

# Newcastle University Library Special Collections

## Digital Preservation Policy

### 1. Introduction

**1.1** *Within the collecting remit of archive repositories, a subset of records will be selected for permanent preservation because of their evidential, information and cultural values which make them of historical interest to users for multiple purposes.*

**1.2** *Due to technological advances effecting working practices, organisations and individuals are increasingly creating records to evidence their activities in digital formats. These include, but are not limited to:*

*Audio visual material;  
Text documents;  
Databases;  
Spread Sheets;  
Images;  
Web pages;*

**1.3** *These digital archives contain specific integrity and functionality, often linked to the software they were created in and hardware they are stored on, which are pivotal to accessing their content and understanding the context they were intended for.*

**1.4** *Due to the rapid changes to technology and short life span of digital carriers such as CDs, DVDs, hard drives or flash drives, the risk of these valuable and often unique archival sources becoming unreadable bring new challenges above the storage of traditional hard copy material. This requires early intervention to discharge the preservation responsibilities expected from depositors, users and other stakeholders so digital archives remain usable over time.*

**1.5** *For access and preservation reasons, physical, analogue archives are also digitised as part of the responsibility of archive repositories towards greater access and as a preservation tool. Considerations also need to be made at the point of creation on how these surrogates will be preserved over time to ensure the best use of resources and avoid duplication of work.*

### 2. Purpose and Scope

**2.1** *The purpose of this policy is to address the risk of losing digital material held by Newcastle University Library's Special Collections department through material becoming unreadable due to obsolescence of the physical carrier containing digital material or the file formats they were created in.*

**2.2** For the purposes of this policy, digital material falls into 2 distinct categories;

*“Born Digital” archives originally created in electronic formats which form the whole or part of collections gifted, loaned or purchased by Special Collections externally as part of its collection development or sourced internally as part of Newcastle University’s Institutional Archive;*

*“Made Digital” surrogates created through scanning and photography of physical, analogue items from existing collections in order to provide greater access and promote the use of Special Collections holdings.*

**2.3** This policy aims to ensure both these categories of digital material remain usable over time by providing guidance and processes for staff responsible for dealing with such material at the point of deposit or creation.

**2.4** Because of their often unique and irreplaceable nature, “Born Digital” material will always take precedence. This is because where “Made Digital” material can be created from analogue sources again, albeit taking up time and resources and hampering working practices, “Born Digital” material cannot be replicated as easily if at all if they become unreadable.

### **3. Context**

**3.1** This digital preservation policy forms part of Special Collections’ overarching preservation strategy and is complemented by the following documents:

- Collection Development Policy
- Digitisation Policy
- Preservation Policy

### **4. “Born Digital” Archives**

#### **4.1 Acquisition**

**4.1.1** Archive collections are either gifted, loaned, or purchased according to Special Collections’ Collection Development Policy. Additionally, they are deposited from the parent organisation to become part of the Institutional Archive (i.e. records of historical significance created by Newcastle University).

**4.1.2** In most instances, these will be hybrid collections including traditional paper based archives as well digital material.

**4.1.3** Where digital material is included and where possible, the Archivist will determine through the deposit agreement and transfer process any specific software used in the

*creation of this material and the size of the material to inform the University Library's Digital Library Services' (DLS) space planning .*

**4.1.4** *If deposited as part of the Institutional Archives, the Archivist will liaise with the originating department/school/faculty to determine specific software used in the creation of this material.*

**4.1.5** *Where possible and where available, through the transfer process the Archivist will also request digital material in alternative formats which are independent of non-supported proprietary software and free of Digital Rights Management controls where this will create problems with immediate and long term access.*

## **4.2 Storage**

**4.2.1** *As part of the initial listing, any digital carriers which are readable (e.g. CDs, DVDs, flash drives) will have their contents itemised and catalogued according to the standards required for their eventual cataloguing according to ISAD(G) and internal cataloguing standards.*

**4.2.2** *This digital material will be given a unique reference number and be transferred to an appropriate folder structure on a networked drive which is backed-up as part of DLS' and the University Information System and Services (ISS) team's regular Business Continuity regimes.*

**4.2.3** *These will be considered to be the master copies where all surrogates are created from and where digital preservation reviews are carried out.*

**4.2.4** *Where digital/analogue carriers are not readable because of obsolescence of technology or difficulty in providing access to researchers in situ (e.g. video cassettes, audio cassettes, vinyl records, floppy disks), these will be itemised and a log created.*

**4.2.5** *The University Library's DLS will be contacted with this log to ascertain if the technology exists in-house to migrate/digitise these into one of the accepted digital formats. DLS will perform this migration/digitisation where possible and Special Collections will transfer to a networked drive and collect the cataloguing data.*

**4.2.6** *Where the University Library's DLS are unable to migrate/digitise due to technology or resources, an alternative provider of this service will be sought internally in the first instance then externally. Acceptable file formats will be specified as part of this process.*

## **4.3 File Formats**

**4.3.1** *As part of the listing and cataloguing process, it will be determined if digital material is currently readable in the first instance.*

**4.3.2** *Where digital material is not readable, efforts will be made to identify the format the file was created in, including utilising The National Archives open source DROID software and liaising with the University Library's DLS and University ISS team.*

**4.3.3** *A log will be created during the listing and cataloguing process of*

*the unique item number;  
a summary of the contents (where known);  
the file format and version it was created in;  
whether it is currently readable.*

**4.3.4** *This log will be sent to the University Library's DLS for advice on migrating to new, more stable formats where appropriate. This advice will be actioned by the Archivist and further advice sought where necessary.*

