). This covers details about the organisation, its target audience and subject coverage, the accessible formats available and details on access to its holdings. In addition, it would be useful for Reveal to include additional 'housekeeping' fields in these records; such data would not be for public display. These data elements need to be held in a database, which needs to support searching and display.

Collection description is a relatively new concept, and the main development work has been in the Research Support Libraries Programme (RSLP) and the eLib clumps projects. Both strands of work have developed collection description records and software to support the records as a database. Using either the RSLP or the clumps collection level description software, the collection level descriptions and associated software would sit on a server, thus there would be a requirement for compatibility between the server operating system and the software. The database would be accessible using the Internet.

#### **3.8.2 RSLP Collection Level Description software**

The Research Support Libraries Programme (RSLP) has developed a Collection Description Tool for use within the programme. The data elements were designed for use with electronic resources as well as collections of physical items, and the terminology used for some fields reflects this.

Most of the data fields (or attributes) map to elements identified for the Reveal collection descriptions, although in some cases the field label

might require change. Thus Reveal might prefer to rename the Physical Characteristics label as Format.

Some data fields required for Reveal might need to be repeated or customised. For example, the field Access Control would hold information on who can access the collection, any fees charged, etc. A number of the organisations set different fees and limits for individuals/families and for organisations. In this case it would be more useful to have Access Control/Individual and Access Control/Group as two separate fields.

Recording the number of items in the collection and the rate at which they are added will help potential users evaluate the possible usefulness of a collection. In the RSLP attribute set, it appears that this data is not specifically included, although it could possibly be held in the Description field or Strengths field (current numbers) and Accrual Status field (new titles added each year).

The RSLP Collection Level Tool is based on ROADS software, which is open source and therefore free. The attribute set would need some modification for Reveal. In addition to modifications to include any required additional fields, and any label changes, some work would be required to ensure that the front end of the software was accessible to visually impaired users.

### **3.8.3 Clumps collection level software**

Fretwell Downing have been working on projects which include a collection level description within the eLib programme. They have been working on software development work for the Clumps, Agora and PRIDE projects. Fretwell Downing have indicated that there are two possible software applications that could be used, but both would need modification, and one contact raised the question of whether the software was more sophisticated than required given the small number of records that would be held.

It has not proved possible to examine the data fields used in the Fretwell Downing software. However, they are likely to be very similar to the RSLP set. It is likely therefore that, as with the RSLP software, there will be a requirement for a few additional fields and some label changes, plus the requirement to make the front end accessible to visually impaired users.

### **3.8.4 MARC21 Community Information Records**

Another option is to consider using MARC format records, supported by whichever library management system is chosen for the main Reveal database. However, none of the MARC formats have at present defined collection level records. An initial investigation shows it would be possible to place the data into MARC21 Community Information (M21 CI) records. These records have been developed to record details about organisations, facilities and events, within the MARC21 format. They were not specifically designed to record collection level descriptions, but much of the information required is part of community information records.

For some of the missing data elements, an existing field could be used but would require a change of field label. Some data would still be outside the standard fields and therefore some local fields would need to be created. As with the collection level software, customisation will be required for field label changes, additional fields and display screens accessibility. In addition, using M21 CI records would require the use of a system that can support these records.

A detailed specification would need to be considered by the system supplier before they can confirm the effort required, likely timescale for development and the cost of the customisation.

### **3.8.5 Non-specific database software**

The option of using non-specific product such as Access was considered. While such a product could handle the amount of data and the number of records, it is not a simple option and a competent designer would be required to set it up. Such a database would need to be designed from scratch, inputting all the fields, making the links between fields and designing the search screens. As with the other options, accessibility of displayed information would be required. In addition, advice from UKOLN technical staff is that there are problems making an Access database available on the Internet.

### **3.8.6 The next stage**

Irrespective of the method chosen, some development work will be required. Using software specifically developed for collection level description is the preferred option, since it appears to require limited customisation. While MARC21 Community Information records can be stretched to accommodate the data (which is not ideal), they will require at least as much, and possibly more, customisation; there do not appear

to be sufficient advantages to outweigh the cost of customising the collection level software. Using Access is not a realistic option.

The data set of elements for Reveal collection descriptions will need to be submitted to the relevant organisations for them to give a detailed tender to supply the customised software.

The collection level descriptions will form a discrete part of the Reveal database. However there may be a need for some integration with the bibliographic database, if records provide links to collection descriptions (e.g. where special conditions apply to loans). If the MARC 21 approach is used, there may be a need to tie it in with other work on the Geac system. Because the ROADS and Clumps software approaches are separate from the bibliographic records, it could be possible to develop this independently from the union catalogue, and in a smaller time scale, if either of these options is chosen. The collection level descriptions could then be made available in advance of the union catalogue.

Development of collection level descriptions records will require specific funding. If it is accepted that this section of the project is fast-tracked, an approach could be made to the fund raising section of RNIB/NLB joint library service, and/or for DCMS funding.

Work on this database would require staff and funding. A Reveal contact would be needed to work for a limited number of days with the suppliers on the development, installation and testing. A full time temporary post would be required for an estimated period of 3 months to collect the data from the collection holders and to input it to the database. After the initial creation of the database, changes to existing entries and the addition of new entries and the withdrawal of existing entries is unlikely to amount to more than a few hours work per year; this effort would therefore be allocated as part of another Reveal post.

### **3.8.7 Feasibility summary**

- Three approaches (RSLP, Fretwell Downing and M21 Community Information records) are possible.
- Any of these approaches could be used to set up a collection register that would be accessible from the Reveal web site.
- The RSLP collection description tool appears to be the most promising.
- A specification needs to be agreed.
- Talks need to be held with contacts to confirm what they can offer and more precise details of cost.
- Funding needs to be secured for this work. Initial discussions with potential suppliers for standalone solutions suggest that between £8000 and £16000 would be required for the software development work, depending on the system chosen and the actual effort involved. The cost of writing the specification would be around £1000. Additional funding of around £3000 will be required for data collection and input.
- A standalone system will need to be held on a server at either RNIB or NLB, and accessible from both organisations web sites and there will be some element of cost relating to staff time and computing time at RNIB and NLB in setting this up.

## **3.9 Copyright Clearance and Register**

### **Recommendations from the 1999 NUCAF Review**

- The database must act as a copyright permission register
- The database must support production selection through a copyright register

#### **3.9.1 Introduction**

The NUCAF review identified the ongoing problem for specialist non-commercial producers of accessible format materials in the UK to contact the copyright holder of the original item for permission to transcribe. In this situation every producer must apply for permission for every transcription, and the rights holder to a work faces the prospect of multiple requests for transcription permissions. Add to this the fact that it may not be easy to identify the rights holder and/or find contact details for them, and we have a confusing situation with a great deal of duplicated effort. The NUCAF Review noted that the Reveal database ‘would need to act as a copyright agreement register while the current copyright restrictions are in place. Ideally publishers should be approached only once for permission for all non-commercial producers to transcribe a title into the various alternative formats.’

It is hoped that the UK government will adopt the discretionary part of the EU directive on copyright, which would make such applications unnecessary, but a decision has yet to be made. For the present, Reveal must work within the current requirements, which require applications to be made. Reveal support for producers is likely to be required at least the medium term, even if there is a change in the UK law in future. Even if at some future point the UK law changes, there will still be a need to inform rights holders of what transcriptions have been made, and there may be cases where applications have to be made to rights holders outside the UK. There is, therefore, likely to be a long term need to hold this type of information, though the amount and extent may change.

#### **3.9.2 The Management of Copyright Permission Applications**

As noted above, the current situation is for many organisations to make their own requests for permissions, with RNIB acting for some organisations. The NUCAF Review saw benefits to producers and rights holders in centralising this process with Reveal potentially acting as the agent for all specialist non-commercial producers.

### **3.9.2.1 NLB**

At present, NLB deals with all copyright permissions relating to titles that it is intending to transcribe itself and does not do this on behalf of anyone else. This work is undertaken by one of the NLB Stock Officers and her assistant as part of their workload. Around 250 permissions a year are sought for UK titles and around 80 permissions a year for imported American titles. NLB has no plans at present to increase production, so this level of permissions work is expected to remain stable. The current staff could probably handle a small increase in permissions applications. The process is completely manual at present.

