COLLECTION MANAGEMENT STRATEGY

PURPOSE OF THE PAPER
To present the Collection Management strategy for discussion and comment.

ABSTRACT (SUMMARY)
Collection Management is the single largest function within the British Library. It primarily supports the Custodianship purpose within Living Knowledge through the effective and efficient management of digital and physical material at all stages of the content life cycle.

Board members will have had an opportunity, in the evening session that precedes this meeting, to engage with staff undertaking conservation and collection care. This paper outlines the overall strategic aims of the Collection Management function and its organisational structures, as well as our response to current and future challenges.

ACTION REQUESTED
Members are invited to review the document and to discuss the models and approach outlined.

Head of Collection Management
January 2016
COLLECTION MANAGEMENT STRATEGY

INTRODUCTION

Collection Management (CM) underpins the Library’s Custodianship purpose:

“We build, curate and preserve the UK’s national collection of published, written and digital content”

As the largest function in the Library (by staffing complement) its constituent departments undertake a wide range of activities that ensure published, written and digital content is effectively managed through the whole of the content Life Cycle. This Life Cycle model for the management of physical materials is illustrated in Figure 1 below:

FIGURE 1: THE CONTENT LIFE CYCLE MODEL (physical materials)

The life cycle management of physical materials is a mature ecosystem of processes, policies and activities. In contrast, the management of digital content is an emergent discipline, both in terms of Library processes but also in the sense that the publishing industry itself is in a constant state of flux – publications are moving away from being digital representations of the printed copy to being complex, multi-media objects often with dynamic links to external databases. In addition, there is an increasing appetite for the large scale digitisation of physical material, often accompanied by rich description, translation and interpretation. Although the principal elements of content acquisition, ingest, description, discovery and access are common to both print and digital formats, Figure 2
illustrates some of the additional considerations when working in this digital environment. There are considerable challenges faced by Collection Management as a result of operating in this digital space. However, the challenges go further than this; we need to operate as a truly hybrid library managing increasing amounts of digital content in an environment where printed volumes are not significantly declining. We need to integrate the physical and digital together to create coherent Collections as well as increasing the rate at which we digitise our content to both maximise access and to preserve fragile physical content.

FIGURE 2: THE CONTENT LIFE CYCLE MODEL (digital content)
ORGANISATIONAL STRUCTURE

Collection Management is structured in a manner that mirrors the Life Cycle models described above. It is designed to allow specialisation and expertise within discrete CM functions, whilst at the same time fulfilling our Custodianship mandate across the entire lifecycle. The organisation chart for Collection Management is included below as Appendix 1; the departmental strategic priorities are summarised in Appendix 2.

OPPORTUNITIES AND CHALLENGES

There are a number of challenges in the external environment that Collection Management needs to respond to:

1. **Technological**
   a. Rate of change in the digital publishing industry
      i. Proliferation of self-publishing
      ii. Complex digital artefacts
   b. Evolving nature of digital preservation as a discipline
   c. Need to replatform multiple systems over the next 5 years
   d. Need to develop capability to handle a wider range of content types, including maps, sheet music and digitised sound
   e. Development of appropriate digital rights management systems in order to ensure we can deliver well-controlled user experiences

2. **Economic**
   a. Limited funding to deal with the challenges of handling both printed and digital content, and ensuring their integration into a coherent collection
   b. Publisher engagement in a climate of reducing acquisitions budgets
   c. Methodology for dealing with the long tail of digital publishers
   d. Need to develop low cost, integrated digitisation services in order to make content available via digital surrogates
      i. Digitisation agenda driven by funding opportunity rather than preservation need

3. **Social**
   a. User expectations of a step change in search and discovery systems, use of personal devices and content on demand
      i. Expectation of content on demand is a driver of an increased level of digitisation activity

