

TAHO

Tasmanian Archive + Heritage Office

State Records Guideline No 8

Digitisation and Disposal of Source Records

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State Archivist

I Introduction

This Guideline has been updated and renamed to better support agencies carrying out digitisation projects. There have been some instances where agencies have not considered requirements for Permanent records before commencing back scanning. These projects produced digitised Permanent records of insufficient quality to be transferred to TAHO. This also meant that agencies were unable to destroy the originals because the 'adequate reproduction' requirements in General Disposal Schedule for Source Records (DA 2159) were not met.

This Guideline sets out the minimum requirements for digitising legacy records that are Permanent value. It also introduces a new process for undertaking disposal of the Permanent source records. This process requires agencies to submit an *Application to Dispose of Permanent Source Records* to demonstrate that the requirements set out in this Guideline have been applied. This will ensure that the digitised copies of Permanent value originals are of sufficient quality for transfer to the Tasmanian Archive & Heritage Office (TAHO).

Compliance with this Guideline will ensure that scanning activities for all legacy paper records result in the creation of a full and accurate copy of the originals, so that agencies may safely destroy the source records using DA 2159 (provided all other conditions are met - see Section 2 and Section 5).

A Digitisation toolkit including; *Advice 21 - Plan before you scan*, a checklist for selecting records and a Digitisation Plan template has been developed to support agencies to understand and meet the requirements set out in this Guideline.

I.1 Purpose

Compliance with this Guideline will ensure that digitised Permanent records are of sufficient quality for transfer to the Tasmanian Archive & Heritage Office (TAHO). Applying the minimum requirements to both permanent and temporary records will also satisfy the adequate reproduction conditions set-out in the General Disposal Schedule for Source Records (DA 2159) so the source records may be disposed of.

I.2 Scope

This Guideline **MUST** be applied to digitisation of Permanent legacy records.

Digitisation may occur as part of regular business processes or as a back scanning project. Business process digitisation is where the record is digitised before any action is taken upon it (e.g. in the mailroom, upon receipt of the record). Back scanning is where the record is digitised after it has been used (e.g. legacy records).

This Guideline applies to back scanning processes.

This Guideline does not apply to business process digitisation. However, agencies may decide to adopt these digitisation requirements as a benchmark for all digitising efforts, including for temporary records.

This Guideline does not apply to:

- Source records that are to be retained as the official record in the agency after digitisation (i.e. the digitised copy is purely for access purposes)
- 'Born digital' records converted or migrated to another format. These requirements are set out in Guideline 24 - Migrating Digital Records.
- Audiovisual documents. Contact Government Information Strategy Unit (GISU) staff for assistance - see contact details at the end of this Guideline.

1.3 Authority

This guideline is issued under the provisions of Section 10A of the Archives Act 1983. Guidelines issued by the State Archivist under this Section set standards, policy, and procedures relating to the making and keeping of State records. This section also requires all relevant authorities to take all reasonable steps to comply with these guidelines, and put them into effect.

Keyword	Interpretation
MUST	The item is mandatory.
MUST NOT	Non-use of the item is mandatory.
SHOULD	Valid reasons to deviate from the item may exist in particular circumstances, but the full implications need to be considered before choosing this course.
SHOULD NOT	Valid reasons to implement the item may exist in particular circumstances, but the full implications need to be considered before choosing this course.
RECOMMENDS RECOMMENDED	The item is encouraged or suggested.

'MUST' and 'MUST NOT' statements are highlighted in capitals throughout the Guideline. Agencies deviating from these MUST advise Tasmanian Archives and Heritage Office (TAHO) of the decision to waive particular requirements.

Agencies deviating from a 'SHOULD' or 'SHOULD NOT' statement MUST record:

- the reasons for the deviation,
- an assessment of the residual risk resulting from the deviation,
- the date at which the decision will be reviewed, and
- whether the deviation has management approval.

Agencies deviating from a 'RECOMMENDS' or 'RECOMMENDED' requirement are encouraged to document the reasons for doing so.

2 Selecting records for digitisation

Agencies **MUST** conduct a risk assessment for all Permanent records before digitisation.

Most agencies have stores of legacy paper files and are looking at achieving business efficiencies by digitising them and destroying the source records. However, it is important to select the right records for digitisation so that the business benefits can be realised, the costs managed and information risks mitigated.

Agencies **MUST** conduct a risk assessment before adopting a particular digitisation approach that involves Permanent records. For more information about this requirement, see *Guideline 25 - Managing Information Risk*.

Implementation of digitisation processes **SHOULD** be carefully planned. This includes conducting an analysis of the source records, to determine if they are described in current approved Retention and Disposal Schedules.