A standard letter is sent to the rights holder requesting permission to transcribe. The letter requests permissions for Braille and/or Moon copies (and sometimes for electronic versions) to be made, and asks for details of any restrictions on the permission. It gives 3 permission options: (1) permission granted unconditionally, (2) permission granted subject to following restrictions, and (3) copyright not held, please contact (x). The reverse of the letter sets out the copyright warning which appears in every item produced, and acknowledges that the copyright owner/author/publisher may terminate the agreement by giving 3 months notice in writing. Two copies of the letter are sent to the rights holder, who completes and signs both copies, retaining one for their own records and returning the other to NLB.

NLB currently have around 5,000 title related copyright forms. If the solution is to hold these details in or attached to the bibliographic record, it is estimated that entering this data would take one person around 4 months to complete.

### **3.9.2.2 RNIB**

RNIB, on the other hand, deals with copyright permission relating to titles selected for transcription by a number of other organisations in addition to its own production effort. RNIB now employs two people full-time on copyright permission work. The Copyright Officer is now working on development work in this area, while the Assistant Copyright Officer carries out the processing of the applications. An average of 345 applications are made each month, including 30 for other organisations; this figure excludes any transcriptions made under blanket permission agreements, where a monthly list of transcriptions made is sent to the rights holder.

Within the RNIB system, the data is accessed through a Copyright screen, attached to the bibliographic record. This is filled in with the date

permission is requested, the name of the rights holder, and the specific medium of the planned transcription. Mail merge is used to generate a request letter using the bibliographic system for author, title, ISBN, date of publication. While the form states the medium for which permission is requested, it also asks for permission for all the other media, in case other versions are required in the future. If RNIB is applying on behalf of another producer, the request letter is accompanied by a supporting letter describing the producer and its services.

The request letter asks the rights holder to specify the formats for which they have granted permission (Braille/Moon, Talking Books, Customised Audio, Customised Print, Disk). It mentions the closed circulation agreements with similar organisations world-wide, and asks the rights holder to specify the territories for which permission is given (The World, British Commonwealth, Canada, USA). The reverse of the letter lists the conditions that the producer of the transcription undertakes to abide by. The rights holder fills in details of permissions granted and returns a copy of the document to RNIB.

Originally details about applications for permission were not held on the RNIB system, but this has changed in the last few years. RNIB has kept rights holder contact details on an electronic database for several years and now has over five and a half thousand entries.

Permission details are held in paper form, but for any clearance granted in the past 3 years, details of formats for which clearance has been given plus any restrictions, are also held in the bibliographic database. For the last 12-18 months, details of territories and the name of the rights holder (which may or may not be the publisher) have also been added to the bibliographic database. Retrospectively adding these details where the permission was obtained before the details were recorded in the bibliographic database has been estimated as requiring one person full-time for approximately six months. Where RNIB did not make the permission application, details are only entered if they were sent in on a NIT form.

### **3.9.3 The Reveal Copyright Agency**

There would clearly be benefits to a move to centralise copyright clearance applications for all non-commercial producers of accessible formats. The present situation is a mixture of direct applications from producers (e.g. NLB) and RNIB acting as an agent for itself and a number of other organisations. The ideal would be to have a central



agency, which would make all applications on behalf of the specialist non-commercial sector.

Such an agency will require 'dedicated' staff, rather than combining these duties with other tasks. Copyright staff will receive queries from producers and rights holders and will therefore need a good understanding of copyright issues from both points of view. Copyright staff would be responsible for entering all data relating to copyright. Ideally, part of their role should include developing and maintaining good relationships with each. In order to achieve this, a possible solution is to build on the work of the copyright unit at RNIB and transform it into a central agency funded within Reveal.

Producers for whom RNIB currently undertakes copyright clearance work would be contacted to offer them the same arrangement with the proposed Reveal Copyright Agency; this could be recorded in the partnership agreement proposed in section 1. Making the unit part of Reveal would mean RNIB would need to make a formal agreement with Reveal.

With the system in place to cover the existing agreements, other organisations would be approached on a planned basis. It might be best to concentrate on supporting the smaller producers first. The service could then be offered to larger organisations that now routinely make their own applications, although they might prefer to sign up as Reveal partners, use standard Reveal request letters and contribute the data regarding permissions (moderated by the Reveal Copyright Agency) to the database themselves.

As noted above, since RNIB already has specific 'dedicated' staff for this work, it would be best to extend the effort at Peterborough, with NLB continuing to cover its own workload in the short term. For each additional member of staff recruited, desk space and a PC would be required; depending on the location of the workspace, an additional printer might be required.

#### **3.9.4 The Applications Process**

Applications would be made on a standard form asking for clearance for all media; some titles might require more than one application where there are different rights holders for specific media. Application to copyright rights holders for permission to transcribe a standard print text into an accessible format is the first step in the production process. Accessible format production is expensive to carry out, and no-one

wants to tie up scarce production effort in a transcription that may have to be abandoned because permission is refused.

At present the Notification of Intention to Transcribe (NIT) form and accompanying documentation is the start of the copyright request process for RNIB facilitated requests. There is some misunderstanding over the reason for the NIT form (some producers viewing it as RNIB 'controlling' what others are producing) and the formats it covers (it is not used by any audio producer although it could be). For this reason, it would probably help to redesign the NIT form and rename it; it can then be 'marketed' as a Reveal service more easily.

Work processes where the Reveal Copyright Agency is making the application:

- Reveal requested to make application, preferably through use of [NIT] form.
- Reveal checks whether application is covered by a blanket agreement; if yes, Reveal informs the applicant, and records the details for the monthly return to the rights holder.
- Reveal enters details from application to a new [in Production] bibliographic record.
- Reveal generates the application for permission letter and sends it to the rights holder.
- Reveal records the date the application is made.
- Reveal generates a periodic report of outstanding applications.
- Reveal sends a reminder letter after a specified period, or if the producer has requested it because the item is required urgently.
- Reveal records the response from the rights holder, updates the database record, and informs the applicant.

Work processes where the application is made by the producer:

- A [NIT] form may still be received. This needs to indicate that Reveal is not being requested to make the application. An In Production bibliographic record is needed.
- A copy of the agreement, or an electronic message giving the relevant details, may be forwarded to Reveal for data entry.
- Alternatively, the producer may enter the details themselves using the web interface. This would be moderated by Reveal.

A standard Reveal letter requesting clearance to transcribe would be required. This needs to include the following elements:

- Author, title, volume, edition, publisher, date, ISBN / ISSN / ISMN

- Request for specific transcription: producer, format, number of copies requested
- Request for general permission: all Reveal partners, all formats, all territories
- Permission granted: format (+ any restrictions), producer(s) (+ any restrictions), number of copies (+ any restrictions), territories (+ any restrictions)
- Requester details: either Reveal Copyright Agency or a producer applying direct.
- Standard conditions agreed by the producer

The letter is accompanied by a document, briefly describing Reveal and listing its registered partners.

The letter needs to be produced as two blank copies, which form the legal agreement:

Copy A: This is sent to the rights holder, is completed by them and retained.

Copy B: This is sent to the rights holder, and returned to the applicant (Reveal or a direct applicant)

In addition, a further copy of the completed agreement may be required: Copy C. Direct applicants send a copy of Copy B to Reveal for details to be entered into the Reveal database, unless they are entering this information directly themselves.

#### Documents required

1. Letter of Registration as Reveal partner. This would include agreement to abide by Reveal Copyright Agency copyright conditions.
2. Reveal standard form: Request for Copyright Clearance (ReCC form, replacing NIT form)
3. Reveal partner listing

### **3.9.5 Record keeping**

Copyright permissions are currently made on hard copy forms. While there is a need to keep the signed permissions forms for a period of years, as they constitute a legal document, there is also a need to keep the data in electronic form.

Two types of data need to be kept, contact details of copyright holders, and details of permissions in relation to specific works. The details of permissions includes what has been applied for, to whom and when, which permissions have been granted, by whom, when, for which territories, any restrictions, and the expiry date of any permission. The two types of data can be held separately, as long as the work specific

data identifies the rights holder in a way that the contact details data can be accessed easily. In an ideal situation all this information would be accommodated within the Reveal system.