4. **Political**
   a. Need to deliver an effective response to the 2017/18 DCMS review of NPLD regulations
   b. Potential need (and resulting opportunities) to develop solutions with partners across the wider cultural sector
STRATEGY FORMULATION WITHIN COLLECTION MANAGEMENT

Strategies for the period 2015-18 have been created at both the Collection Management and Departmental levels. The CM management team have used the Kaplan and Norton Strategy Mapping methodology, which defines strategic objectives in the following terms:

- Outcomes
  - What are our most important outcomes?
- Customers
  - What would we like people to say about us?
- Processes
  - What do we need to excel at to fulfil customer expectations?
- Learning and Growth
  - How will we sustain our ability to improve?

The map below reflects the 2015 to 2018 strategic responses within Collection Management that are necessary to successfully address the environmental challenges outlined above:
Collection Management

We build, curate, preserve and make accessible the UK’s national print and digital collections

Outcomes
What are our most important outcomes?

Customers
What do we want people to say about us?

Processes
What do we need to excel at to fulfil customer expectations?

Learning and Growth
How will we sustain our ability to improve?

Outcomes
- What are our most important outcomes?

Customers
- What do we want people to say about us?
- Authoritative and competent managers of the Collection
- An exemplar of the large scale custodianship of collections

Processes
- What do we need to excel at to fulfil customer expectations?
- Continuously improve our core processes to deliver KPIs
- Capture staff imagination, creativity and expertise

Learning and Growth
- How will we sustain our ability to improve?

Staff
- Ensure appropriate levels of professional development

IT
- Close collaboration to plan and build scalable end-to-end capability
- Develop our management information to allow us to make informed, timely decisions

Organisation
- Flexible workforce and selective outsourcing
- Offer staff a challenging, stimulating working environment

Capability
- Adequate Digital and Print Collection Management capacity
- End to end, fit for purpose workflows.

Partnerships
- Apply “best practice” and benchmark against relevant organisations
- Be the national hub for library collections

Innovation
- Enter into strategic relationships that (also) improve our own capabilities
- Capture staff imagination, creativity and expertise

Collection Management
- Polices, procedures and plans in place to assure appropriate preservation, in perpetuity.
- Fit for purpose operational processes appropriate to the collection type
- Delivering a positive Collection discovery and access experience
- Maximised access to collections for the user, both now and in the future
The Strategy Map defines the high-level outcomes that will be delivered over the period. These will be enabled through departmental strategies.

**Outcome:** Policies, procedures and plans in place to assure appropriate preservation, in perpetuity

Departmental strategy:

- Digital Preservation strategy published
- Internal audit against ISO standard completed and action plan agreed
- Increased staffing resources in place
  - Digital Preservation
  - Conservation Science

*Outcome:* Fit for purposes operational processes appropriate to the collection type

Departmental strategy:

- Design of highly scaled, exception-based processes for the treatment of born-digital and digitised content
- Professional development programme to embed appropriate digital skills
- Review of cataloguing levels to determine appropriate resources

**Outcome:** Delivering a positive Collection Discovery and Access experience

Departmental strategy:

- Collection Metadata strategy and Implementation plan published
- Linked and Open Data initiatives
- Use of readers own devices in Reading Rooms
- Baseline review of future Search and Discovery systems

**Outcome:** Maximised access to the Collections for the user, both now and in the future

Departmental strategy:

- Reduction in the number of Collections that are not discoverable through our strategic systems
- Targeted interventions by Conservation and Preservation teams
- Increased support to enable the successful delivery of the Cultural programme
- Digitisation of poor quality newspapers to enable access
SYSTEMS INFRASTRUCTURE

The current Library Management System (LMS) was procured in 2004, and is designed to handle large collections of physical, published content. In this respect it is highly effective and the system is well maintained by Ex-Libris (the market leading supplier). However, this product will not be further developed by the supplier and there will be a need to replace it over the next two to three years.

