



Public Record Office Victoria
PROS 11/01
Storage

Guideline

2

Implementing a Storage Programme

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1. Introduction

1.1. Public Record Office Victoria Standards

Under section 12 of the *Public Records Act 1973*, the Keeper of Public Records ('the Keeper') is responsible for the establishment of Standards for the efficient management of public records and for assisting Victorian government agencies to apply those Standards to records under their control.

Recordkeeping Standards issued by PROV reflect best practice methodology. This includes International Standards issued by the International Organisation for Standardisation (ISO) and Australian Standards (AS) issued by Standards Australia in addition to PROV research into current and future trends.

Heads of government agencies are responsible under section 13b of the *Public Records Act 1973* for carrying out, with the advice and assistance of the Keeper, a programme of efficient management of public records that is in accordance with all Standards issued by the Keeper.

In Victoria, a programme of records management is identified as consisting of the following components:

- A recordkeeping framework;
- Recordkeeping procedures, processes and practices;
- Records management systems and structures;
- Personnel and organisational structure; and
- Resources, including sufficient budget and facilities.

A programme of records management will cover all an agency's records in all formats, media and systems, including business systems.

1.2. Purpose

The purpose of this Guideline is to facilitate implementation of requirements contained in *PROS 11/01 S1 Agency Records Storage Specification* through the development and implementation of a storage programme. A storage programme coordinates the planning, delivery and reporting undertaken by various business teams, outsourced providers and shared services regarding the storage of agency records. The purpose of having a storage programme is to enable more efficient practice by sharing key knowledge about the:

- Recordkeeping requirements of public records in storage;
- Technological advancements, practices and issues that affect records held in storage;
- Capacity of the building, storage areas and other facilities to store the agency's records over the next three to five years;
- Risks associated with the storage of public records and their mitigation; and
- Management of outsourced or shared services activities involving the storage of agency records.

1.3. Scope

This Guideline applies to all public records in the custody of a Victorian government agency. This includes records that are stored within the agency, by shared services, or within an Approved Public Record Office Storage Supplier (APROSS) facility.

This Guideline is for Victorian government agency records managers and information managers. It covers information that is needed to make decisions regarding the management of public records held in storage.

This Guideline is written using non-technical language and concepts. It does not cover the PROV APROSS programme, or archive programmes for POD Repositories or other bodies that hold State Archives on behalf of the Keeper of Public Records. It also does not cover technical requirements for systems that store records, or the file-formats and systems used to capture and register records.

A storage programme is part of the agency's records management programme. It is the framework, processes, systems, structures and resources required to manage the storage of public records regardless of format. This consists of the following:

- Storage plan (see section 5.1);
- Compliance or inspection report (see section 5.2);
- Maintenance plan (see section 5.3);
- Disaster preparedness, management and recovery plan (see section 5.4);
- Processes and procedures (see section 6.2);
- Communication with key stakeholders (see section 6.3); and
- Progress and monitoring reports (see section 7.2).

1.4. Related Documents

This Guideline must be read and implemented in conjunction with Public Record Office Victoria (PROV) Standards and associated documentation, including appropriate Retention and Disposal Authorities (RDAs). The Standard, Specifications, Guidelines and Fact Sheets associated with this Guideline are detailed below:

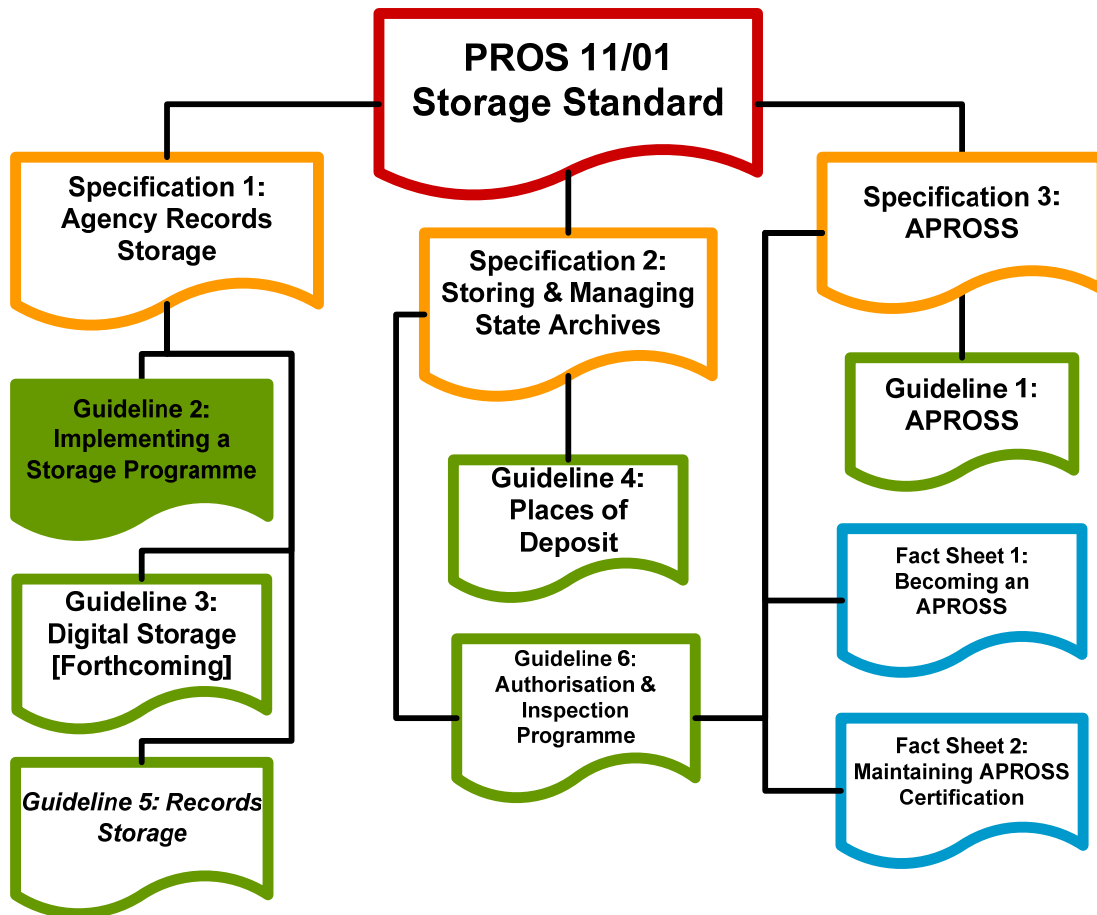


Figure 1: Relationship Diagram

2. Methodology & Summary

2.1. Benefits of a Storage Programme

The storage of public records may be undertaken and maintained by various bodies, both within the agency and external to the agency. Implementing a storage programme for records has the following key benefits for the agency:

- Records remain usable and accessible by the agency for the duration of their retention period as they are consistently monitored and maintained whilst in storage;
- More effectively manage and recover from disasters as operations are aligned to and cater for the different circumstances of different types of records and business units or organisations involved;
- Facilities for the storage of records (including shelving and other equipment) are effectively maintained and meet ongoing building, safety and other requirements;
- Staff know what records are stored where, so they are able to identify and retrieve them efficiently; and
- Anticipated future storage needs can be catered for.

2.2. Methodology

The methodology for implementing a storage programme is summarised in Figure 2: Implementing a Storage Programme Methodology (below).

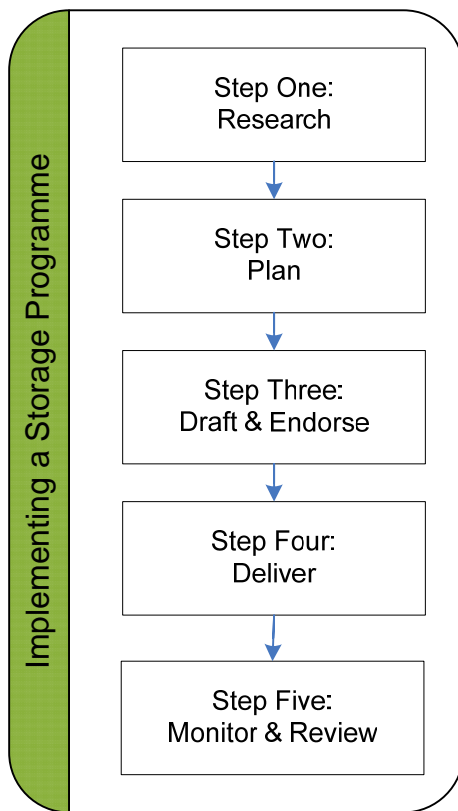


Figure 2: Implementing a Storage Programme Methodology

2.3. Summary

Step One: Research

Conduct research to determine what storage options are best, what the storage programme needs to cover, and how the storage programme fits into other agency plans and strategies.

Key tasks for this step are as follows:

- Identify the compliance requirements for the storage of public records (section 3.1);
- Locate the sources of information (that is, the knowledge, people, systems, documents and tools) that cover the storage needs and practices of the agency (section 3.2);
- Determine the factors that influence the storage of public records (for example, the storage options available, potential risks, and the retention period, media, format, age, size and retrieval rate of the records to be stored) (section 3.3); and
- Confirm the budget and resources available for the storage of public records (that is the money and people to do what must be done) (section 3.4).

Step Two: Plan

Identify processes, tools and actions that will be needed to implement the options identified.