### **3.9.5.1 Copyright Holders Contact details**

When a rights holder has been identified for a specific title, a request for copyright clearance will be sent to them. Having identified the rights holder, a register of contact details will provide current mailing details for many rights holders.

Rights holders may be publishers, literary agents, authors and corporate bodies. Where the author is the rights holder, the approach may still need to be via a literary agent, in which case the agent's contact details would form part of the entry for the author. While business addresses are in the public domain, access to data such as author personal addresses must be strictly controlled. Reveal copyright staff would have access to the details. Producers would only require access if they were making direct applications instead of using Reveal to do this and would have to be authenticated in some way (e.g. passwords). Alternatively, records could display notes instead of suppressed data (e.g. address not accessible, forward application via Reveal Copyright Agency).

In addition rights holder details could indicate those instances when blanket permissions have been granted. Thus the entry for Example Publishing could indicate that there is a blanket permission for any of their titles to be transcribed into Braille or Moon; in these cases the producer simply needs to notify the publisher that a transcription has been made.

Storing these details can be handled in 3 ways.

A. They could be integrated with a library management system that supports MARC21 Community Information records, which are structured to hold information about organisations and their contact details. It is likely that some customisation of the records would be required in terms of changes to field labels and additional fields.

B. The details could be held in a specially designed set of fields using the library management system capabilities, in a similar way that patron details are held.

C. A separate web accessible database could be used. This might take the form of software that enables a general product to be customised or it could be a specially designed product.

### **3.9.5.2 Permissions details**

The other type of data relates to the permissions made and granted for specific works. Firstly enough bibliographic data is required to identify a specific work. Then the rights holder to the work must be identified. Details must be kept of when permission was requested, any follow-up to unanswered requests, and date permission granted and to whom, or refused (for whom). Details must also be kept of any restrictions on the transcriptions, such as the number of copies that can be made, the territories in which they can be loaned or sold, and whether there is a time limit to the agreement.

Because the permissions details relate to items identified by bibliographic data, the ideal would be for this information to be held in, or attached to, bibliographic records in the Reveal database, with controlled access to this data. If the system cannot accommodate this function, a separate database might be required.

Copyright issues are covered to a limited extent in UKMARC (and similarly in MARC21). However, the relevant UKM field 540 Terms Governing Use has a limited number of sub-fields to record restrictions on use. In addition it does not cover the process of applying for permission.

Again there are 3 options for storing this data.

- A. Define local structured field(s) within the bibliographic record to hold this data.
- B. Use library management system capability to hold this data, perhaps in combination with the production history data, and linked to the bibliographic record.
- C. Use a web accessible database, either specially designed or a customisation of a general product.

### **3.9.5.3 Blanket Agreements**

Reveal would also work on establishing blanket agreements with rights holders; where possible these will be non-specific and allow production by any registered Reveal partner. Blanket agreements may still restrict the number of copies in any transcription and the territories in which they may be loaned or sold. Reveal would also seek to renegotiate the blanket agreements, currently in place, which are limited to specific producers.

Both RNIB and NLB have negotiated blanket agreements with rights holders, though the agreement may still be limited to a format, and

limited to distribution by RNIB or NLB. RNIB has signed blanket agreements with around 160 – 170 rights holders, ranging from Age Concern, to manufacturers of domestic appliances, and a literary agent, and is working to increase this number. NLB has around 50 blanket agreements. The new agency would continue to promote these agreements.

### **3.9.6 Feasibility Summary**

The current RNIB copyright unit could be transformed into a Reveal Copyright Agency; this would retain the expertise of current staff. New documentation (application forms, etc.) would be needed and additional work would be required in promoting the new unit to rights holders and producers. In addition, this would mean a relationship with RNIB itself as a client.

Since the permissions data needs to be related to a bibliographic record, the preferred solution is to use the Reveal bibliographic database to hold this information, either in local fields or as attached data. The contact details database could be held on the same system, perhaps using Community Information records or variations of patron records, or could be held on a separate system.

RNIB and NLB already hold a great deal of data on copyright permissions and this would need to be transferred to the new database(s). It may be possible to transfer the data using electronic files but there may be a requirement for keyboarded data input. As noted above, a certain amount of retrospective work for permissions will be required where full details have not been entered in the bibliographic record.

Initially staff at both RNIB and NLB might continue to input data, with a later move to the single unit. Alternatively, a move to integrate the work might take place ahead of the system, though there would be organisational and financial implications to this.

If the Reveal Copyright Agency were to be set up, it would undertake the following tasks:

- Deal with copyright permissions requests for NLB and RNIB
- Deal with copyright permissions request for other producers who require this service
- Send off initial permissions request
- Monitor receipt of decision by permissions rights holders
- Chase outstanding permissions decisions

- Maintain copyright permissions database
  - Maintain rights holder contact details database
  - Contact with RNIB and NLB production sections, other producers, etc
- It is hoped that government will change copyright requirements and thus reduce the need for this work. Initial estimate if copyright requirements remain as at present is for 2 to 3 full time equivalent posts.*

### **3.9.7 The Future**

This consideration of managing the copyright clearance function has focussed on the current practice of hard copy applications and electronic record keeping. For the future, electronic rights management may be the accepted procedure. The proposed new unit should take a pro-active role in following up new options.

As noted before, changes to copyright legislation for transcription into accessible formats for visually impaired and print disabled people may reduce the work required in this area.

### **3.10 POTENTIAL SYSTEMS FOR REVEAL**

Reveal is an ambitious project to provide a union catalogue of resources in accessible formats and a number of supporting services. Many of the elements required are available in the various library management systems and union catalogue systems currently available. However, the wide range of functions required for Reveal means that the system ultimately chosen will require an element of modification and development.

This study has concentrated first on defining what is required for Reveal. Only then is it possible to move to evaluating available systems for their potential to support Reveal. A complicating factor in this is that RNIB and NLB are currently pursuing a library service partnership in which it is likely that the Geac Advance system will be used by both organisations. RNIB and NLB between them account for 66% of the estimated content of Reveal and this makes Geac an obvious candidate to provide at least the bibliographic database for Reveal. A Geac system is also in use at the Canadian National Institute for the Blind (CNIB).

While it makes sense to consider Geac, other solutions are not being ruled out. The Geac system is a library management system, and needs to function as such for NLB, and to a currently undetermined extent for RNIB also. Reveal is a union catalogue with a number of supporting databases, which may use one system or more than one system. Not all functions of a library management system and a union catalogue are identical; there will be common functions and library management or union catalogue specific functions.

There is no requirement for all of the Reveal databases and services to use a single system. The Reveal web-site home page can bring together a variety of resources for the end user, and specifications for individual systems would include interoperability when interface to another system is required. So if Geac does prove the best option for the bibliographic database, some of the additional data and services might be better served by other systems.

#### **MIRACLE**

The alternative is to see whether union catalogue software may be a better solution. It appears that many of the issues and problems encountered in this study have also been encountered in the MIRACLE project <[www.svb.nl/project/MIRACLE](http://www.svb.nl/project/MIRACLE)>, which aims to develop a bibliographic database of records for Braille music which are linked to



digital files held at individual organisations. This will allow libraries to access the records and download digital files of Braille music. The system incorporates a union catalogue of four of the major Braille music libraries: SVB (Netherlands); Organizacion Nacionales de Ciegos (Spain); RNIB; and Schweizerische Bibliothek fur Blinde und Sehbehinderte (Switzerland).

The project has concentrated initially on titles which are already held in digital form, but the intention is to create digital files of those items currently held in paper form.

The project is due to be completed at the end of January 2001. The system is currently being evaluated by the consortium members (the four libraries mentioned above, plus the Danish Library for the Blind and Stamperia Braille in Italy) and the evaluation will shortly be extended to the corresponding partners in the project (including NLB).

The project is, in many respects, a microcosm of the Reveal project, with similar aims and objectives. Although dealing with only one format – Braille music – it has had to address many of the issues facing the developers of Reveal.

The MIRACLE catalogue acts as a ‘window’ for the records produced at the individual organisations. Records are uploaded in UNIMARC format using a ‘catalog’ option available on the union catalogue homepage (records from RNIB currently undergo a batch conversion to UNIMARC, written by the software developers). Once uploaded, an ‘Add Catalog’ form is available which allows for modifying records if required. Sessions of ‘Add Catalog’ can be saved for future work.