The underlying Digital Library System infrastructure dates from a similar time, and the IT strategy proposes alternative solutions based around commercially available technologies. Digital research and the changing nature of publishing will potentially lead to a fundamental redesign of our Search and Discovery systems, and the existing multi-node storage arrangements are also in scope for a technology refresh.

Interwoven with these multiple systems challenges is the potential for a DCMS supported Digital Cultural Hub which, if successful, would provide an opportunity to design solutions for BL specific content streams in a manner that would also allow wider use by the Cultural Sector.

The scale of these potential changes offers both opportunities and challenges to Collection Management over the next 3 to 5 years.
DIGITAL COLLECTION MANAGEMENT PROGRAMME

The Digital Collection Management programme was instigated for the purpose of delivering the tools and workflows that will underpin an effective end to end operational capability for the treatment of both born digital and digitised content. A significant aim is to provide strategic governance and approach to the development of the Library’s digital capabilities. The major anticipated benefits of the programme are:

1. Improvement in the efficiency of the processes used for the treatment of a wide range of born digital material
2. Extension of the use of the DLS as our strategic storage and preservation repository
3. Scalable and repeatable processes for the ingest, discovery and display of digitised contemporary and historical material
4. Enabling of digital material to be viewed from pages within the public facing website
5. Rationalisation of the number of viewers used for items accessed via both the catalogue, as well as directly from the website
6. A mechanism to collect and subsequently manage rights data for digital material, such that discovery and display for each item is maximised within its permitted rights
7. An improved user experience when displaying material
8. An improved capability for the long-term preservation of digital collections

These benefits are being delivered through a portfolio of interrelated projects, which are detailed in Appendix 4.

Whilst the current workplan will make significant progress in delivering the benefits outlined above, it is recognised that the existing projects will not deliver the full functionality needed by the Library. To that end we have recently proposed, as part of the Business Planning Round, the elements which will form the basis of the next phase of the programme. This will significantly enhance our digital preservation capability as well as enabling us to ingest new born digital content streams, such as digital mapping and digital sheet music. There are also plans to improve our digitised archives and manuscripts processes, and to further decommission legacy systems.

Finally, we are managing a project, working with IT colleagues, to run a number of proofs of concept that will inform our medium term strategy to replace and improve both our underpinning library management systems as well as our DLS infrastructure.

The Digital Collection Management programme will provide significant improvements to our infrastructure over the next twelve months, reducing workload for our content and metadata processing teams whilst significantly increasing both the scale of material available to our readers and the quality of their reading experience.
STAKEHOLDER ENGAGEMENT

Collection Management works closely with internal and external stakeholders to ensure that Collections are built, curated, preserved and made accessible to users. As well as embedded working relationships there are a number of formal, cross-Library, arrangements in place that ensure transparency and accountability:

- Collection Management Board
  - Ensures that strategic guidance is in place to guide good decision making within Custodianship
- Digital Collection Management Programme Board
  - Resolves programme issues, and provides strategic direction, in order to ensure that the DCM Programme fully delivers its published benefits
- NPLD Governance
  - A number of governance groups working across the network of Legal Deposit Libraries and publishers

In addition to these well-established stakeholder relationships, there are an increasing number of opportunities to work with technology suppliers, cultural partners and DCMS to broaden the impact of Collection Management across the sector. These will be taken forward in alignment with the Library’s wider programmes.

RISK MANAGEMENT

Collection Management is primarily responsible for the following entry on the corporate risk register:

*(The BL is) unable to develop and deliver an effective digital platform to underpin future products, services, and custodianship mandate*

There is no single mitigation to this risk, and in order to manage it there is a need to identify its root causes and then to determine appropriate mitigations. These are summarised in the table below:

