1. Purpose

The purpose of this guide is to assist staff who digitise / scan / image original or source records to implement sound records management practices relating to the destruction of original records which have been successfully digitised through scanning and capture in the University Records Management System, which is Content Manager (TRIM), or a University Approved Information System.

2. Scope

Original records that fall into the category below are NOT to be disposed of after digitisation:

1. Records that are subject to a Government policy or directive not to be destroyed,
2. Original artworks – refer these to archive services for appraisal,
3. Original proclamations, charters, testimonials and intergovernmental agreements or treaties,
4. Records that are subject to current or pending legal proceedings,
5. Records that are subject to current requests for information under the Government Information (Public Access) Act 2009, the Health Records and Information Privacy Act 2002 or the Privacy and Personal Information Protection Act 1998,
6. Records that are required as State archives that were created or received prior to January 1st 1980,
7. Film, photographic negatives, or analogue audio-visual material that are required as State archives.

Ensure that a 'Records Digitisation Project Plan' has been completed by using our template, then save the plan to TRIM.

Prior to the digitisation and destruction of the original / source record, staff must ensure that the records considered for destruction under *GA45 – Original or source records that have been copied* are covered by a current, approved General Disposal Authority.

3. References

- State Records NSW GA45 - Original or source records that have been copied
- State Records NSW General Disposal Authority – Source records that have been migrated (GA48)
- State Records NSW Technical Specifications for Digitisation Projects
- State Records NSW Planning for business process digitisation
- Records Digitisation Project Plan Template
- Records and Information Management Policy
- Record Destruction Authorisation Form for Digitised Original or Source Records

4. Capture Requirement

TRIM or a University Approved Information System must be used to capture official digitised records and the associated recordkeeping metadata relating to the records. This will facilitate record integrity, preservation and retrieval.

Digitisation of records must be done using software and hardware that comply with the NSW State Records minimum requirement for digitised records. This will ensure imaged records are a true and exact copy of an original. If the minimum requirements are not met we are not permitted to dispose of the original records.

5. Sensitivity

5.1 Security Controls

Staff must ensure that the appropriate security controls are applied to digitised records to protect the sensitivity of information. Access to records within TRIM is directed by the Security Level associated to the files and through the use of location groups and Access Controls.

Staff are reminded that digitised records inherit the same Security Level as the originals.

5.2. "Read Only" Controls

Staff are required to use only approved image formats. Approved image formats include Portable Document Format (PDF/A) and Tagged Image File Format (TIFF) for digitised records as these provide 'read only' controls ensuring data integrity and accessibility.

6. Quality

6.1. Technical Considerations – Recommended Resolution

Staff must observe the following recommended technical guidelines when digitising records into TRIM or a University Approved Information System.

Document Type	Resolution	Bit Depth	File Formats	Compression
Text only, black and white	Minimum 300ppi	1 bit (bi-tonal)	- TIFF - PDF/A	Lossless compression
Documents with watermarks, grey shading, grey graphics	Minimum 600 ppi	8 bit greyscale	- TIFF - PDF/A - JPEG2000	Lossless compression
Documents with discrete colour used in text or diagrams	Minimum 600 ppi	Minimum: 8 bit colour	- TIFF - PDF/A - JPEG2000	Lossless compression
Black and white photographs	Sufficient to provide >3000 pixels across long dimensions	8 bit greyscale	- TIFF - PDF/A - JPEG2000	Lossless compression
Colour photographs	Sufficient to provide >3000 pixels across long dimensions	24 bit colour	- TIFF - PDF/A - JPEG2000	Lossless compression
Black and white negatives	Sufficient to provide >3000 pixels across long dimensions	8 bit greyscale or 24 bit colour	- TIFF - PDF/A - JPEG2000	Lossless compression
Colour negatives and transparencies	Sufficient to provide >3000 pixels across long dimensions	24 bit colour	- TIFF - PDF/A - JPEG2000	Lossless compression

6.2. Quality Control / Imaging Process

Industry standards for digitising records recommend quality control measures including:

- the issue of certificates verifying the integrity of the copying process, particularly when it is done by an external organisation,
- periodic testing and cleaning of scanning equipment,
- careful preparation of the records to be digitised, for example, to ensure they are not folded, obscuring information,
- random sampling of pages scanned to check quality. For large volumes, samples of 5-10% are acceptable. This quality checking is to examine:
  - smallest detail legibly captured (e.g. smallest type size for text; clarity of punctuation marks, including decimal points);
  - completeness of detail (e.g. acceptability of broken characters, missing segments of lines);
  - dimensional accuracy compared with the original;
  - scanner-generated speckle (i.e. speckle not present on the original);
  - completeness of overall image on the record area (i.e. missing information at the edges of the image area);
  - density of solid black areas; and
  - colour fidelity.