There are a number of options including:

- Search
- Ordering
- Register
- Accounts
- Policies
- Multi-media
- Help (FAQ)

All options apart from ‘Search’ and ‘Help’ require registration and entry of a username and password.

The software which has been developed for this project is clearly of relevance to Reveal, and represents an alternative approach to using a library management system such as Geac, at least for some aspects of its proposed services. It would be most useful if a representative from the Reveal project team could be involved in some way at the external evaluation stage. Whilst it is understood that the purpose of the evaluation will be to ensure that the aims and goals of MIRACLE are met, it would be a valuable opportunity to look at the software in more detail and possibly explore using the software (on a commercial basis) for the Reveal project. It is recommended that permission for this level of involvement should be sought from the appropriate party.

### Voyager

Another system which might merit investigation is Endeavour's Voyager system. This has been chosen by the Library of Congress for all its collections and services, which include the NLS catalogue of material in accessible formats, and the NLS catalogue will shortly be migrating to Voyager. Many, if not all, of the issues raised in this report will have been considered when choosing this system.

The following section considers how the Geac system could accommodate Reveal.

*In this version of the report the following section has been largely omitted, apart from some introductory matter, as the information was obtained under a 'commercial in confidence' agreement. The headings have been retained to indicate the issues that were explored.*

*In addition some costs detailed in section 5 have also been omitted for the same reason.*

## **4. HOSTING REVEAL ON THE GEAC ADVANCE SYSTEM**

### **4.1 Introduction**

*The NUCAF review recommended that the national database should be hosted by the joint library services of the NLB/RNIB. It has been agreed that NLB will pilot hosting joint bibliographic data on the Geac ADVANCE system in use at NLB (this will include RNIB and NLB's bibliographic data); NLB and RNIB are also determining the suitability of the ADVANCE circulation system to host the distribution system for the RNIB Braille and Cassette libraries. Discussions have been taking place in parallel with this study concerning the migration of the relevant constituent parts of the RNIB system (and NUCAF) to the NLB system. For the purposes of this study, a specification of functional requirements for the operation of Reveal was prepared (see Appendix C) and matched in the first instance against the NLB Geac ADVANCE system.*

### **4.2 The Geac ADVANCE system at NLB**

#### **4.2.1 General**

The Geac ADVANCE system in use at NLB is a library management system (LMS). These systems incorporate a number of staff library management functions (such as cataloguing and authority control, circulation, acquisitions and serials control) with online public access (OPAC) to bibliographic, holdings and other data (e.g. on order status, loan status etc.). MARC records are often used to hold the bibliographic and holdings data; other data, such as circulation and acquisitions data, is held in non-MARC format (although it can be still be accessed through the OPAC if desired, e.g. display of borrower data). End users can, if the library desires, interact with the OPAC by displaying their own details, renewing and requesting books.

On many LMS's , it is possible to set up 'virtual' separate files within the same database. This enables, for instance, several different libraries to share the same database but to have different logical 'views'. This would allow a library to perform a search of the database for only its own holdings.

#### **4.2.2 Bibliographic and holdings records**

#### **4.2.3 Import of bibliographic records**

#### **4.2.4 OPAC**

#### **4.2.5 Circulation**

#### **4.2.6 Acquisitions**

### **4.3 Compliance with requirements**

#### **4.3.1 The database**

#### **4.3.2 Data types and records**

#### **4.3.3 Notification of holdings**

#### **4.3.4 Management and control of 'in process' records**

*This relates to holding records for material in production and the possibility of user suggestions for purchase/production.*

#### **4.3.5 Collections register**

#### **4.3.6 Database access**

##### **4.3.6.1 Display of holdings**

##### **4.3.6.2 Virtual catalogues**

*Relates to simultaneous searching of Reveal and another catalogue.*

##### **4.3.6.3 Web access**

*Accessibility issues for visually impaired end users.*

##### **4.3.6.4 Search limits**

##### **4.3.6.5 Displays**

##### **4.3.6.6 User requests**

##### **4.3.6.7 CD-ROM**

#### **4.3.7 Export**

### **4.4 Areas for development**

### **4.5 Implications of using Geac**

## **4.6 Resources and timescales**

### **4.7 Costs**

#### **4.7.1 Software costs**

#### **4.7.2 Professional services**

#### **4.7.3 Hardware and operating software**

## 5. COSTS AND TIMESCALE

### 5.1 Introduction

It has proved very difficult to come up with sufficiently detailed information to put together a full business plan. Many costs and timescales can only be determined when decisions have been taken on the use of specific systems. However, within the limitations of the information that has been obtained, this is a preliminary indication of the possible scale of cost, effort and time to make Reveal a reality.

- Many of these costs are based on an assumption that Geac will be the base system, although in some areas alternatives have been identified. *Identifiable Geac costs have been omitted.*
- Estimated salaries are given, with a standard figure of 22% for on-costs (employers NI contributions, etc.). In addition recruitment costs will also be incurred.
- Some additional costs will be incurred for time and travel when consultants and staff from RNIB and NLB are required to attend project management and Reveal Development Steering Group meetings.
- Inevitably, as with previous phases of this project, there will be a hidden contribution by all organisations and individuals working on the project (e.g. when discussions or small pieces of work involve people not directly contracted to work on Reveal). A great deal of goodwill and support for Reveal has been given by everyone who has been approached regarding this work. It is difficult to quantify all of this but it should be recognised by the Steering Group and pointed out to potential funders.

## 5.2 Phases of Work

### Phase 1

<b>Reveal development phase</b>		<b>6 months</b>	<b>Oct- Mar 2001</b>
Operational reqs. spec			£5K - consultant
Procurement			£7.5K - consultant
Appoint project manager			£25K - £30K + 22% on-costs
Input from RNIB & NLB			

<b>Commission system</b>		<b>15 months</b>	<b>Mar 2001-May 2002</b>
Contract for system		3 mths Mar-May 2001	
Development stage		6 mths Jun-Nov 2001	
Implementation stage *including data migration and maybe some Z39.50 work		6 mths Dec-May 2002	
Staff training			
Input from RNIB & NLB			

<b>Contracted experts and RNIB &amp; NLB staff attendance at meetings</b>	
Project management Monthly, 6-8 people	Travel: ? £800 per meeting Time: 6-8 person days
Reveal Development Steering Group 6 times a year, 8-12 people	Travel: ? £1200 per meeting Time: 8-12 person days

<b>Maintaining Reveal</b>	<b>on-going</b>	<b>From May 2001</b>
Project manager	1 FT	£25K - £30K + 22% on-costs
Reveal officers	2 FT 1PT (0.2 of £25K)	2 x £14K + 22% £5K + 22% on-costs

<b>Collection register set up</b>		<b>4 months</b>	<b>Jan-Apr 2001 standalone Dec-Mar 2002 bib system</b>
Commission			£12K - £18K software
Development and testing	1 mth		£1K - consultant
Data collection and input	3 mths (£12K p.a.)		£3K + 22% on-costs
Input from RNIB & NLB			

## Phase 2

<b>Rights holders database 7 months Jan-Jul 2001 standalone Dec-Mar 2002 bib system</b>		
Commission	1 mth	£19K - £27K
Development and testing Migration	3 mths?	
Input from RNIB & NLB		
Missing permissions *Input / upgrade entries	6 mths (£12K p.a.)	£6K + 22% on-costs
Total for set up: £26K - £34K		
Salaries for Copyright Agency: £34 - 48K p.a. + on costs at 22%		

Although this could be undertaken at the time indicated, it may be better to defer this to a later stage, and requirements may be altered if UK copyright legislation changes.

<b>CD-ROM production 3 months Jun-Aug 2002</b>		
Commission	3 mths	£10K
Development and testing		
Each pressing		? £ per pressing c.2K - 3K copy sales

<b>Z39.50 clients 6 months each client Jun-Nov 2002</b>		
Commission	6 mths if in parallel:	Talk to elib projects
Development and testing Implementation	BL, V3, Unity	

<b>In Print file (commercial production) Jun-Nov 2002</b>		
Commission	6 mths	Talk to book trade data suppliers
Development and testing Implementation		

Could be progressed earlier if there is a temporary host for the file until Reveal is operational and funding is available.