<table>
<thead>
<tr>
<th>Cause</th>
<th>CM response</th>
</tr>
</thead>
</table>
| The development of technology and business solutions is not affordable within GIA funding | • Continuing top-slice of GIA to fund development  
• Procurement of 3rd party solutions to reduce internal costs  
• Potential partnerships within the context of the Cultural Digital Hub |
| Publishing technologies and formats change more quickly than we can respond to | • Landscape review of publishing technologies, and targeted development  
• Consideration of ‘preserve only solutions’  
• Potential use of publisher interfaces to provide access to complex content |
| The BL does not have the necessary skills to develop, integrate and implement effective digital solutions | • Use of 3rd party expertise  
• High levels of systems automation  
• Targeted professional development and skills training |
APPENDIX 1 – ORGANISATIONAL STRUCTURE

[Diagram of organisational structure]

APPENDIX 2 – STRATEGIC PRIORITIES BY DEPARTMENT

<table>
<thead>
<tr>
<th>Life Cycle function</th>
<th>CM department</th>
<th>Core purpose</th>
<th>2015-2018 Strategic Priorities</th>
</tr>
</thead>
</table>
| Acquisition; Creation/Purchase | **Collection Development Implementation** | Manages the £13m acquisitions budget. Ensures VFM (value for money) and compliance in content acquisition. Manages publisher and supplier negotiations, contracts and relations for both purchased and Legal Deposit material | • Engaging with the ‘long tail’ of digital content creators  
• Facilitating the ‘zero based review’ of purchased acquisitions and implementing its outcomes  
• Driving efficiencies through effective procurement and supplier negotiations |
| Ordering; Receipt; Ingest ; Metadata creation | **Content and Metadata Processing** | Receives, ingests and catalogues physical and digital content. For breakdown of volumes, see Appendix 3 | • Agile integration of systems and tools for digital processing;  
• Reducing collections hidden from our users by finding innovative ways to tackle backlogs  
• Optimising our bibliographic and metadata skills for the management of digital and print based content |
| Metadata; Access | **Collection** | Enables the provision and | • Improving the return on |
| Dissemination | Metadata | maintenance of collection metadata; Drives efficiencies by reducing the cost and complexity of metadata creation and management | investment by ensuring the long term value of our metadata;  
• Opening up more Collection Metadata to increase access, reuse and relevance  
• Providing expertise to major programmes such as Save our Sounds |
| --- | --- | --- | --- |
| Conservation / Preservation | Conservation | Provides the specialist skills and knowledge to enable preservation and use of the physical collections. Ensures the library’s physical collections are preserved for current & future users; Manages the external conservation programme | • Supporting the increasing activity generated by our cultural programmes, whilst also satisfying our core conservation mandate  
• Increasing capacity for digitisation |
| Conservation / Preservation | Preventive Conservation | Minimises risks to physical collections in storage, transit and in use by providing best practice advice, support, and expertise to all collections and staff that need it within the Library | • Ensuring a well-managed, risk based approach, to the increased, and wider, use of our Collections both within and outside the Library. |
| Conservation / Preservation | Conservation Science | To be a leader and generate knowledge in heritage science | • Integrating the Conservation Science function into the wider Collection Care mandate  
• Positively positioning our Conservation Science function within the wider Cultural sector |
| Content Preservation | Digital Preservation | Provides the specialist skills and knowledge to enable preservation and use of the digital collections; Ensures the library’s digital collections are preserved for current & future users | • Ensuring our digital repository can store and preserve our collections for the long term;  
• Managing the risks and challenges associated with digital preservation throughout the digital collection content lifecycle;  
• Embedding digital sustainability as an organisational principle for digital library planning and development;  
• Benefiting from collaboration with other national and international institutions on digital preservation initiatives |
| Access | Loans Registry | Supports the BL’s Cultural purpose in governing the processes by which Inward and Outward loans are enabled. | • Ensuring the scale of the Loans Registry is consistent with our cultural engagement expectations  
• Rationalising the end-to-end processes and policies that underpin the function |
### APPENDIX 3 – SCALE OF PHYSICAL AND DIGITAL CONTENT