Agencies may decide that certain legacy records are not appropriate for digitisation because the source records cannot be disposed of using DA2159. Source records that are not covered in DA2159 include:

- Records created before 1960. The disposal of those records should be managed according to the procedures for unscheduled records¹
- Records required or likely to be required in evidence for Royal Commissions, government inquiries, investigations, land rights claims or for legal proceedings
- Records relating to current or pending applications under Right to Information or Personal Information Protection and other legislation (e.g. police investigation records, client health information, personnel files, etc.)
- Records that are historical artefacts (see Section 7 - Definitions).

The Toolkit accompanying this Guideline is intended to assist agencies to successfully implement digitisation projects. *Advice 21 - Plan before you scan* provides further guidance on selecting records for digitisation, preparing a business case for digitisation, and developing a Digitisation Plan.

2.1 Records as evidence

The *Evidence Act 2001* lays down the requirements for admissibility of evidence for records created or maintained in electronic systems. The *Evidence Act* accepts copies of documents or documents that have been produced by a device that reproduces the contents of documents. It should be noted that the provisions of this act does not override the provision in the *Archives Act 1983* for the disposal of State records.

Problems may arise with admissibility if appropriate procedures are not followed in creating and maintaining records. While digitised records may be acceptable for the conduct of legal proceedings, the destruction of any relevant source record at or around the time concerned may lead to claims of impropriety and impact on the outcome of the investigation or action. Application of this Guideline to digitisation processes may support the acceptance of digitised records as admissible evidence.

¹ *Recordkeeping Advice No. 10, Disposal of Unscheduled Records* provides more information on the disposal of unscheduled records
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For more information about legal acceptance and certification of records refer to the appropriate advice and guidelines on our website or contact GISU staff - our contact details are at the end of this Guideline.

3 Digitisation Plans

It is **RECOMMENDED** that agencies prepare a Digitisation Plan when undertaking legacy back scanning projects for Permanent and long-term Temporary records (e.g. personnel records and client case files).

Digitised records often have retention periods that are longer than the life of the systems they are captured in. This, together with the short life of most physical storage media and the problem of technological obsolescence, means that digitised records may be at greater risk of being lost than the originals if not managed appropriately. *Guideline 25 - Managing Information Risk* requires agencies to include digitised records in the agency's risk management assessments. The ideal place to document this analysis is in a Digitisation Plan.

While it is not a requirement of this Guideline, it is **RECOMMENDED** that agencies prepare a Digitisation Plan when undertaking legacy scanning projects for long-term temporary records (e.g. personnel records and client case files). In 75, or even 110 years, when the records are due to be destroyed, this Digitisation Plan will be a key evidential document to understand any decisions that were made about the digitisation process. This Plan may also be used in the development of digital preservation strategies to address technological obsolescence.

The Digitisation Toolkit accompanying this Guideline includes a Digitisation Plan template and further advice on planning and management considerations for digitisation.

4 Digitisation requirements

Agencies intending to dispose of Permanent source records using the Disposal Schedule for Source Records (DA 2159) **MUST** meet the digitisation, metadata and quality requirements described in this section.

4.1 Digital image specification

Digitising to these specifications provides assurance that image data may be accurately rendered (for example output to screen or print). This Guideline sets out the following **minimum** requirements for digitisation of documents, and for photographs and negatives, including:

- Output resolution in dpi (dots per inch);
- Type of image (bi-tonal, greyscale, colour) and bit-depth (when greyscale or colour);
- Colour management;
- Output format(s); and
- Compression algorithm mode.

While these technical requirements are not mandatory for digitisation of temporary records, by complying with this Guideline, agencies will meet the 'adequate reproductions' provisions set-out in the Disposal Schedule for Source Records (DA 2159). Therefore agencies **SHOULD** consider adopting these requirements if intending to dispose of long-term Temporary source records.

Output Resolution

Resolution is the measure of the detail captured in the scanned image. It normally expressed as ppi (pixels per inch) but can be expressed as dpi (dots per inch).

These requirements specify the final output required. The higher the resolution used, the larger the file size, so this is a consideration when choosing resolution.

Choosing the image type and bit-depth

It is **RECOMMENDED** that 1 bit bi-tonal settings be used only for typed or word processed documents and 8 bit grey-scale used for handwritten notes. If black and white text is scanned in 24 bit colour, the file size will be far greater than needed and may introduce areas of background colour not in the original. Newer scanners and capture software can produce high-quality black and white images, so conduct tests before you commence.

Output format

Agencies **MUST** manage the Permanent digitised records in preservation formats described in *Guideline 19 - Digital preservation formats*. Permanent and temporary records **MUST NOT** be combined into single PDFs.

If documents are being scanned for access and distribution, create smaller images for use as thumbnails and quick delivery for read-only purposes. The master copy of the Permanent digitised record **MUST** be retained in PDF/A format.

The scanning equipment may not capture the documents in PDF/A format, therefore agencies may need to convert documents into PDF/A files after registration into the recordkeeping system (EDRMS). Software that combines single page PDFs into a multi-page PDF/A is available.