### Possible Sources of Funding

BL Cooperation Programme Call in 2000, funding available 2001  
DCMS grant 2000/2001 for improving library services to the visually impaired  
Fund raising by RNIB and NLB  
New Opportunities Fund



### 5.3 Reveal Development

- The feasibility study has considered the recommendations for Reveal set out in the 1999 NUCAF Review.
- The study examined the options for achieving the recommendations, and identified problems and possible solutions.
- The next stage is development. To provide the full Reveal service a number of discrete projects have been identified. For each project, some further work is needed to get to the commissioning stage. This will include refining specifications, obtaining proposals and quotations for work to be carried out, negotiating contracts with suppliers as necessary and negotiating funding to complete the project.

<b>Task</b>	<b>Effort</b>	<b>Cost (est)</b>	<b>Notes</b>	<b>Time</b>
Develop technical spec into an Operational Requirement for Reveal database	Consultant	£5K	Based on consultancy rate of £500 per day	10 days
Procurement work (obtaining and evaluating proposals, negotiating with suppliers)	Consultant	£7.5K	Dependent on procurement method (e.g. if tendering required) and number of suppliers involved	15 days
Staff time at RNIB and NLB				
Negotiating funding				
Total: c. £15K				

The progress and timescale for the RNIB/NLB library service partnership, and decisions on the use of Geac Advance by RNIB will influence how Reveal is taken forward. External factors may influence decisions, i.e. if the partnership does not get beyond the pilot phase or RNIB decides against using Geac.

If the partnership continues, and Geac Advance is used for RNIB functions, and Geac Advance proves to be the best option for Reveal, progress on Reveal will have to be tied in with progress on the RNIB/NLB implementations.

## 5.4 Commissioning the bibliographic database

- This element of Reveal might be developed and implemented separately from other elements

Task	Effort	Notes
Customise database	System supplier Reveal contact time	
Install/test	System supplier Reveal contact time	
Hardware, etc	System supplier	
Software upgrades	System supplier	
Input - RNIB & NLB		
Staff training		
Staff manuals		
Migration NUCAF Mapping Conversion prog. Testing Conversion		Data conversion for NUCAF and retro  87,000+ records
Migration retro Mapping Conv. Prog. Testing Conversion		85,000+ records
Total: c. Up to c. £200K		

### Costs and Funding

The major cost of supplying a system can only be estimated.

### Funding Options

DCMS/Resource

### Timescale

Previous NLB experience suggests a period of 4 months.

### Reveal Staff

Technical and bibliographic contact will be needed during the development, installation and testing phases

## 5.5 Maintaining Reveal

- Bibliographic Database: NLB and RNIB staff will continue to create records for their own productions/holdings. Some producers will move to submitting data directly to Reveal, and these will require validating and in many cases an element of upgrading. Other producers will continue to submit data in other ways (e.g. paper listings) and staff will be needed to input and in many cases upgrade the records.
- Collection Register: almost all the effort is in setting up the register; only a minimal amount of additional entries and amendment of existing entries is anticipated after set up.

Post		Notes	Cost p.a. (est)
Reveal Manager	Full time		£25K-£30K + 22% on-costs
Reveal Officers	2 FT equiv		£14K + 22% on-costs
	1PT (0.2)	Technical aspects	£5K + 22% on-costs
TOTAL: £44K - £49K + on-costs			

In addition, each member of staff will require desk space, and computer equipment. Some shelving capacity is likely to be required and shared computing equipment such as a printer. At least 1 phone line will be required.

There will be a need for the following elements in addition to systems and staff already identified.

- Outreach to producers as Reveal partners
- Negotiation with producers on data supply or direct data entry
- Developing a user manual for producers
- Maintaining software and hardware (see section 4 for initial Geac estimates on this)
- Future developments of software and upgrading hardware as required

- **Maintaining Copyright Register:** If this is required under the current legislation, staff will be needed to work on this long term. Work will include applying for permissions, negotiating blanket permissions, and recording new contact details of rights holders and new permissions granted. Initially they would cover the work now done by NLB and RNIB, but there would be a need for expansion if this service could be offered to all voluntary sector and education sector specialist producers. It should be recognised that this cost is currently borne by the producers.

*Requirements for this element may change if government changes copyright legislation.*

Post		Notes	Cost p.a. (est)
Copyright Officer	Full time		£20K + 22% on-costs
Copyright Assts	1 - 2 FT equiv		2 x £14K + 22% on-costs
<b>TOTAL: £34K - £48K + on-costs</b>			

## 5.6 Reveal Record Export

If Reveal records are still to be exported, there will be:

- Cost of software to export records in non-standard format
- Cost of staff time to oversee export process (BNB, LASER, Unity, NLS, MIRACLE)

## 5.7 Reveal CD-ROM

It is planned that Reveal would be available as a CD-ROM. There will be initial development costs and production costs for each issue. Staff time will be required to oversee both development and ongoing production. Staff time will also be required to administer the sale of the product.

- Development costs to set up the product – this is likely to be around £10,000. If it is possible to customise the BL template, this cost could be reduced.
- Master(s) for each issue – depending on the number of pressings required, there may be a need for re-mastering.
- Copies pressed for each issue.
- Royalties to the production company.

## 5.8 Collection Register set-up

- This element of Reveal might be developed and implemented separately from other elements

<b>Task</b>	<b>Time</b>	<b>Cost (est)</b>	<b>Notes</b>
Finalise element set and spec	5 days – consultant + RNIB & NLB	£1K	If independent of bib system, could start Jan 2001
Choose system or Put out to tender			
Development and testing	1 month	£8K - £16K	Jan 2001
Install			
Collect/input data	3 months	£3K (at £12K pa)	Feb-Apr 2001
<b>TOTAL: £12K - £20K</b>			

If Geac is chosen for the bibliographic database and the collection register, then this work would be tied in to the bibliographic database schedule, and would start later. In addition, costs would be subsumed in the overall development costs and no separate charge made. It should be noted, however, that this is not the recommended option.

### Costs

- Costs are dependent on system chosen.
- Regardless of system chosen, c.£1K for consultant to finalise element set and write specification and c.£3K for data collection and input

### Funding Options for standalone development

- DCMS/Re:source funding
- Fundraising project by NLB and/or RNIB

### Reveal Staff

Temporary post (clerical or cataloguer) for collection and input of data  
Then maintained by Reveal staff

## 5.9 Copyright Register set-up

### Rights Holder database

- Geac Community Information records: timing as for bibliographic database.
- Separate database: could be developed and implemented independently.

### Permissions database

- Held on bibliographic database: timing as for bibliographic database.

Task	Time	Cost
Finalise element set and spec	5 days	£1K
Choose system or Put out to tender		
Development and testing	1 month	£8K -£16K
Install		
Rights Holders Migrate RNIB data 5000+ records	1 month	
Permissions Input NLB data 5000 records	4 person months	£4K (at £12K pa)
Permissions Upgrade RNIB data	6 person months	£6K (at £12K pa)
TOTAL: £19K - £27K		

If independent of bib system, possible start Jan 2001

If using bib system, start Dec 2001

### Funding options

DCMS/Resource funding

Publishers Association

### Reveal Staff

Temporary staff to input NLB permissions currently held in paper format, and to input additional permissions details, held by RNIB but are not currently in electronic form.

Then maintained by Reveal Copyright Agency staff.

## Appendix A: Glossary

Accessible format: a physical or electronic medium, which can be used by visually impaired people, and in which intellectual or artistic content is held.

- Tactile formats: Braille and Moon text, specialist Braille (e.g. Music Braille) and tactile diagrams and maps. Tactile text may be uncontracted or contracted (known as levels or grades). For a single volume standard print text, the tactile version will usually comprise more than one volume.
- Audio formats: Audio cassette (exist in a variety of recording formats, some of which require specific playback equipment) or CD-ROM. In most cases the audio version will comprise more than one audio unit.
- Large print: Printed texts, music scores and images in font sizes 14 or above. The actual font size or magnification is important as there are varying user requirements of print size.
- Video recordings: audio described video recordings.
- Electronic files: These are likely to become an increasing feature of resources for visually impaired people. There are three aspects of electronic files.
  1. Physical carrier. This can be a file on a computer, a file on a floppy disc or a file on a CD-Rom. The file may be designed for use with a specific piece of playback equipment, or be usable on any PC, in which case the user can access them through a route of their choice (screen magnification, speech synthesis, refreshable Braille).
  2. File format. The content is held in a file format, such as ascii, html, braille file (.brf), pdf, etc.
  3. Function. Some electronic files are the text of a standard print item intended for end users. Others are master files for producing other formats. Some files are both masters and an accessible format for end users.
- Electronic resources: In the future accessible web-sites and web pages may become a more important resource.

