



Technical Requirements for the Scanning of Official Records

This recordkeeping advice provides assistance to state and local government agencies in the scanning of official records. It provides information regarding format and resolution requirements and should be read in conjunction with the following documents:

- State Records of South Australia, *Digitisation of Official Records and Management of Source Documents Guideline (2009)*;
- State Records of South Australia, *General Disposal Schedule 21: For management and disposal of source documents and digitised versions after digitisation, Version 3 (2009)*;
- State Records of South Australia, *South Australian Recordkeeping Metadata Standard (2009)*;
- Public Records Office of Victoria, *PROS 11/07/S2: Digitisation Image Requirements, Version 1.1*; and
- Public Records Office of Victoria, *Victorian Electronic Records Strategy (VERS)*.

Scanning of Official Records

Scanning, also referred to as digitising, enables the reproduction of paper source records or images into an electronic or digital format.

Scanning can provide a range of benefits for government agencies including:

- faster retrieval and access to information;
- reduce management and access costs; and
- improve sharing of corporate information.

Many agencies are considering the implementation of scanning or imaging technologies for the digitisation of official records of temporary and permanent value. It is recommended that scanning or imaging of records is managed within an Electronic Document and Records Management System (EDRMS) or a business system that meets established government specifications.

Record Retention

Advice from the Crown Solicitor's Office indicates that the provisions of the *Electronic Transactions Act 2000*, which allow for the recording and retention of records in electronic format, cannot justify the destruction of paper records determined to be of permanent value in accordance with the *State Records Act 1997*. The process of digitisation therefore does not allow for the destruction of permanent paper records once scanned.

Permanent paper based records need to be transferred to the custody of State Records once the records reach 15 years of age or are no longer required for administrative purposes, whichever occurs first.

Source records of temporary value may be destroyed under certain conditions when digitisation of the record is managed within an EDRMS or business system certified under *General Disposal Schedule 21: For management and disposal of source documents and digitised versions after digitisation*, Version 3(2009) available at www.archives.sa.gov.au.

Recordkeeping Issues

It is important that agencies are aware of the recordkeeping issues associated with the scanning of official records. Both source and scanned records need to be authentic, reliable, integral and useable.

Official records that have been scanned must:

- be captured and maintained in an appropriate EDRMS or technology, such as a business system;
- exist in an open and enduring format; and
- maintain all mandatory recordkeeping metadata.

Metadata

Agencies need to ensure metadata associated with records stored within a recordkeeping system or line of business system is captured. Metadata provides the context, content and structure of records. Metadata must be captured immediately when records are scanned, where agencies are employing an EDRMS or line of business system. Where agencies capture scanned records on a network drive, all mandatory recordkeeping metadata must be applied as soon as practicable.

Metadata must be applied using the South Australian Recordkeeping Metadata Standard (SARKMS) and Victorian Electronic Records Strategy (VERS) specifications.

Recommended Formats and Resolution

When scanning records, State Records recommends that agencies apply the requirements within PROS 99/007 Specification 4: VERS Long Term Preservation Formats.

Agencies need to determine the resolution and other attributes of the selected file format when scanning, appropriate to each type of record and its associated retention period. For example, agencies may relax scanning requirements for short term temporary records such as financial records (eg invoices). However, the requirements should not be relaxed for records of permanent or long term temporary value or those records remaining unsentenced.

Where an agency needs to establish a single format for all its digitised records it should choose the highest resolution appropriate to its records and apply to all.

It is recommended that agencies conduct a business risk analysis to identify these records and their business use when making determinations to relax scanning requirements.¹

¹ PROS 11/07/S2: Digitisation Image Requirements (2010), Public Records Office of Victoria

Minimum Technical Requirements for Scanning

As a guide to assist agencies, the following table establishes the minimum set of technical requirements for the scanning of permanent and long term temporary records to archival quality.

Agencies are expected to apply higher standards than those specified in the table to records vital to the agency, where record loss may potentially have significant consequences to the organisation.

File formats have not been specified in the table allowing agencies the flexibility to chose appropriate formats based on image requirements and business needs. However it is recommended that agencies use the VERS compliant formats including:

- TIFF
- PDF/A
- JPEG
- JPEG2000

For further information, please refer to *PROS 11/07/S2: Digitisation Image Requirements, Version 1.1*, Public Records Office of Victoria.

The table has been developed with reference to the following guidelines:

- Queensland State Archives, *Guideline for the Digitisation of Paper Records*, Version 2 (2006)
- Public Record Office of Victoria, *Scanning or Imaging of Records: Advice to Victorian Government Agencies Information Sheet 2* (2001)
- State Records Authority of New South Wales, *Recordkeeping in Brief 11 – Digital imaging and recordkeeping* (2009)

Public Records Office of Victoria, *PROS 11/07/S2: Digitisation Image Requirements, Version 1.1*, (2010)

Minimum Technical Requirements for Scanning Table

Document type	Resolution	Bit Depth	Compression
Documents with text or graphics, black and white only	200 dpi	bitonal	lossless
Documents with discrete colour used in text or diagrams	200 dpi	24 bit colour	lossless
Black and white photographs	600 dpi	8 bit greyscale	lossless
Colour photographs	600 dpi	24 bit colour	lossless
Black and white negatives	2400 dpi	8 bit greyscale	lossless
Colour negatives and transparencies	2400 dpi	24 bit colour	lossless

Further Information

State Records of South Australia, *General Disposal Schedule 21: For management and disposal of source documents and digitised versions after digitisation*, Version 3, (2010).

State Records of South Australia, *Digitisation of official records and management of source records* (2009).

State Records of South Australia, *South Australian Recordkeeping Metadata Standard* (2009).

Public Records Office of Victoria, *Victorian Electronic Records Strategy (VERS)*
<http://210.8.122.120/vers/vers/default.asp>

Public Records Office of Victoria, *Scanning or Imaging of Records: Advice to Victorian Government Agencies* (2001).

State Records Authority New South Wales, *Recordkeeping in Brief 11 – Digital imaging and recordkeeping* (2009).

Queensland State Archives, *Guideline for the digitisation of paper records* (2006).