It is **NOT RECOMMENDED** that you combine records with different retention periods into a single PDF/A.

Use of multi-page TIFF files to store multi-page documents is **NOT RECOMMENDED**. This is because multi-page TIFF images are not widely supported in viewing software, and can contribute to migration issues between systems down the track (e.g. pages can get lost, systems compile documents differently, etc.)

Compression

Compression describes methods of reducing the file size. The two types of compression are 'Lossy' and 'Lossless'. Lossless will generally result in a larger file size but retains all information from original scan. Lossy will reduce the size of the file but some detail will be lost from the original.

4.1.1 Documents

The following table describes minimum technical requirements for digitisation of documents:

Source Type	Black and White	Colour
Documents	For clean, high contrast documents with text or graphics for which colour is either not present or not essential and any images are line art. Includes maps and plans if they do not contain colour information or tonal variation.	For documents where colour is present and is important or for documents with low contrast (e.g. faded text, browning paper, coloured paper or coloured background).
Resolution	300 dpi	300 dpi
Image type	bi-tonal	colour
Bit-depth	1 bit	24 bit
Colour management	Not applicable	This is a standardised method for displaying or printing colour when images are moved between applications and operating systems. For colour images, use embedded ICC colour profile.
Output format	PDF format, and if possible PDF/A. PDF/A is preferred as an archival format for the long term storage and retention of documents.	PDF format, and if possible PDF/A. PDF/A is preferred as an archival format for the long term storage and retention of documents.
Compression algorithm	Lossless compression	Lossless compression

4.1.2 Photographic prints

The following table describes technical requirements for digitisation of photographs:

Source Type	Black and White	Colour
Photographs	Photographic images printed on paper, using traditional printing processes or digital printing. (Does not include transparencies such as 35mm slides - see 4.1.3)	Photographic images printed on paper, using traditional printing processes or digital printing. (Does not include transparencies such as 35mm slides - see 4.1.3)
Resolution	600 dpi (this is an recommended resolution, as it does depend on the size of the original)	600 dpi (this is an recommended resolution, as it does depend on the size of the original)
Image type	greyscale	colour
Bit-depth	8 bit	24 bit
Colour management	embedded ICC colour profile	embedded ICC colour profile
Output format	TIFF, PDF, PDF/A, JPEG, and JPEG2000. Agencies should only use JPEG where the digitisation device only produces JPEG images.	TIFF, PDF, PDF/A, JPEG, and JPEG2000. Agencies should only use JPEG where the digitisation device only produces JPEG images.

Source Type	Black and White	Colour
Compression algorithm	Lossless compression (if using JPEG, the digital image must be saved at maximum image quality)	Lossless compression (if using JPEG, the digital image must be saved at maximum image quality)

4.1.3 Negatives and transparencies

The following table describes technical requirements for digitisation of negatives and transparencies:

Source Type	Black and White	Colour
Negatives	Negatives can be plastic but may be glass. Includes 35mm slides.	Negatives can be plastic but may be glass. Includes 35mm slides.
Resolution	2400 dpi (this is an recommended resolution, as it does depend on the size of the original)	2400 dpi (this is an recommended resolution, as it does depend on the size of the original)
Image type	greyscale	colour
Bit-depth	8 bit	24 bit
Colour management	embedded ICC colour profile	embedded ICC colour profile
Output format	TIFF, PDF, PDF/A, JPEG, and JPEG2000. (Agencies should only use JPEG where the digitisation device only produces JPEG images.)	TIFF, PDF, PDF/A, JPEG, and JPEG2000. (Agencies should only use JPEG where the digitisation device only produces JPEG images.)
Compression algorithm	Lossless compression (if using JPEG, the digital image must be saved at maximum image quality)	Lossless compression (if using JPEG, the digital image must be saved at maximum image quality)

4.2 Metadata requirements

Metadata assists in the document capture and registration process, allows for ongoing records access, and supports digital preservation. The capture of metadata should be automated where possible, as it generally is more accurate than manual entry. This may be via the scanning software, barcoding, use of document templates, etc.

This Guideline recognises that, depending on the sophistication of the agency's recordkeeping system, the metadata may need to be linked, rather than applied directly to the record. At a minimum, the digitised record **MUST** have a unique identifier (ID) and title applied. This metadata may then be linked to the other mandatory metadata that is documented elsewhere, such as in a Digitisation Plan. This approach may be appropriate for large batches of similar documents. See the accompanying Digitisation toolkit for a Digitisation Plan template.

Ideally this ID should be linked to its previous (hardcopy) identification number (if there is one). This ensures that any original control records (such as a register or file index) can still be used to retrieve the digitised records. Implementing document barcoding, to link the barcode number to an existing file register or index, may be an option for legacy records that would be rendered meaningless and inaccessible without their controlling number system.