Copy/copies: Physical items and electronic files containing the text of a work in a particular accessible format transcription. Depending on the format, a single copy may comprise a number of individual 'pieces'; for instance, a sound recording on 5 cassettes.

Copy-set: A term used at NLB for transcriptions comprising multiple components (a novel may require several braille volumes).

Master: Physical items and electronic files used to generate copies of an accessible format, either in a production environment or in response to customer requests.

Manifestation: a version of a work in a particular physical medium.

Master: Physical items and electronic files used to generate copies of an accessible format, either in a production environment or in response to customer requests.

Soft braille : a keyboard with a special bar for temporary display of braille generated by a software package. Also referred to as refreshable braille, and temporary display braille.

Transcription: a specific accessible format version of a work. Because of the nature of accessible formats, a number of tactile format volumes or audio cassettes will be required to represent a single, standard-print volume.

Work: an item of intellectual or artistic content.



## **Appendix B: Data Elements**

Records in the Reveal database will need to contain a variety of data relating to format, production status, an intellectual and artistic content, in addition to full use of fields for access points.

The data presented to the user will be specific to the user type and the search type. Some of the data elements enable searching, but do not need to be displayed in the results. Some data elements will only be available to specific users, identified through some form of authentication.

### **B.1 Record content**

Much of the record content is work specific – the author, title, subject, synopsis, etc., but some content is format specific.

#### **B.1.1 Tactile text**

There are two systems in use to represent printed text in a tactile (embossed) format, Braille and Moon. Both systems have uncontracted and contracted forms (grades or levels). Generally a number of tactile volumes will be required for a single-volume, standard-print text. Records need to indicate the system and the grade or level of the text, and the number of components.

#### **B.1.2 Tactile images**

Tactile images are made by hand, mostly in single copies. When reproduced for another user, they may require modification. They can be maps, diagrams (e.g. showing the layout of rooms in a building, the positioning of switches on a washing machine) or images (e.g. a tactile version of a painting). Records for these items need to include details of overall size, and any accompanying media (e.g. an audio tape).

#### **B.1.3 Audio formats**

At present, audio versions may be on standard audio cassette, a variety of special format audio cassettes, and CD-ROM. The playing time of audio cassettes and CDs often means that more than one cassette or CD is required for an audio version. Records for these formats should detail the specific format type (number of tracks, structured or unstructured digital books, MP3 format, etc), whether specific equipment is required for playback, and the number of components.

#### **B.1.4 Enlarged print**

Enlarged print is a variable term used to refer to printed texts in font size 14 point and above. Most large print commercial production is 16 point, but this is often not large enough for people with visual impairment. Records for these items should include the font size when known.

#### **B.1.5 Electronic files**

Electronic files can be used to store information that is later accessed through magnified computer screens, speech synthesis software or refreshable braille display software. Records for these items need to detail file size and characteristics (e.g. Microsoft Word file) and any specific requirements regarding equipment. They will also need to detail whether the file is downloadable from a server (giving the URL), sent as an email attachment, or held on a floppy disc or CD-Rom.

#### **B.1.6 Electronic resources**

Accessible digital resources (such as accessible web-sites) may be included if they form part of the output of one of the producers. Records for these resources should include field 856 for the URL of the resource. A direct link to the resource should ideally be possible. Any restrictions on access to the resource should also be noted.

#### **B.1.7 Mixed media**

Examples of mixed media are tactile pictures with audio tape commentary, tactile text interleaved with standard print text, and tactile diagrams with audio tape text. Records should indicate the components of the item, and include relevant details of each component format.

#### **B.1.8 Masters**

Masters will be recorded in the database. They may be used to generate copies of one specific format, or in the case of electronic masters, be used to generate several different output formats, or could be 'virtual media' – a source file which is edited for immediate production in a pre-determined media. Details required about a master are its physical form (including electronic masters), which formats it can generate and whether further copies can be generated from it.

### B.3 Data Elements Set

The following data elements need to be recorded

<b>Work</b>	
Author	Personal authors Corporate authors
Title	Title Volume (title and part number/sequence designation)
Uniform title	
Edition	
Series	Title, number/sequence designation, frequency of issue, relationships (preceding, succeeding and related works)
Language of text	
Content	Form (e.g. encyclopedia) Type (e.g. government publication)
Music information	Score format, musical transcription, medium of performance Music reference numbers
Drama	Cast details
Synopsis	
Standard numbers	ISBN, ISSN, ISMN Producers numbers
Original text	Publisher and date
Subject indexing	Dewey Decimal Classification Topical terms Geographical terms Names, personal and corporate
Genre and form indexing	
Notes	A variety of notes fields will be required
Audience	Intellectual level of content
Awards	

<b>Transcription</b>	
Transcription	Publisher and date Format (at general and specific levels) Number of components Equipment required for use URL (for electronic resources)
Audio materials	Narrator name, gender, non-native speaker
Music materials	Accessible format score layout
Extract	Where original is not transcribed in full
Notes	

<b>Master</b>	
Producer	
Format of Master	Physical/electronic form of master Master only Is an accessible format in its own right
Formats generated	The formats this master can generate Whether master is still capable of being used
Holder	Original producer of master Reveal deposit master
Unique identifier	
Notes	

<b>Production History</b>	
Producer	
Production stage	Selected for production, In production
Date	Expected date of production, date produced
Unique identifier	
Notes	

<b>Holdings: For each transcription</b>	
No of copies	
Availability	For loan, sale, hire, or free on request
Restrictions	Type of restriction Does restriction apply to all copies
Holder	Holding institution/collection Notes

<b>Copyright Permissions</b>	
Copyright holder	
Permission	Requested (general or for a specific producer) Granted (to which producers) Refused
Permission limits	Producers Number of copies Territories covered or excluded Expiry date of permission

<b>Copyright Holders</b>	
Copyright holder	Name (personal or corporate)
Contact details	Postal address Email address Telephone number Restrictions on contact
Further details	Blanket permissions negotiated Other details may be required

<b>Collections</b>	
Title	Name of unit, library or producer
Description	Free text description of collection and/or service
Audience	Groups of people for whom material is intended
Coverage	Subject areas covered in collection
Language	Languages of materials in collection
Format (for each format held)	Format type (general and specific) Equipment required to use the format Number of titles held Annual additions Target audience (where applicable)
Access	Individual Group Conditions of membership Fees Postal concessions available Restrictions on number of items borrowed / on loan at any time
Owner of collection	Name Postal address Telephone number Email address URL of any web site connected with the owner / collection Primary contact individual Parent body Previous name(s) of organisation
Data supply to Reveal	Records supplied by hard copy/electronic transfer/direct entry
Partner agreement	Date Records supplied Reveal to undertake copyright clearance work
Group entries	Bodies with more than one collection will also have a group entry. Name of parent body Free text description of body / service Name of each specific collection Owner postal address, telephone number, email, URL Primary contact individual

## Appendix C

### Specification of functional requirements

NB: (1) This specification assumes a certain level of functionality with regard to standard operations such as cataloguing and retrieval (which are provided for on all major library management systems), and concentrates on those requirements particular to the operation of Reveal.

(2) The specification was written with a single system in mind, but this does not preclude the use of separate systems for specific functions (e.g. maintenance of Collections Register) should this prove the best solution.

#### 1. General requirements

1. The system must support a database of material in accessible formats, produced and/or held by a number of different organisations.
2. The system must include the following functions:
  - General database management
  - Management and control of notifications
  - Identification and tracking of items 'in process', from notification through production to completion and inclusion on a union catalogue of records produced and/or held by contributing organisations
  - Copyright clearance
  - Maintenance of a collections register
  - Web access to the union catalogue and other files as appropriate
  - Z39.50 access to the union catalogue
  - Z39.50 gateway to other databases, e.g. LASER, Unity
  - Ability to output to CD-ROM (for users without Web access)
  - Input and control of user requests
  - Export of union catalogue records and subsets to host databases without Z39.50 access
3. The system must be accessible by visually impaired and print disabled users.