The following gives some indication of the scale of activity within the Collection Management function (based primarily on 2014/15 figures):

#### Legal Deposit

- Annual number of printed books received 104,000
- Annual number of printed serial issues received 175,000
- Annual number of printed newspaper issues received 124,000
- Number of e-journal articles ingested since NPLD regulations 1.2m
- Number of e-Books ingested since NPLD regulations 41,000
- Number of registered publishers on deposit portal 280
- Number of Legal Deposit publishers 25,000
- Number of EJ titles received 5,500

#### Purchased/Licensed

- Annual number of printed serial issues received 87,000
- Annual number of digital serial issues received 92,000
- Annual number of printed books received 75,000
APPENDIX 4 – DIGITAL COLLECTION MANAGEMENT PROJECTS

DC01 – Long term approach to digital storage.

This project has two main aims:

- To provide all interim DLS storage to cover the Libraries requirements for the financial year 16/17
- To develop proofs of concepts for new approaches to digital storage.

DC02 – Digital Capability Improvements.

This project will improve the capability, and effectiveness, of workflow systems that process born digital content into the DLS. It is already delivering significant operational benefit relating to the addition of new publishers, automated (rather than manual) accessioning, and enabling the decommissioning of legacy services. Several key developments are anticipated in the next few months including a significant increase in the automatic matching rate which will reduce pressure on operational resources.

DC03 – Legal Deposit Management Information

This project is scheduled to complete at the end of January 2016 having delivered the ability to create the management information which will underpin the response of the Legal Deposit Libraries to the DCMS Post Implementation Review of Non-Print Legal Deposit legislation anticipated to take place in 2018.

DC04 – Enhanced Access to Electronic Content

This project will provide:

- A technology solution which delivers the accessibility functionality for non-print legal deposit content, as required by equality legislation.
- A proof of concept to provide secure access to purchased electronic content via users’ own devices.

DC05 – Google Books Multi Volume

Following the extension of the Google Books digitisation project, this project will allow the Library to digitise multi-volume texts, providing a significant increase to the scope of the overarching Google Books project. The first multi-volume shipment to Google is scheduled for March.

DC06 – Universal Viewer

The first year of the Universal Viewer project provided basic functionality and enabled access to the Europeana collection of World War One material. The second year will significantly enhance this capability and will provide access to significant collections including more than 55,000 books in the Microsoft Books collection and the material from the Google Books digitisation project. In addition, it will provide the key viewer features required to ingest more than 300TB of legacy digitised material into the DLS and make it viewable for the first time.
DC07 – Redevelopment of the Open UK Web Archive

The Open UK Web Archive website has not had significant change since 2010 and this project will provide an important update as well as resolving several obsolete elements. Particular benefits will include improving the search functionality, providing access to descriptive and contextual metadata and enabling seamless linking to other web archives across the world. It is anticipated this project will commence in March 2016.

DC08 – Text Encoding Initiative (TEI)

This will provide a significant capability improvement in the area of archives and manuscripts by enabling the import, export and editing of TEI metadata. This metadata format is mandated by funders of digitisation projects in certain areas including those of the mass digitisation projects of the Library’s Hebrew and Persian manuscripts.

DC09 – Digital Rights Management

The Library has, to date, operated with a piecemeal, tactical approach to digital rights. These are no longer fit for purpose. This project will provide a strategic solution that is capable of supporting our aim to provide the maximum level of access to any digitised object based on its associated rights.

DC10 – Digitised Content Development

This is our final in-flight project and is focussed on developing digitisation workflows that enable ingest and display of contemporary and historical content. It will also develop the set of curatorial tools necessary to manage the content and metadata to our own and funders’ requirements.

It will, in tandem with the Universal Viewer project, enable the library to significantly increase access to our digitised collections whilst simultaneously ensuring they are preserved in long term, strategic, systems.

Head of Collection Management
January 2016