

# Digital Preservation Policy



Version: 1.0

Last Amendment: N/A

Approved by: Executive

Policy owner/sponsor: Executive Director, Library and Information Services

Policy Contact Officer: Digital Curation Specialist

Policy No: PD52 TRIM File No: 52874

Date approved: 24/03/2016

Next review: 30/11/2016

## 1. Summary

The Digital Preservation Policy sets out the responsibilities and duties of the State Library of New South Wales (the Library) in caring for its digital collection and addresses issues related to three key themes:

- meeting community and Government expectations for preservation and access
- mitigation of risk
- commitment to intergenerational responsibilities.

It is an essential tool that establishes and directs the Library's efforts to ensure the authenticity, integrity, provenance, longevity and ongoing accessibility of the Library's digital collection, encompassing born-digital and turned digital material.

Digital preservation is a developing area for the Library and this policy and the Library's approach and practices will be reviewed on a regular basis.

## 2. Policy statement

The policy supports the Library's digital collecting endeavours and increasing turned digital activities. This policy applies to all digital material in the Library's collection where the Library is required by law, determines by policy or selects to preserve and/or provide access to content. Long-term preservation of the Library's digital collection and the ability to provide access – now and in the future – is sustained by ongoing digital preservation efforts. The Library's digital preservation practices should be in line with international best practice, principles and standards, where available.

The purpose of the Digital Preservation Policy is to:

- define the Library's approach to digital preservation
- outline the principles and framework the Library uses to preserve digital collection material.

This policy aligns with the Library's *Collection Development Policy*, the *Digital Collecting Strategy* and supports the challenges of long-term preservation and ongoing access to the Library's digital collection.

## **2.1. Scope**

This policy applies to all staff (including fulltime, part-time, casual, fixed-term and contractors), volunteers, consultants and service providers handling digital collection material. Collection material includes:

- a. digital publications published in New South Wales
- b. digital publications about New South Wales
- c. NSW Government publications
- d. digital materials selected for the collection (e.g. including original materials, photographs, maps, ephemera, sound recordings, audiovisual, social media, email, datasets and other material as appropriate)
- e. websites and online publications
- f. turned digital material produced by digitising analogue materials from the Library's collection.

## **2.2. Principles**

The Library is committed to:

- building its digital collection
- supporting the lifecycle of digital collection materials
- complying with international digital preservation standards and best practices
- developing mechanisms to provide access to the Library's digital collection now and in the future.

The Library undertakes to:

- a. Create and acquire:
  - i. where appropriate, ensure best practice principles are used when creating digital content
  - ii. choose to accept any form of digital content, regardless of format, software requirements, operating system or computer environment
  - iii. where appropriate, acquire content in standard formats
  - iv. collect and maintain minimum metadata to support long-term preservation and ensure ongoing access
  - v. support migration of file formats from physical carriers, in order to mitigate the risk of file format, physical carrier and technological obsolescence and/or physical degradation.
- b. Preserve:
  - i. preserve the original file, regardless of format
  - ii. as a minimum, support preservation of the bitstream
  - iii. where appropriate, implement normalisation processes that address non-standard or at-risk proprietary formats
  - iv. where possible, normalise to predetermined preservation formats
  - v. consider emulation where normalisation is not possible
  - vi. migrate digital material from physical carriers and store digital content in a Trusted Digital Repository (TDR)
  - vii. ensure legal obligations are met, specifically those relating to privacy, copyright and intellectual property, when copying content for preservation purposes.
- c. Store and manage:
  - i. employ best practice data management procedures to ensure preservation including keeping three backup copies of preservation material

- ii. undertake regular fixity checks on an ongoing basis to mitigate risks (including corruption)
  - iii. where appropriate, preserve original date and time information and where possible, file ownership information
  - iv. plan and implement ongoing format migration
  - v. maintain appropriate infrastructure to safeguard the collection for the future and protect against loss, misuse and alteration of information.
- d. Provide access and maintain rights:
- i. facilitate meaningful access to digital content including providing open access via online mechanisms or onsite use
  - ii. respect existing access conditions, rights, privacy and sensitive information
  - iii. seek to put in place appropriate access conditions.

### **2.3. Standards**

To support the long-term preservation of the Library's digital collection, the Library aims to comply with the following relevant international digital preservation and information management standards, including:

- [ISO/IEC 27002:2013 – Code of practice for information security controls](#)
- [ISO 16363:2012 Space data and information transfer systems -- Audit and certification of trustworthy digital repositories](#)
- [ISO 14721:2012 Space data and information transfer systems -- Open archival information system \(OAIS\) -- Reference model](#)
- [PREMIS Data Dictionary for Preservation Metadata, Version 3.0](#)

### **3. Legislative and Policy Framework**

Most relevant legislation:

- *Library Act 1939*
- *Library Regulation 2010*
- *Copyright Act 1968 (Cth)*
- *Copyright Act 1879*
- *Health Records and Information Privacy Act 2002*
- *Privacy and Personal Information Protection Act 1998*

Related and/or most relevant Library and government policies:

- Collection Acquisitions Policy
- Collection Development Policy
- Collection Donations Policy
- Collection Storage Access Policy
- Collection Storage and Service Delivery Policy
- Information and Communication Technology (ICT) Services Policy
- Information Security Policy
- Metadata framework: principles & standards for cataloguing
- NSW Government Digital Information Security Policy
- Preservation Policy
- Records Management Policy
- Retention and Disposal Policy for Collection Material and Donations
- Takedown Position Statement
- Work Health and Safety Policy

Other relevant Library frameworks and plans:

- Digital Collecting Strategy
- Business Continuity Management Plan
- Information and Communications Technology Strategic Plan 2013-2017
- Privacy Management Plan
- Strategic Plan 2015-19
- Strategy and Action Plan to Support People with a Disability 2015

Premier's Memorandum:

- Premier's Memorandum No. M2000-15, Access to Published Information – Laws, Policy and Guidelines (library deposit)

Relevant frameworks and principles:

- International Association of Sound and Audiovisual Archives (IASA) Safeguarding the Audio Heritage: Ethics, Principles and Preservation Strategy
- National and State Libraries Australasia (NSLA) Digital Preservation Principles
- National Information Standards Organization (NISO) Framework of Guidance for Building Good Digital Collections
- Library of Congress Recommended Formats Statement

Codes of practice:

Australian Institute for the Conservation of Cultural Material (AICCM) Code of Ethics and Code of Practice

#### **4. Definitions**

Please refer to Appendix A.

#### **5. Responsibilities**

The State Librarian and Chief Executive is responsible for authorising the policy including its conformity to legislative and other compliance requirements, and supporting relevant activities regarding specific policy implementation.

The Library's Executive Committee is responsible for communicating this policy effectively to managers and supervisors, and ensuring adequate staffing levels to support digital preservation activities.

The Library's Collection Management Group (CMG) is responsible for strategic oversight of digital collecting activities and digital preservation efforts.

The Executive Director, Library and Information Services and Dixon Librarian and the Director, Digital Experience and Chief Information Officer will nominate representatives who will be responsible for leading the implementation of this policy.

Relevant managers and supervisors are responsible for communicating this policy effectively to Library staff and managing processes relevant to this policy, ensuring work practices comply with this policy.

The Digital Curation Specialist, Data Quality Systems and Standards is responsible for coordinating and facilitating the ongoing review and update of this policy in consultation and collaboration with relevant Library stakeholders.

Client Services and Support, Digital Excellence Division, are responsible for maintaining the systems and infrastructure and supporting the digital preservation efforts of the Library.

Library staff are responsible for understanding and complying with this policy.

## 6. Implementation framework

The Library is progressively implementing digital preservation practices, including developing *Digital Preservation Guidelines* to determine preservation standard formats (or best practice and/or principles where no international standards exist) to support digital collecting and preservation activities.

## 7. Approval

This policy was approved by NSW State Librarian & CE/Executive on **24 March 2016** for immediate implementation.

## 8. Implementation

This policy is implemented on **24 March 2016**.

## 9. History

This is a new policy.

## 10. Related Policy

This policy is related to the Library's Preservation Policy.

## 11. Prepared by:

Digital Curation Specialist, Data Quality Systems and Standards  
18 February 2016

## 12. Document History and Version Control

Version	Date approved	Approved by	Brief description
1.0	24 March 2016	Executive	First release

### 13. Appendix A

Definitions used by the international digital preservation community have been sourced from:

- [Alliance for Permanent Access – DP Glossary](#)
- [Archives New Zealand Glossary](#)
- [Australia Council for the Arts – Archives in the Digital Era Glossary](#)
- [Australian National Data Service \(ANDS\) – File Formats – Working Level](#)
- [Digital Preservation Coalition – Digital Preservation Handbook](#)
- [National Digital Stewardship Alliance \(NDSA\) Glossary](#)
- [State Library of Queensland \(SLQ\) Digital Preservation Policy](#)
- [Trusted Digital Repositories: Attributes and Responsibilities RLG-OCLC Report](#)

**Access:** Continued, ongoing usability of a digital resource, retaining all qualities of authenticity, accuracy and functionality deemed to be essential for the purposes the digital material was created and/or acquired for.

**Authenticity:** A mechanical characteristic of any digital object that reflects the degree of trustworthiness in the object, in that the supportive metadata accompanying the object makes it clear that the object is what it purports to be.

**Bitstream:** Contiguous or non-contiguous data within a file that has meaningful common properties for preservation purposes.

**Born digital/Born-digital:** Relating to an object that is originally created in a digital format.

**Co-master/Modified master:** The co-master is derived from the archival master and is intended to be a high-quality access file and is typically the source from which derivatives are generated. The co-master may have cropping, filtering or similar other actions applied.

**Digital content/Digital materials:** Any arbitrary item created, published or distributed in a digital form, including, but not limited to, text, data, sound recordings, photographs and images, motion pictures and software.

**Digital object:** A conceptual term that describes an aggregated unit of digital content comprised of one or more related digital files. These related files may include metadata, derivative versions and/or a wrapper to bind the pieces together.