## **2. General database management**

### **2.1 Data types and records**

1. The system must support the following types of data:
  - bibliographic, i.e. original work
  - transcription
  - master details )
  - production ) for each transcription
  - holdings ) (as appropriate)
  - copyright permission details )

Data elements for each type of data are given in Appendix B.

2. The system must allow for the identification and tracking of items at different stages of processing, as follows:
  - Notification: intention to transcribe or selected for transcription; holdings; amendment/withdrawal of holdings
  - Held awaiting copyright clearance or review by Reveal staff
  - Copyright cleared
  - In production
  - Completed awaiting copyright
  - Completed, i.e. included in union catalogue.
3. The system must support the UK MARC format (with extensions) for the union catalogue records.
4. The system must support a collections register (data elements in Appendix B).
5. The system must support a register of copyright holders (data elements in Appendix B).

### **2.2 Access and privileges (staff and producers/holding institutions)**

1. The system must prevent unauthorised access to the database or areas of the database to which the user does not have privilege.
2. The system must support different levels of access to the database, as follows:
  - Reveal staff: read/write access to all records (subject to individual permissions)
  - Producers: read access to union catalogue, in process records, copyright permission details (if applicable); write access to Web notification forms and 'their' records, e.g. contact details on collection level record.



- Holding institutions: read access to union catalogue, in process records; write access to Web notification forms and 'their' records, e.g. contact details on collection level record.
3. For each level of access, it must be possible to define appropriate permissions linked to a log-on ID/password for each contributing organisation and for members of Reveal staff.
  4. It must be possible to limit access to copyright holders details to Reveal staff and partners only.

### **2.3 Record creation, amendment and deletion**

1. The system must support the addition, amendment and deletion of records both by import of machine-readable data, and direct input by Reveal operators using Reveal-defined templates.
2. It must be possible to import data supplied electronically (see notifications below) and use it as the basis for the record on the system.
3. It must be possible to directly input data for those items notified in paper form.
4. It must be possible to:
  - import an external MARC record to upgrade a sub-standard, minimal or standard record, retaining any local fields
  - directly add or amend any data on the record to bring it up to the Reveal standard.
5. It must be possible to flag sub-standard records (920 field).
6. It must be possible to assign a unique identifier for each transcription. This is normally generated by the producing organisation, but it must be possible to assign a system-generated number if the organisation does not supply a number.
7. It must be possible to archive deleted titles.

### **2.4 Authority control**

1. The system must provide authority control on the following fields:
  - Union catalogue record (bibliographic data):
    - author (1XX, 7XX)
    - uniform title (240)
    - publisher (776)
    - series (440)
    - subject fields (6XX, to include 655, 698, 699)
  - Copyright
    - rights holder (link to copyright register)

## Production

- producer (link to collection record)

## Collection record

- organisation name
- subjects
- audience
- accessible formats held

2. For bibliographic data, it must be possible to access and download headings from external authority files, e.g. British Library, Library of Congress.
3. It must also be possible to offer pull-down lists of possible values for other types of record, e.g. format, producer, language, and for Reveal staff to maintain such lists.

## **3. Management and control of notifications**

### **3.1 General**

1. The system must support a pre-search of the database for organisations to establish whether or not an item has been transcribed into an accessible format or a transcription is in process (see Database access below).
2. The system must support the following notifications:
  - intention to transcribe into an accessible format
  - selected for transcription
  - transcription in production
  - transcription completed
  - transcription aborted
  - holdings
  - amendment/withdrawal of holdings
3. There must be provision for notifications by the following methods:
  - Web input (transcriptions and holdings)
  - File transfer (FTP) (records exported in MARC exchange format from local system) (holdings notifications only)
  - On disk or tape (records exported in MARC exchange format from local system) (holdings notifications only)
  - E-mail
  - Paper forms (transcriptions and holdings)
  - Telnet (if necessary)

## **3.2 Notification types**

### *3.2.1 Notification of intention to transcribe*

1. It must be possible to handle notifications from organisations where there has been no pre-search of the database. Incoming notifications must be checked against union catalogue and in process records to ensure that the item does not already exist in the format proposed or is in process. It must be possible to search all records simultaneously, and for those items received in electronic format, some means of automatic matching (e.g. ISBN, bibliographic elements, accessible format) would be preferable.
2. Where an item already exists or is in process, the system must generate a notice (paper or electronic) to the organisation concerned informing them of the availability/status of the item and from where it may be obtained (if appropriate).
3. Records for items which do not exist in the proposed medium must be imported/added to the system as in process items (selected for transcription). The system must generate a notice (paper or electronic) to the organisation concerned advising them to proceed. The transcription unique identifier must be given and quoted on all further notifications. (See also Management and control of 'in process' records below)
4. It must be possible to manage copyright applications on behalf of producers if required (see Section 5 below).

### *3.2.2 Selected for transcription*

1. It must be possible to handle notifications from organisations which have pre-searched the database and established that the item does not exist in the required format. In this case, the notification will state that the work has been selected for transcription.
2. It must be possible to check the database for duplication (in the intervening period) and records for items which do not exist must be added to the system as in process items (selected for transcription), and an acknowledgement generated to the organisation concerned, quoting the transcription unique identifier.

### *3.2.3 Transcription in production*

1. It must be possible to log when an item has actually gone into production (if known).

### *3.2.4 Transcription completed*

1. It must be possible to handle notifications from producers when a transcription is complete. Completed items must be flagged for inclusion in the union catalogue, once copyright permission has been received (see also Management and control of 'in process' records below).
2. It must be possible to 'chase' those producers who fail to notify when a transcription is complete (or aborted), producing a notice (paper or electronic) after a defined period of time.

### *3.2.5 Transcription aborted*

1. It must be possible to handle notifications from producers if they decide not to go ahead with a transcription.
2. It must be possible to produce an alert for aborted transcriptions for copyright staff, so that copyright is not pursued (if applicable).
3. It must also be possible to hold and access recently deleted titles.

### **3.2.6 Notification of holdings**

1. It must be possible to check incoming notifications of new holdings records (first notified holding for a given transcription) against union catalogue and in process records to avoid duplication (an incoming MARC exchange record may have an 'n' status but may in fact already be on the database). It must be possible to search all records simultaneously, and for those items received in electronic format, some means of automatic matching (e.g. ISBN, transcription identifier) would be preferable.
2. It must be possible to import/add new holdings records and holdings to existing records to the union catalogue (see 2.3 above).

### 3.2.7 Notification of amendment/withdrawal of holdings

1. It must be possible to amend or withdraw holdings on the union catalogue. Where such notifications are received electronically, this should be activated automatically using the transcription identifier (see also 3.3.2 below).
2. The system must give a warning when the last holding of any given transcription is being deleted.
3. It must be possible to retain records removed from the active database on an archive file.

## 3.3 Notification methods

### 3.3.1 Web

1. It must be possible to define various Web screens for the different types of notification for direct input by producers and holding institutions. Screens must include appropriate bibliographic data (minimum data standards will apply) as well as the appropriate data elements for each type of notification (see Appendix B for data elements):

Intention to transcribe/selected for transcription:

- Organisation ID
- Date
- Copyright details *or* request for Reveal to make copyright application
- Format
- Expected date of production

Transcription in production:

- Organisation ID
- Transcription ID
- Date into production

Transcription completed:

- Organisation ID
- Transcription ID
- Date completed
- Format details, e.g. number of vols/cassettes
- Details of final master
- Availability/use (e.g. loan, sale, free or restrictions on access)
- Location/collection

Transcription aborted:

- Organisation ID

- Transcription ID
  - Reason for abort
- Addition/amendment/withdrawal of holdings:
- Organisation ID
  - Format details
  - Availability/use (e.g. loan, sale, free or restrictions on access)
  - Location/collection

### 3.3.2 MARC exchange records by file transfer (FTP) or media (floppy disk, tape)

1. It must be possible to accept notifications of holdings and amendment/withdrawal of holdings as UKMARC exchange records ('n', 'c', 'd' record status, character position 6 in record label). (Transcriptions will not be notified in MARC exchange format). [Records identified by transcription identifier, not on exchange record currently]
2. It must be possible to set up import profiles to exclude certain fields e.g. local fields and to exclude certain records, e.g. non-Reveal records held on local database.