6.3. Standard Format

The standard format for digitised records is PDF/A. PDF/A is a digital format that has become the standard for the exchange and storage of data. PDF/A files may be created natively in PDF/A form, converted from other electronic formats, or digitised from paper, microfilm or other hard copy formats. TIFF is a digital format that is widely supported. TIFF files are commonly used in desktop publishing, facing, 3-D applications and medical imaging applications.

6.4. Image Enhancement

To ensure the integrity of digitised records, any image enhancement undertaken must be noted and registered as metadata on the record within TRIM or the University Approved Information System. This includes enhancements such as:

- Despecking
- Deskewing
- Crop Border
- Invert Images
- Smoothing / Sharpening
- Colour Correction

### 6.5. Conditions for the Disposal of Digitised Records

To comply with legal requirements when destroying digitised records, staff must ensure that;

- all requirements for retaining originals have been assessed and fulfilled (refer to Scope on page 1)

- Originals are kept (in the business unit / school) for quality control purposes for three months after copying, proving that all quality checks have been made within this period, and there are no legal or pending legal requirements to retain them for longer. Keeping originals for at least three months allows time for any errors to be detected and, if necessary, allows for re-scanning.

Under the existing legal framework in New South Wales:

- there is no barrier to public sector organisations tendering digital records as evidence for legal proceedings, for GIPA applications or for other evidentiary purposes,

- under the Evidence Act 1995, an 'original' is not automatically regarded as better evidence than copies, including those made and kept by electronic means,

- the value of a record as evidence will, however, depend on how it has been created and kept, and organisations need to be prepared to show how they have protected digital records from tampering or loss.

Scanning Flowchart
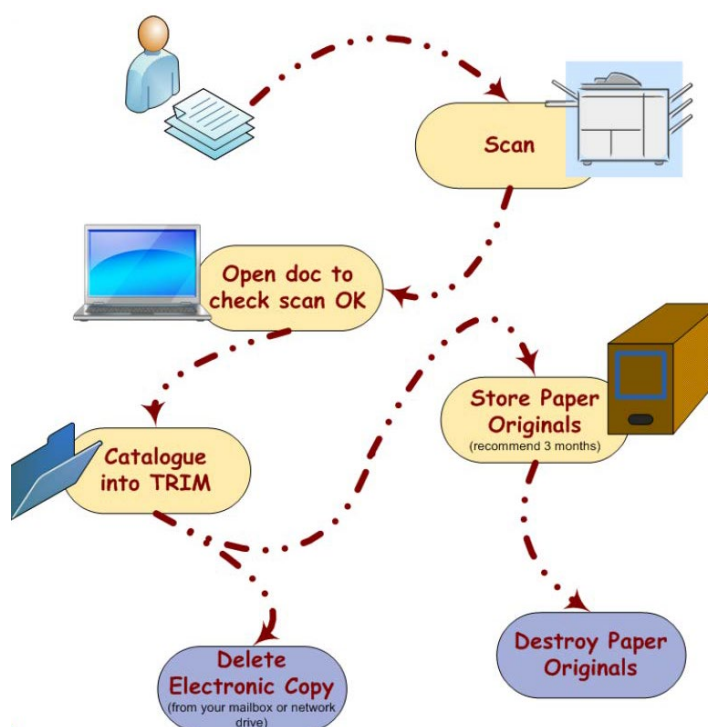
Digitisation Quality Assurance (QA) Checklist

Use this checklist to ensure that digital scanned images created as part of your digitisation work are sufficient to meet legal evidential obligations.

Checklist

Task	Completed
ACCURATE REPRESENTATION OF THE SOURCE RECORD • Is all the information captured? (i.e. information is not missing from the edges, it is not cropped or incomplete, etc.) • Is the image orientation correct? • Has the smallest detail been legibly captured? (e.g. smallest type size for text, clarity of punctuation marks, including decimal points, etc.) • Do the colours accurately compare with the original? (e.g. density of solid black areas matches the original record, colour fidelity is accurate) • Is the sharpness of the image comparable to the original? (e.g. there are no blurry areas or unnatural halos) • Are multi pages structured and arranged in the correct order as the original?	☐
LEGIBILITY • Are all highlighted areas with text readable? • Are there any marks, lines, blotches on the image caused by the scanning process?	☐
FILE FORMAT • Is the file format correct according to the Digitisation Plan?	☐
ANNOTATIONS • Can all annotations be viewed? (Consider using the Sticky Notes feature in PDF or highlighting)	☐
NUMBER OF PAGES • Do the number of pages produced exactly match the original record? • Have all "blank" pages in image (but not in the original document) been removed?	☐
METADATA • Is the metadata correct according to the Digitisation Plan? (e.g. Naming conventions have been followed, date format is correct, etc.)	☐
IMAGES • Are all original images (photos, logos, diagrams, etc.) reproduced clearly?	☐