**4.3.5** *In terms of file formats digital material is kept in, Special Collections will migrate to open source formats in the first instance wherever practical and possible. This is to ensure that digital material is file neutral and not reliant on any proprietary software to access, which may become obsolete or unsupported due to version updates, commercial considerations or institutional preference. Common examples include:*

*.PDF/A for textual material  
.tiff for image material  
MPEG4 (with appropriate codecs) for video material  
Broadcast Wave (with appropriate codecs) for audio material*

**4.3.6** *As a secondary choice, Microsoft formats will be favoured as this is Newcastle University's preferred supplier.*

#### **4.4 Surrogates**

**4.4.1** *Once a collection, including digital and analogue material, has been fully listed/catalogued (including information on the formats) and the digital material is readable, a research surrogate will be created from the items on the networked drive. These will be on CD-R carriers; 1 for each item/unit of production as determined by the level of listing/cataloguing.*

**4.4.2** *Researchers requesting these items will be given these surrogates to view on the computer in the Special Collections Reading Room under supervision from a member of staff.*

**4.4.3** *Due to concerns over copyright and other access restrictions, researchers will not be able to view these on their own laptops or elsewhere (in line with procedures for all Special Collections material).*

**4.4.4** *Additional surrogate copies will be created on DVD-R carriers and kept in a fireproof safe in the University Library and in off-site storage as an additional preservation consideration.*

#### **4.5 Review**

*4.5.1 The master copies on the networked drive will be reviewed on an annual basis to ensure they remain readable/accessible due to updates or obsolescence in software.*

*4.5.2 New CD-R research surrogate copies and DVD-R surrogate copies will be created from the master copies at least every 5 years due to their expected lifespan of 5 – 10 years.*

*4.5.3 Special Collections Staff will also report any signs of deterioration to the research surrogate copies in a timely manner where they are discovered in the day to day operation of the service.*

*4.5.4 The University Library's DLS will also monitor any technological advances in carriers and file formats which create a risk of obsolesce and advise Special Collections of any remedial action that needs to be taken in terms of migration and/or transfer of digital material.*

#### **4.6 Roles and responsibilities**

*4.6.1 The Archivist and the Special Collections and Archives Librarian are responsible for the overall implementation of this section of this policy. They are also responsible for acting on advice given from the University Library's DLS and the University ISS team.*

*4.6.2 The Archivist and the Special Collections and Archives Librarian will consult with relevant organisations, such as The National Archives, The Preservation Advisory Centre, The Digital Preservation Coalition and the Digital Curation Centre when reviewing this policy and associated procedures.*

*4.6.3 Where delegating these responsibilities to other members of staff, volunteers or partners, the Archivist and the Special Collections and Archives Librarian are also responsible for training and ensuring adherence to this policy.*

*4.6.4 The University Library's DLS is responsible for providing advice on identifying file formats, the best file formats for digital preservation, migrating file formats and migrating/digitising from obsolete carriers. They should also inform Special Collections of technological advances which necessitate further preservation actions in a timely manner.*

*4.6.5 LSG will be responsible for any strategic decisions that impact on the long-term support for digital preservation.*

*4.6.6 All Special Collections staff will participate in relevant in-house and external training relating to digital preservation, as appropriate to their roles. Newcastle University Library has achieved Investors in People Bronze Accreditation.*

## **5. "Made Digital" Surrogates**

### **5.1 Creation**

**5.1.1** *Digital surrogates will be created by the Digital Images Assistant using the flatbed scanner or camera as is appropriate for the size and physical condition of the physical item.*

**5.1.2** *These will be rendered in the first instance into uncompressed, high resolution TIFF file formats as these are open source and high resolution. These will be considered the master copies and kept for high quality reproduction.*

**5.1.3** *These will also be converted into low resolution JPEG file formats for access copies.*

## **5.2 Storage and Metadata**

**5.2.1** *The TIFF master copies will be stored on removable DVD-R carriers. These will be indexed and the disk reference captured as part of the JPEG access copy metadata. Once the storage limit is reached, these will be kept in a fireproof safe in the University Library and in off-site storage.*

**5.2.2** *The JPEG access copies will be stored on a networked drive, which is backed-up as part of DLS' and the University ISS team's regular Business Continuity regimes.*

**5.2.3** *The JPEG access copies from these networked drives will be migrated automatically to Special Collections' image hosting software Portfolio. As soon as is practically possible, all metadata as defined by the Archivist and the Special Collections and Archives Librarian will be captured against these copies within this system to ensure they are searchable and facilitate the functionality of any web platform.*

## **5.3 Review**

**5.3.1** *Once capacity is reached, the TIFF master copies on DVD-R's will be migrated to new DVD-R's at least every 5 years due to their expected lifespan of 5 – 10 years.*

## **5.4 Roles and Responsibilities**

**5.4.1** *The Digital Images Assistant is responsible for the overall implementation of this section of this policy. They are also responsible for acting on advice given from the University Library's DLS.*

**5.4.2** *The University Library's DLS is responsible for providing advice on the best file formats for digital preservation. They should also inform Special Collections of technological advances which necessitate further preservation actions in a timely manner.*

**5.4.3** *The Archivist and the Special Collections and Archives Librarian are responsible for devising and revising metadata schemas and ensuring this information is captured by the Digital Images Assistant as part of the digitisation process.*

**5.4.4** *The Library Strategy Group (LSG) will be responsible for any strategic decisions that impact on the long-term support for digital preservation.*

**5.4.5** *All Special Collections staff will participate in relevant in-house and external training relating to digital preservation, as appropriate to their roles. Newcastle University Library has achieved Investors in People Bronze Accreditation.*

## **6. Policy Review**

To be reviewed annually or following projects leading to innovations in Digital Preservation.

Ian Johnson (Archivist) July 2013

Approved by the Library Strategy Group, date . . .