### 3.3.3 Paper forms

1. It must be possible to input notifications of transcriptions and holdings submitted on paper forms.

## 4. Management and control of 'in process' records

### 4.1 General

1. The system must control records for items 'in process' as notified by producing organisations, either as a physical or virtual separate file.
2. 'In process' records must contain the following data (for data elements, see Appendix B):
  - bibliographic and transcription data (as notified by producing organisation)
  - details of master
  - production details
  - copyright details
3. It must be possible to hold records for items selected for transcription whilst awaiting copyright clearance or review by

Reveal cataloguing staff. Records for items which do not require copyright clearance (e.g. blanket permissions) or review can be flagged as 'in production'.

4. Once an 'in production' item has been completed, the system must check to ensure copyright permission has been received, after which the record must be flagged for inclusion on the union catalogue.
5. Alternatively, if production is awaiting copyright clearance, the system must generate an alert when copyright clearance has been obtained so that production can begin. [e.g. for Talking Books]
6. It must be possible to generate chasers for items which have been in process for a specified period of time.
7. It must be possible to search and output records for new titles, new formats or new holdings.

## **5. Copyright clearance**

1. It must be possible to record information relating to the following:
  - Copyright holder contact details
  - Permissions details (per transcription)
  - Blanket permissionsData elements are given in Appendix B.
2. It must be possible to link permission details with rights holders.
3. It must be possible to import/add copyright data which has been supplied by producers.
4. Where blanket permission has been given by a publisher, it must be possible to:
  - generate a notice to the applicant
  - generate a notification to the publisher that a transcription has been made
  - record details for monthly return to rights holder.
5. It must be possible to generate a multi-part letter to a rights holder requesting clearance to transcribe. This must include the following elements:
  - bibliographic details
  - request for specific transcription *or* general permission
  - details of permissions and restrictions
  - Requester details.
6. It must be possible to:
  - record date of application
  - record decision
  - generate a notice of decision to applicant

- chase outstanding copyright requests, either after a specific period, or on demand.

## **6. Collections register**

1. The system must support a collections register which will contain information:

- about producers/holding institutions
- about collections

Data elements for the collections register are given in Appendix B. (In the absence of an electronic signature, a signed declaration form must be kept giving permission to publicise the data produced/held by the organisation, within the limits of any special conditions of use.)

2. It would be useful to link to Collections Register records from specific item records in the database, e.g. where special conditions govern use.

3. The system must assign a unique ID to each organisation, and it must be possible for organisations to directly amend contact details/notify amendments via Web/e-mail.

## **7. Database access**

### **7.1 General**

1. The system must support different levels of access and 'views' of the database for:

- Reveal staff
- Producers/holding institutions
- End users (for end user access, see 7.3 below).

Authorisation to read/write is covered in 2.2 above.

2. The system must provide Web access to the database via an OPAC interface.

3. Z39.50 (state which version) client and server must be supported. Suppliers should state if the Z39.50 OPAC Holdings Schema is supported.

4. The system must support a Z39.50 gateway to other databases, e.g. LASER V3 and Unity (when available). It must be possible to search both Reveal and other Z39.50 databases simultaneously and to present merged, de-duplicated results lists.

5. The system must support additional methods of access and display for staff use only (e.g. for maintenance purposes), either



via a different 'view' of the OPAC or a separate staff searching function.

6. It must be possible to output required records to CD-ROM to provide access to the database for those without Web access.

## **7.2 Web access**

### *7.2.1 General*

1. Web interfaces must meet web accessibility guidelines.
2. It must be possible to search across all records or a subset of the database, e.g. union catalogue records or 'in process' records only, or both simultaneously (subject to the necessary authorisation).
3. It must be possible to offer an 'all formats' search which does not duplicate bibliographic data for each transcription but rather presents bibliographic data once with brief details of the formats available.
4. It must be possible to search the collections register separately (i.e. not in combination with other searches). It must be possible to link from the collection level record to the home page for the organisation concerned if appropriate (via 856 field).

### *7.2.2 Indexing*

1. The following fields must be indexed:

Union catalogue records:

- Author
- Title/Uniform title
- Publisher (Original work)
- Series
- Notes/synopsis
- Subject (to include LCSH, Genre, and supplementary local subject and genre)
- Format
- Producer
- Narrator
- Standard numbers (ISBN, ISSN, ISMN, producer's numbers)
- ID for transcription

Holdings:

- Location/sub-location

In process records:

- As above +

- Producer

Notification records:

- As above +
- Organisation ID

Copyright register

- Rights holder

Collection level records:

- organisation name/ID (including former name cross references)
- organisation type (e.g. lending library)
- subject areas of collections
- language of collections
- format of collections

2. It must be possible to offer different search options for the different levels of user or subset of records being searched, incorporating all/some of the indexed fields.
3. It must be possible to offer keyword and/or phrase searches on the defined indexes, as appropriate, either individually or across all indexes

### *7.2.3 Search limits*

1. It must be possible to pre- and post-limit searches by:
  - Language
  - Date of publication of original item
  - Format
  - Producer or group of producers
  - Holding institution or group of institutions
  - Age range/audience level
  - Production status, e.g. selected for transcription, in production.

### *7.2.4 Display/navigation*

1. The system must support different levels of display appropriate to the level of user. This must include:
  - display of union catalogue and holdings information (to include availability, e.g. for loan, sale, etc.)
  - display of 'in process' data
  - display of notification data
  - display of copyright permission data
  - display of collection level record

2. It must be possible to define the content of the different levels of display.
3. The system must support hypertext links (via 856 field).
4. It must be possible to offer a 'request' option on the record display (see 7.4 below).
5. It must be possible to download search results to disk/e-mail.
6. It would be useful if contributing organisations could transfer bibliographic details found to the appropriate Web notification form (e.g. to add holding or transcription notification for another format).

### **7.3. End user access**

NB: 'End user' here means both intermediary (e.g. librarian, teacher) and direct end user (e.g. VI person).

1. The system must provide for end user searching of the union catalogue and collections register only, incorporating a sub-set of the search and display options available to Reveal staff and contributing organisations as given in 7.2 above.

### **7.4 User requests**

1. The system must allow contributing organisations and end users to request items found on the database. When a user selects the request option, the system must prompt for organisation ID and password/PIN (direct end users must be required to register first). The system must check that the item is available for loan/hire/sale/subscription/free and that there are no special conditions governing use (preferably via link with Collections Register) and that the user is eligible to request the item.
2. For producers and organisations held on the collections register, user details must be automatically supplied on input of organisation ID and password.
3. Requests must then be forwarded for attention by Reveal staff (see 8 below).

### **7.5 CD-ROM access**

1. It must be possible for the system to output required records to produce a CD-ROM version of the database at a frequency to be determined.

## **8. Management of requests**

1. The system must provide support for requests input by contributing organisations and end users. In the first phase, this must allow for Reveal staff to route the request to the producer/holding institution, together with details of the requester.
2. A second phase envisages full management of requests, which automatically routes requests to the appropriate source and controls supply of requests (loans, sales etc). Suppliers should state their support for Z39.50 (Extended Services)/ILL protocols in this area.

## **9. Export of records**

NB: It is expected that the requirement for export of records will be superseded by the 'virtual' union catalogue model (see 7.1. (4) above). There will still be a requirement, however, for physical export of records and subsets to host databases which are not Z39.50 compliant.

1. The system must support the export of new [amended and deleted] union catalogue records for each transcription in standard MARC exchange format to other hosts, e.g. [LASER, Unity,] British Library, Library of Congress (NLS BPHP).
2. The system must support the export of subsets of the database in standard MARC exchange format based on specific criteria, e.g. MIRACLE [Unimarc format]

## **10. Management information**

1. There must be an easy-to-use report writer enabling both regular and ad hoc reports to be produced.
2. Standard reports must include:
  - statistics of records added to the database, broken down by type of record/organisation
  - statistics of notifications, by type
  - statistics and type of database searches
  - user requests
  - popular titles/ under-used titles
  - usage monitoring
3. Ad hoc reports, including catalogues, bibliographies and reading lists must allow for a wide range of selection options and formatting/sorting options.