OCR technology offers greater possibilities for automatic metadata capture. Automatic capture of key fields may be possible, especially if the source records use a standard format or template. However, data gathered by the use of OCR technology will need to be quality assured to verify the accuracy. See *Advice 21 - Plan before you scan* for more about applying OCR.

4.2.1 Technical metadata for each digital image

Technical metadata is vital for identifying management strategies that will support digital continuity and preservation of Permanent digitised records. These are mandatory properties which **SHOULD** be automatically captured from digitisation equipment and applied to each digital image:

Metadata	Comments
Capture equipment	Information about the hardware, software and/or operating system used to originally create the document. For example, X Flatbed scanner, X Desktop scanner, PDFCreator version X, Adobe Professional Version X. Capture of this metadata can usually be automated.
Image properties	Technical information about the media and format, including resolution, image type, bit depth, colour management, format, compression. See Section 4.1. Digital Image Specification for further explanation.
Image manipulation	If the image has been edited or manipulated, information about de-speckling, de-skewing, or other digital enhancement and the software application used.
Manipulation package	If the image has been manipulated, the name of scanning or image software. For example, Adobe Photoshop, Corel Photo paint, GIMP. In practice, this may be the same as the creating software.

4.2.2 Recordkeeping metadata for each digitised record

This metadata supports the authenticity, accessibility and security of the digitised records. These are mandatory properties which **MUST** be applied or linked to all permanent digitised records (e.g. multi-page PDF) when registered in the recordkeeping system (EDRMS):

Required metadata	Comments
Unique Identifier	This would normally be automatically assigned by an EDRMS. When scanning to a network drive, instead of unique ID, use unique file and folder naming based around a documented Naming Convention (see Title/name property below).
Title/name	The record title or name SHOULD be based around a documented Naming Convention, which includes at least; Consistent structure, unique titles, use of leading zeros for numeric titles, avoidance of special characters & consistency (e.g. use of dates in titles, etc.)
Business purpose/process/activity	Why this information is captured (i.e. the business context). This is normally assigned by classifying in the EDRMS according to a function-based Business Classification Scheme (BCS), but may be included in the title (e.g. Land use and Planning - Zoning - Zone maps - [Free text title]).
File format	For example, Adobe Acrobat document, TIFF image file, etc. This can usually be automatically captured in an EDRMS.

Required metadata	Comments
File size (extent)	Expressed in bytes. This can usually be automatically captured in an EDRMS.
Responsible agent/creator	The position, business area/s and/or organisation/s involved in the creation of the source record. For a legacy back scanning project, the name of the unit responsible for digitisation may be used in place of the original creator.
Date of creation	The date that the original paper record was created. This should not be the same as date registered. Can be manually recorded or system-assigned.
Registration Date/time	When it was captured into the recordkeeping system (e.g. Date registered in EDRMS). This will be automatically applied upon registration into an EDRMS.
Responsible agent/registration	Information about the position, business area/s and/or organisation/s responsible for capturing the record into the system. This will be automatically applied upon registration into an EDRMS. This may be the same as Responsible agent/creator.

4.2.3 File level recordkeeping metadata

There are also additional properties that **MUST** also be applied or linked to permanent digitised records at the file, folder or box level to support accountability, evidentiary and archival requirements. This metadata may be automatically or manually applied, depending on how the digitised records are managed in the recordkeeping system:

Required metadata	Comments
Disposal	The disposal schedule number, disposal class number, disposal action and disposal trigger date.
Information security	Security classification and caveats (if not 'unclassified')
Rights statement	Statement that sets out copyright ownership (if security classification is 'public') or any other policies governing use, intellectual property rights and access to the records.

4.3 Quality Control and Assurance

Agencies **MUST** develop and implement Quality Control and Assurance processes to ensure that the digitised records are full and accurate copies. These processes are:

Image accuracy - ensure that the digitisation equipment is producing accurate images. (E.g. quality of image, colour rendition) and the equipment is being operated correctly. This must cover:

- Scanning Operator training;
- Scanner operation quality control processes;
- Extent and frequency of sampling of digitised images;
- Criteria for checking image quality; and
- Any acceptable variations from normal procedure.

Record accuracy - the digitisation workflow process ensures that all records have been digitised, metadata is correctly captured, and all images in a document are captured, and registered correctly into a recordkeeping system. This must cover:

- Records Officer training;
- Verification that the quantity of output images matches the record input;
- The process for metadata checks;
- The process for capturing into recordkeeping system; and
- Any acceptable variations from normal procedure.

Storage reliability ensuring that the storage system can reliably hold the records for as long as they are required (auditing back-up and restore, periodic validation of copies of records on media, managing media so that records can be migrated when at risk) and export when required.

Quality failure processes - describe the processes in place to check for quality failures in the image capture and registration process.

Logging and analysis - describe your logging and analysis processes to monitor trends and detect systematic problems.