Key tasks for this step are as follows:

- Using the information gathered from step one, describe the current records storage situation for the agency (section 4.1);
- Map the compliance requirements to the relevant areas of the agency (or outsourced providers) that undertake similar tasks (section 4.2);
- Identify the strategies and processes of relevance to the storage of agency records (section 4.3); and
- Determine the future direction required for the storage of agency records (section 4.4).

Step Three: Draft & Endorse

Ensure that the processes, tools and actions are incorporated into the storage plan and associated strategies, policies and plans, and that the changes have been fully endorsed.

Key tasks for this step are the development of the following:

- Storage plan (section 5.1);
- Compliance or inspection report (section 5.2);
- Maintenance plan (section 5.3);
- Disaster preparedness, management and recovery plan (section 5.4); and
- Endorsement of the above as key components of the Records Storage Programme (section 5.5).

Step Four: Deliver

Implement the plan by storing public records in the manner determined as being suitable for their ongoing useability and readability according to the procedures developed.

Key tasks for this step are as follows:

- Set key delivery tasks for the implementation of the storage programme (section 6.1);
- Develop and implement procedures on effective records storage practices (section 6.2); and
- Provide ongoing and regular communication (including relevant training) to all stakeholder groups on records storage (section 6.3).

Step Five: Monitor & Review

Monitor the storage of public records, inspect the records stored and the storage facilities or areas used, and revise the approach taken as needed.

Key tasks for this step are as follows:

- Identifying and implementing key monitoring and review tasks (section 7.1); and
- Placing the results of the monitoring and review tasks into reports so that it may be utilised for the continuous improvement of the agency's records storage practices (section 7.2).

3. Step One: Research

This step consists of obtaining the information necessary for the agency to plan and implement a storage programme for its public records.

Storage of public records involves areas of the agency that either manage or undertake tasks in the following areas:

- Building or Facilities Management (storage areas and facilities);
- Information Technology (digital records);
- Contract Management (contracts with APROSS facilities and other outsourced service providers);
- Risk Management (management of risks associated with records storage); and
- Records Management (management of records, including their storage).

Key tasks

Key tasks for this step are as follows:

- Identify the compliance requirements for the storage of public records (section 3.1);
- Locate the sources of information (that is, the knowledge, people, systems, documents and tools) that cover the storage needs and practices of the agency (section 3.2);
- Determine the factors that influence the storage of public records (for example, the storage options available, potential risks, and the retention period, media, format, age, size, and retrieval rate of the records to be stored) (section 3.3); and
- Confirm the budget and resources available for storage of public records (that is the money and people to do what must be done) (section 3.4).

3.1. Compliance Requirements

It is essential to have a clear understanding of what the agency will need to comply with when undertaking storage activities. If facilities or practices are not compliant, achieving compliance can have an enormous impact on resources (finances, time and people). The agency will have compliance requirements relating to the following:

- PROV Recordkeeping Standards, including *PROS 11/01 Storage Standard*;
- Other related Standards, such as the International Standards related to storage; and
- Legislation, such as the *Information Privacy Act 2000* or *Public Records Act 1973*.

Once the compliance requirements regarding storage are known it is easier to determine what information will be needed to address them.

PROV Storage Standard

The compliance requirements for the storage of public records are identified in the two Specifications associated with the Storage Standard. These are:

- *PROS 11/01 S1 Agency Records Storage Specification*;

- *PROS 11/01 S2 Storing and Managing State Archives Specification; and*
- PROS 11/01 S3 APROSS Specification.

The *Agency Records Storage Specification* contains the requirements for storage of public records that are considered to be in the custody of the agency. This includes records held within the agency, or within a shared services facility. All Victorian government agencies are to abide by the requirements in this Specification.

The *Storing and Managing State Archives Specification* contains the requirements for storage of State Archives (i.e. permanent public records) on behalf of the Keeper of Public Records. Only Victorian government agencies that are managing or funding repositories that have been authorised by PROV to hold and provide access to State Archives on behalf of the Keeper need to comply with this Specification.

The *APROSS Specification* contains the requirements for storage provided by Approved Public Record Office Storage Supplier (APROSS) facilities.

International Standards

The International Organisation for Standardisation (ISO) has developed a number of International Standards covering the storage of various media types. Section 2.4 Preservation and Safety of the *Agency Records Storage Specification* refers to the management of records so they are not damaged whilst in storage. A list of International Standards that may be of relevance to the agency when determining preservation risks and their mitigation is provided in Appendix One. The agency should investigate the types of media they have in storage or that will need to be stored in order to identify which ISO Standards will be of most relevance.

The *ISO Storage Standards* were developed to promote the preservation of specific media types for the duration required. Some are divided into medium term storage (for storage up to 10 years) as well as extended term (permanent) storage.