**Digital preservation:** The series of managed activities, policies, strategies and actions to ensure the accurate rendering of digital content for as long as necessary, regardless of the challenges of media failure and technological change.

**Digital surrogate:** Objects that are created as the result of converting analogue material to digital form.

**Digitisation:** The process of creating digital files by scanning or otherwise converting analogue materials. The resulting digital copy, or digital surrogate, can then be classed as digital material and is subject to the same broad challenges involved in preserving access to it, as 'born digital' materials. Also see, Turned Digital.

**Emulation:** A means of overcoming technological obsolescence of hardware and software by developing techniques for imitating obsolete systems on future generations of computers.

**File Format:** Packages of information that can be stored as data files consisting of a fixed byte-serialized encoding of a specified information model, and/or a fixed encoding (of that encoding) in a tangible form on a physical storage structure.

**Format:** Specific, pre-established structure for the organisation of a file or bitstream.

**Format migration:** A means of overcoming technical obsolescence by preserving digital content in a succession of current formats or in the original format that is transformed into the current format for presentation. The purpose of format migration is to preserve the digital objects and to retain the ability for clients to retrieve, display, and otherwise use them in the face of constantly changing technology.

**Fixity check:** A mechanism to verify that a digital object has not been altered in an undocumented manner. Checksums, message digests and digital signatures are examples of tools to run fixity checks. Fixity information, the information created by these fixity checks, provides evidence of the integrity and authenticity of the digital objects and are essential to enabling trust.

**Library staff:** All Library staff including contractors, consultants and volunteers.

**Life cycle/Lifecycle:** A set of iterative, modular processes that govern the creation, acquisition, selection, description, sustainability, access and preservation of digital content over time.

**Metadata:** Structured information that describes and/or allows users to find, manage, control, understand or preserve information over time.

**Normalisation:** The process of transforming a wide range of file formats to a pre-determined set of file formats identified as being more appropriate for long-term preservation.

**Normalise:** Convert data objects from a wide range of formats to a selected range of formats better suited to long-term preservation.

**Operating system:** Software that is made up of programs and other data that runs on computers and other devices (such as mobile devices), managing the hardware and resources. It provides the base level for all other applications, programs and software to run from. Operating systems include Microsoft Windows, OS X and OS 7-9 series (Apple), Linux and UNIX.

**Original:** The 'original' file is considered to be the file that is selected for the Library's collection.

**Physical Carrier:** An item on which content is recorded, encoded or fixed. This can be stored as analogue or digital information. Selected examples of physical carriers include magnetic tape (carrying analogue or digital audio and/or video content), motion picture film (carrying optical moving image and/or audio content), disks (Zip disks, 3½ inch and 5¼ inch floppy disks, carrying digital data), optical media (such as compact discs, DVDs and Blu-ray discs, carrying digital data, audiovisual or

multimedia content) portable hard disk drives or USB flash drives (carrying digital data).

**Preservation material:** For turned digital, this refers to preservation masters and co-masters. For born-digital, this may cover the born-digital 'originals' as well as preservation masters and co-masters.

**Preservation master/Archival master/Preservation copy:** Digital content targeted for preservation that is considered the master version of the intellectual content of any digital resource. Preservation master files may capture additional information about the original, beyond the content itself. Because they are created to high capture standards, preservation master files can take the place of the original record if the original is destroyed, damaged, or not retained. Preservation masters generally do not undergo significant processing or editing. Preservation masters are often used to make other copies including reproduction and distribution copies.

**Proprietary:** In reference to hardware technology, software applications and/or file formats, the state of being privately owned and controlled. A proprietary design or technique implies that the company has not divulged specifications that would allow other companies to duplicate the product.

**Proprietary format:** A *proprietary* format is one that is owned by an individual or a corporation. Some common examples of proprietary formats are: AutoCAD's DWG drawing format, the MP3 MPEG Audio Layer 3 format and Adobe Photoshop's PSB native image format. Most proprietary formats are closed, meaning that neither the definition nor the development of the format is available to the public. This means that data stored in the format can only be accessed using the format owner's software. Some formats are both open and proprietary e.g. Adobe PDF Microsoft OOXML. An *open format* is one where the description of the format is available to the public.

**Provenance:** Provenance means the origin, or the source of something, or the history of the ownership or location of an object. The term is used in a wide range of professional fields including, art collection, archival management, librarianship, computing and law. In most fields, the primary purpose of provenance is to confirm or gather evidence as to the time, place, and - when appropriate - the person responsible for the creation, production, or discovery of the object.

**Trusted Digital Repository:** The mission of a trusted digital repository is to provide reliable, long-term access to managed digital resources to its designated community, now and in the future. Please refer to ISO 16363:2012 Space data and information transfer systems - Audit and certification of trustworthy digital repositories.

**Turned Digital:** Digital file created by reformatting a physical original, e.g. by capturing or scanning a paper document, photograph, audio tape or film original. Replaces the term 'digitisation'. Also see, Digitisation.