When undertaking back scanning or legacy digitisation, the record may not be examined for a considerable period and therefore requires a high level of quality assurance (i.e. 100% of permanent and long-term temporary records are checked, less checks are performed if records are temporary). It is expected that the quality assurance processes will include both routine activities and audit activities:

- Routine activities are those that are conducted routinely as part of the digitisation workflow (e.g. daily or on every document).
- Audit activities are those that are conducted periodically by a person different than the person operating the system (auditors), to independently confirm correct behaviour.

For more information about quality control and assurance, consult the Digitisation Toolkit.

5 Disposal of source records

Disposal of source records is authorised in the Disposal Schedule for Source Records (DA 2159), but the records **MUST** be covered by a current Retention and Disposal Schedule².

The Archives Act 1983 stipulates that agencies **MUST NOT** dispose of records of any type or format without the written approval of the State Archivist. Disposal of records can mean destruction, removal from the agency's custody, or transfer to the Tasmanian Archive & Heritage Office. This approval can come either by:

- Using Retention and Disposal Schedules which have been authorised and issued by the State Archivist. See *Advice 9 - Disposal of Scheduled Records* or,
- Applying to the State Archivist for permission to destroy records that are not described in an authorised disposal schedule. See *Advice 10 - Disposal of Un-scheduled Records*.

5.1 General Disposal Schedule for Source Records (DA 2159)

The General Disposal Schedule for Source Records (DA 2159) authorises the disposal of source records that are described in a current approved Retention and Disposal Schedules provided “adequate reproductions” exist. The conditions set-out in DA 2159 are intended to ensure that the digitisation process is sufficient and the digitised records are properly managed.

This Guideline will allow agencies to understand and apply a measurable set of minimum requirements to all digitisation efforts and ensure that “adequate reproductions” are created so that both Temporary and Permanent value source records can be disposed of using DA 2159.

Some records **MUST NOT** be disposed of after digitisation, regardless of whether or not agency digitisation processes satisfy the minimum requirements described in this Guideline. Refer to Section 2.1 for more information about selecting records for digitisation.

5.2 Permanent source records

Agencies **MUST** submit an *Application to Dispose of Permanent Source Records* and demonstrate they have met the requirements set out in this Guideline before undertaking disposal of Permanent source records using the Disposal Schedule for Source Records (DA 2159).

Disposal of permanent source records is still covered in DA 2159, provided the minimum requirements set out in this Guideline are applied.

This means that Permanent value source records **MUST NOT** be destroyed using DA 2159 without first obtaining approval from the State Archivist. Agencies **MUST** complete and submit an *Application to Dispose of Permanent Source Records* form available on the GISU website..

Details about the agency’s digitisation processes, digital image specifications and metadata capture **MUST** be attached to the application form to demonstrate that the digitised permanent records have the required degree of authenticity, integrity, reliability and useability³ necessary to replace the source records.

