British Library Digital Preservation Strategy

The mission
Ensure perpetual access to the digital material held in the British Library's collections in accordance with our content and collection strategy.

The Goal
In ten years time (2016) all of the British Library's digital collections will reside in a secure digital repository. Preservation strategies will be in place to ensure continued access to these collections. A preservation watch mechanism will monitor and provide advance warning of the need for preservation action. The British Library will be an international leader in the preservation of digital materials.

This will be achieved by:
1. Preserving the British Library's digital collections within the Digital Object Management System.
2. Embedding knowledge and experience of digital preservation issues within policy and practice across The British Library.
3. Contributing to and implementing digital preservation best practices.
4. Collaborating nationally and internationally with the key players in digital preservation.

The Principles
The British Library will follow these principles:
- Pursue a range of digital preservation strategies (not limited to: normalisation, migration on request, emulation, and desiccation) to ensure that:
  - o Preservation is flexible, cost effective and appropriate.
  - o The risk of preservation strategy failure in the long term is mitigated.
- Address the root causes of digital obsolescence. For example, by engaging with the developers of application software to improve the longevity of proprietary file formats, to reduce the frequency and complexity of the digital preservation actions.
- Consider not just the short and medium term, but also the genuine long term implications.
- Perform preservation activities with appropriate timeliness. Some activities may be postponed, without danger, to a later date. Other activities may need to be carried out sooner rather than later due to technology obsolescence or other factors. Effective preservation planning should allow these principles to be implemented effectively.
- Share experience with and learn from other organisations through selective national and international collaboration.
- Be transparent and utilise life cycle modelling to cost and plan for the preservation of digital collections.

- Ensure effort is not wasted. For example, use existing tools where they are fit for purpose.
- Apply knowledge learnt from experience with the preservation of older materials to ensure our preservation of current materials is effective, despite an uncertain technological future.
- Apply best practice from the print world where it is applicable for the preservation of digital materials.
- Perform experimental preservation activities using demonstrator materials from the BL's own collections.

Acquire and retain digital materials
- The Collection Area selection groups will consider the implications for the complete lifecycle of digital materials at the point of their acquisition.
- The Digitisation Programme will develop and enforce an approvals process to ensure digitised collections are created with due consideration for their long term preservation.
- Theory, practice and confidence in digital preservation will be advanced to the point that digital data is considered an effective long term preservation surrogate for paper based materials.
- The Web Archiving Programme will explore the capture and preservation of web based materials and will contribute to international developments of toolsets.
- In some cases digital materials may be disposed of or maintained with a lower level of confidence of successful preservation due to practical considerations. Guidelines for these decisions will be developed and clear responsibilities will be assigned for decision making.

Enable digital preservation
The Digital Preservation Team will:
- Provide policy, guidance and technology to enable effective preservation infrastructure to be implemented.
- Ensure digital preservation issues are considered throughout the lifecycle of the British Library's digital objects.
- Establish and execute a comprehensive communications plan to gain buy in across the British Library.
- Seek funding for and participate in collaborative projects to develop practical digital preservation policy and technology.
- Be a leader in international developments.
- Be pragmatic and relevant.

Implement digital preservation
The DOM Programme will implement the British Library's digital preservation infrastructure. Preservation of the British Library's digital collections will be achieved by:
- Storing multiple copies of each digital object in different physical locations (three initially) and utilising backups and integrity checking to ensure that no data is lost due to media decay, or catastrophe.

- Characterising and validating each digital object in order to determine requirements for its preservation.
- Recording metadata about each digital object and allocating unique, persistent identifiers to ensure that no objects will be lost.
- Developing and executing preservation plans.
- Creating and evolving Representation Information over time.
- Implementing a comprehensive technology watch mechanism to provide warning of the need to take preservation action.
- Developing or acquiring tools to perform preservation actions on digital objects to ensure they can continue to be used and understood

Risks

Risks identified in ensuring the longevity of the BL's digital collections include:

Risk	Mitigation
Loss of data in the event of disk failure, error, or disaster	• Store copies of each digital object across multiple sites and use backups, integrity checking and detailed disaster recovery planning to ensure bitstream preservation
Available resources not sufficient to address the problem adequately	• Preservation processes will be automated where possible • Collaboration, external funding and existing tools will be utilised where appropriate • On demand rendering and other preservation techniques increase efficiency • Additional resources will be sought if necessary
Inaccuracy or unavailability of Representation Information may compromise ability to render objects in the long term	• Opportunities to share/evaluate Representation Information will be explored • Relationships will be developed with software vendors to gain access to proprietary file format information
Chosen preservation strategies may prove to be ineffective or flawed in the long term	• Infrastructure will allow multiple preservation strategies to be employed, providing greater security • Case study testing with older materials will provide evidence as to the effectiveness and applicability of preservation strategies.