5.3 Temporary source records

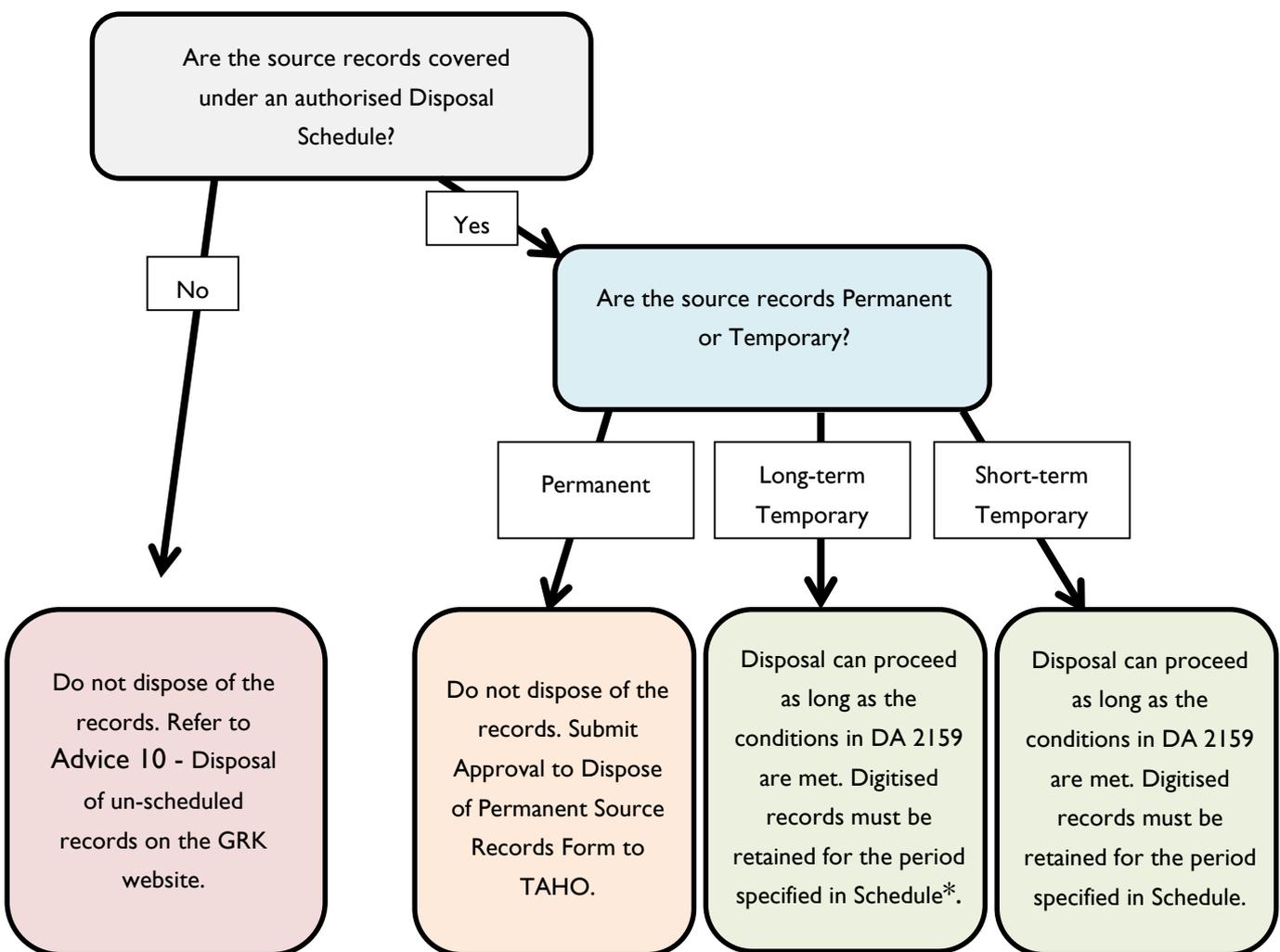
Disposal of temporary value source records is covered in the Disposal Schedule for Source Records (DA 2159). By complying with this Guideline, agencies will meet the “adequate reproduction” provisions set-out in the Disposal Schedule for Source Records (DA 2159); therefore agencies **SHOULD** also adopt these requirements if intending to dispose of long-term Temporary source records.

³ Refer to the Definitions on page 16 for further explanation of these terms.

Long-term temporary - Disposal of source records can proceed as long as the other conditions in DA 2159 are met. Digitised records must be retained for the period specified in Schedule, however it is **RECOMMENDED** that digitisation processes for long-term Temporary records be documented in a Digitisation Plan. See Section 3. Digitisation Plans.

Short-term temporary - Disposal of source records can proceed as long as the conditions in DA 2159 are met. Digitised records must be retained for the period specified in Schedule.

5.4 Decision process for source records disposal



*TAHO **RECOMMENDS** that digitisation processes for long-term Temporary records be documented in a Digitisation Plan.

6 Management and disposal of digitised records

Agencies **MUST** manage digitised records according to the requirements in *Guideline 1 - Records Management Principles*.

The digitised records **MUST** be managed appropriately in a recordkeeping system to ensure they can be accessed for the required retention periods, and to provide enhanced control, access and retrieval capabilities. Recordkeeping systems allow the application of security classifications and other access controls as required. Audit trails can also be kept of who accessed the digitised records and when. Document any decisions made about the management of the digitised records in Digitisation Plans.

6.1 Permanent digitised records

All digitised records with a Permanent status **MUST** be stored in a recordkeeping system (e.g. EDRMS) and be accessible for transfer to TAHO. The onus is on the agency to manage such records appropriately including during migrations and system upgrades until they can be transferred.

Permanent value digitised records **MUST NOT** be stored and maintained on removable media e.g. compact discs, USBs, portable drives.

6.2 Temporary digitised records

All digitised records with a Temporary status **MUST** be retained in the agency for the period specified in the relevant Schedule as per the conditions in DA 2159.

Agencies **SHOULD NOT** use removable media for the long-term storage of Temporary records. Removable media is subject to a number of risks. For example, they can easily be damaged, stolen or lost, or left on a shelf and forgotten when migration projects are underway. Records stored on removable media are usually not backed up as part of the regular backup cycle. While there may be valid reasons to temporarily store digitised records on removable media, agencies **SHOULD** conduct a risk assessment, and ensure that appropriate backup, preservation and digital continuity strategies are in place.

Temporary value digitised records **MUST** be destroyed in accordance with approved Retention and Disposal Schedules and their disposal entered into a Register of Records Destroyed. Choose a destruction method that is appropriate to the record's format. Ensure the records are actually destroyed and the process is confidential and secure. For more about the disposal process, refer to *Guideline 2 - Retention and Disposal of State Records*.

7 Definitions

Agency - means all agencies, authorities, statutory offices, departments, councils and other organisations that are subject to the *Archives Act 1983*.

Audiovisual documents - works comprising reproducible images and/or sounds embodied in a carrier whose:

- recording, transmission, perception and comprehension usually requires a technological device
- visual and/or sonic content has linear duration⁴

Authenticity - the digitised copy replicates the attributes of the source record and can be proven and trusted to be what it purports to be. This requires proof that the record comes from the person, agency, or other legal entity claiming to be its author.

Back scanning - Any digitisation activity where source records are digitised after they have been actioned by an officer of an agency. The key characteristic is that this kind of post-action digitisation involves digitising the records after they were actioned by the agency staff in carrying out the business of the agency.

Born digital - Information created in digital format. Term used to differentiate materials from those that have been created as a result of converting analogue or paper originals into electronic form through the process of digitisation.

Business Classification Scheme (BCS) - A conceptual model of what an organisation does and how it does it. It involves the identification and documentation of each business function, activity and transaction and the documentation of the flow of business processes, and the transactions which comprise them.

Business process digitisation - Any digitisation activity where source records are digitised before action by an officer of an agency. For example, the digitisation of paper records as they are opened in the mail room. The key characteristic is that this kind of pre-action conversion is for daily business use, such as digitising incoming mail, invoices, applications, and forms as they are received, or before they are actioned, for improved workflows.

Conversion - the act of converting a record from one format to another. Conversion applies to both analogue and digital media. See also digitisation and migration.

Colour profile - a set of attributes embedded as metadata into digital images to manage the colour input and output in computer operating systems and devices

Digitisation - describes the process of making a digitised copy which acts as a digital surrogate for the original physical record (e.g. paper document, map, plan or photograph). 'Digitisation' is often used interchangeably with conversion, scanning, digital reformatting and digital imaging.

Digitised record - a record transformed into a digital form from an analogue form, e.g. scanning a paper record.

Digital image – see 'Image'

⁴ <http://www.nfsa.gov.au/preservation/glossary/audio-visual>

Disposal - Disposal of records involves; their destruction, their removal from the custody of their creating Agency, or their transfer to TAHO.

EDRMS – Electronic Document & Records Management System

Historical artefact – means records that are classified as permanent based primarily on their historical research value (E.g. records relating to properties listed on a heritage register, building files identified by a Council as having significant architectural or cultural value, records with an intrinsic artistic value, original artworks, proclamations, charters, testimonials, treaties, etc).

Image – refers to the scanned/digital file of a document, photograph, picture, etc.

Integrity - the digitised copy is unaltered and has the same degree of completeness as the source record.

Legacy records - Closed records, also referred to as non-current records, created:

- Under a previous/defunct recordkeeping system
- Under a defunct function or activity
- By a predecessor agency.

For the purposes of this Guideline, legacy records are hardcopy records no longer required for action (i.e. post action), and collections of hardcopy records that are quite old, but still retained in the agency in storage or off-site. These may be inherited due to amalgamations, structural or functional changes.

Metadata – in records management, recordkeeping metadata is data that describes the context, content and structure of records and their management through time. Metadata is attached to records when they are created, and added to as a result of different processes, such as sentencing and disposal.

Migration - The process of moving digital records from one system to another, while maintaining the records' authenticity, integrity, reliability and useability. See also conversion.

Permanent records - mean those records which **MUST** be transferred to the Tasmanian Archive & Heritage Office.

Reliability - the digitised records can be trusted as credible evidence of the transactions they document. The recordkeeping system must also be reliable to prove reliability and integrity of the records.

Source record - the original paper record after a digitised copy has been made. A source record may be an original record or may itself be a reproduction.

Temporary records - means those records that after a minimum retention period can be destroyed according to an authorised Disposal Schedule.

Unscheduled records – mean those records that are not described in an authorised Disposal Schedule.

Usability - the digitised record can be located, retrieved, presented and interpreted. It must be managed and kept in a preservation format that allows its continued use.

For more definitions, consult the Records Glossary A-Z list of terms on the GISU website.

Recommended Reading

Digitisation Toolkit:

- Advice 21 - Plan before you scan (2015) and Digitisation Plan Template
- Advice 30 - Digitisation dilemmas (2013)
- Checklist: Selecting records for digitisation

Other Guidelines and Advice:

- Guideline 1 - Records Management Principles
- Guideline 2 - Retention and disposal of State records (2005)
- Guideline 25 - Managing Information Risk
- Guideline 19 - Digital preservation formats (2012)
- Guideline 21 - Approved destruction methods for State records (2013)
- Guideline 24 - Migrating digital records
- Advice 9 - Disposal of scheduled records (2005)
- Advice 10 - Disposal of unscheduled records (2012)
- Advice 29 - Advice for agencies on managing legacy records (2012)
- Advice 37 - Keeping digital records accessible (2013)

Further Advice

For more detailed advice please contact:

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Acknowledgements

- Public Record Office Victoria, PROS 11/07 Capture Standard - Specification 1 Digitisation Requirements, & Specification 2 Digitisation: Image Requirements (2010)
- National Archives of Australia, Digitising accumulated paper records: A guide to initiating and planning digitisation projects, 2013
- State Records NSW, Advice - Managing digital images as records
- Australian Capital Territory (ACT) Territory Records Office, Guideline for Records Management No. 9 Records Digitisation and Conversion (2011)

8 Checklist of minimum requirements

Section	Requirement	Evidence Examples
	Digitisation of Permanent legacy records	
1	This Guideline MUST be applied to digitisation of Permanent legacy records.	<ul style="list-style-type: none"> Statement in policies and/or procedures
2	Agencies MUST conduct a risk assessment for the Permanent records before commencing digitisation.	<ul style="list-style-type: none"> Documented risk assessments Entry in Information Risk Register
4.	Agencies intending to dispose of Permanent source records using the General Disposal Schedule for Source Records (DA 2159) MUST comply with the digital image specifications for documents, photographs and negatives: <ul style="list-style-type: none"> Output resolution in dpi (dots per inch); Type of image (bi-tonal, greyscale, colour) and bit-depth (when greyscale or colour); Colour management; Output format(s); and Compression algorithm mode. 	<ul style="list-style-type: none"> Documented digitisation procedures Scanner test/maintenance documentation Vendor/outsourcing documentation defines image requirements Digitisation Plan includes section about image specifications
	Agencies MUST manage the output format of digitised records using preservation formats described in <i>Guideline 19 - Digital preservation formats</i> .	<ul style="list-style-type: none"> Documented digitisation processing procedures Vendor/outsourcing documentation defines processing and output requirements Digitisation Plan includes section about processing
	Permanent records MUST NOT be combined with temporary records into single PDFs.	
	The master copy of the Permanent digitised record MUST be retained in PDF/A format.	
	Minimum mandatory metadata MUST be linked or applied at the image, record and file level: <ul style="list-style-type: none"> Technical metadata for each digital image Recordkeeping metadata for each digitised record File level recordkeeping metadata 	<ul style="list-style-type: none"> Documented metadata capture procedures Vendor/outsourcing documentation defines required metadata Digitisation Plan includes section about metadata capture
	At a minimum, the digitised record MUST have a unique identifier (ID) and title applied, whereas the additional metadata may be linked to the record.	
	Agencies MUST develop and implement quality control and assurance processes to ensure that the digitised records are full and accurate copies of the originals.	<ul style="list-style-type: none"> Documented digitisation procedures Vendor/outsourcing documentation includes quality control and assurance Digitisation Plan includes quality control and assurance plan

5	Disposal of Permanent source records	
	Agencies MUST NOT dispose of records of any type or format without the approval of the State Archivist.	<ul style="list-style-type: none"> • Current approved retention and disposal schedules • Application to dispose of Unscheduled records
	Source records MUST be covered by a current approved Retention and Disposal Schedule in order to be destroyed in accordance with the Disposal Schedule for Source Records (DA 2159).	
	Unscheduled source records MUST NOT be destroyed without specific authorisation from the State Archivist. See <i>Advice 10 - Disposal of unscheduled records</i> .	
	Agencies MUST submit an <i>Application to Dispose of Permanent Source Records</i> to TAHO if intending to destroy any source records classed as Permanent value records.	<ul style="list-style-type: none"> • Application to Dispose of Permanent Source Records
	Some records MUST NOT be disposed of after digitisation, regardless of whether or not agency digitisation processes satisfy the minimum requirements described in this Guideline. This includes pre-1960 records. See the General Disposal Schedule for Source Records (DA 2159) for more information.	<ul style="list-style-type: none"> • Documented disposal procedures exclude these records • Vendor/outsourcing documentation includes disposal requirements and exclusions • Digitisation Plan covers disposal
6.1	Management and Disposal of Permanent digitised records	
	Agencies MUST manage digitised Permanent records according to the requirements in <i>Guideline 1 - Records Management Principles</i> .	<ul style="list-style-type: none"> • Refer to Evidence Checklist in Guideline 1
	All Permanent value digitised records MUST be stored in a recordkeeping system (e.g. EDRMS) and be accessible for transfer to TAHO.	
	Permanent value digitised records MUST NOT be stored and maintained on removable media e.g. compact discs, USBs, portable drives.	
6.2	Management and Disposal of Temporary digitised records	
	Agencies MUST manage digitised Temporary records according to the requirements in <i>Guideline 1 - Records Management Principles</i> .	<ul style="list-style-type: none"> • Refer to Evidence Checklist in Guideline 1
	All digitised records with a Temporary status MUST be retained in the agency for the period specified in the relevant Retention and Disposal Schedule as per the conditions in the General Disposal Schedule for Source Records (DA 2159).	