Standards that cover specific media types, such as optical disc, include valuable information on what to look for when inspecting records of that media type, appropriate handling practices and enclosures, as well as what may occur if records are not kept in an appropriate temperature and humidity range. The standard for multiple media (ISO 18934) divides the temperature and humidity levels for the main media types into four zones (room, cool, cold and sub-zero) so that different media types can be stored together.

Legislation

The agency will be required to comply with Victorian legislation and associated regulations. Some of these will apply to the storage of public records. The agency will need to be aware of all relevant legislation and any potential impact they may have on the storage of agency records, including the following:

- Agency specific legislation (for example, the *Country Fire Authority Act 1958*);
- Sector specific legislation (such as the *Local Government Act 1989*); and
- Victorian government or public sector legislation (such as the *Information Privacy Act 2000*).

It is important to be aware of what legal jurisdiction the agency is storing their public records in, and how it differs to the requirements of the Victorian jurisdiction. For example, digital

records stored using cloud computing¹ may not be adversely impacted if the records were stored within an Australian jurisdiction. Storing Victorian public records in the legal jurisdiction of the United States of America however, would mean that the agency was in breach of the Victorian *Information Privacy Act 2000* as under the *USA Patriot Act 2001* the American Government can access any records within its legal jurisdiction at any time.

3.2. Sources of Information

Sources of information needed regarding storage of public records may be documents, people, or practice. For example:

- The records management strategy or information management strategy may identify the types and formats of records used by the agency (documents).
- The risks associated with the media and formats used for digital records may be known to information technology staff, but not documented (people).
- The way that the agency records are currently preserved may not be documented, but may be known by observing what is done (practice).

Identifying information sources of relevance to the storage of public records enables factors that influence their storage to be determined and addressed more easily.

Using existing records and information management documents

There are a number of key agency documents that contain information of relevance to the storage of public records. These include (but are not limited to) the following:

- Records Management Strategy (this may contain information about current practice and future plans regarding records storage);²
- Records Management Policy (this may contain information about the media and formats that the agency uses);
- Information Technology (IT) or Information and Communications Technology (ICT) Strategy (this may contain information about digital records storage practice and plans);
- Retention and Disposal Authorities (these provide information on how long records will need to be stored);³
- Facilities Management Plan (this may contain information about the current facilities management tasks and related assessments or checks); and
- Storage provider contract (this may provide information about the conditions, type and amount of records currently stored with a secondary storage provider).

A check of records management, IT, information management, knowledge management and facilities documents is recommended. When checking the documents, keep in mind the

¹ For information on the risks to records related to cloud computing, please see Australasian Digital Recordkeeping Initiative (ADRI) *Advice on managing the recordkeeping risks associated with cloud computing*, Council of Australasian Archives and Records Authorities (CAARA), 2010, viewed 18 August 2010, <<http://adri.gov.au/content/products/cloud-computing.aspx>>.

² Further information on how to write a Records Management Strategy and Records Management Policy is located within the PROV *Strategic Management Standard* and associated documents.

³ Retention and Disposal Authorities are located on PROV's web site at the following location: <http://prov.vic.gov.au/government/disposal-and-transfer/retention-and-disposal-authorities>.

compliance requirements regarding storage that need to be met. Appendix Two provides some information on what business strategies may be of relevance and why.

Using the stakeholder engagement model

Communication with key stakeholder groups is essential to obtain the information needed to for consistent and compliant records storage management. Tasks related to the storage of records may well be undertaken by various areas of the agency. It is therefore important to think about what aspects of storage will be undertaken by which area of the agency, and how this can be holistically managed and planned.

The stakeholder engagement model⁴ developed in accordance with the PROV *Strategic Management Standard* will have identified stakeholders of relevance to records management and specific techniques for engaging with them.

It may not be necessary to develop a specific communication plan (see section 6.3) if the stakeholder engagement model sufficiently addresses the storage of public records. A separate communication plan may be required in some instances to comply with project or other business frameworks.

Using the model effectively to build a communication plan involves the following:

- Identifying the stakeholders and strategies of relevance to the storage of public records from the agency's stakeholder engagement model;
- Placing them within a communication plan designed around the context of a programme for the storage of public records; and
- Ensuring that the communication plan is regularly updated as a result of the engagement process.

Observing common practice

Whilst there may be a policy that specifies how a particular type of record is to be stored, in practice something entirely different may occur. The corporate culture of the agency covers both policy and practice. Whilst engagement with stakeholders may provide some information regarding common practice, it will be useful to observe what normally occurs. Differences between practice and policy can then be raised and discussed with the relevant stakeholders.

3.3. Factors that Influence the Storage of Public Records

There are a number of factors that will influence decisions regarding the storage of public records. These include (but are not limited to) the following:

- **The age of the record:** Whether the record is created and managed using current systems and processes, or using a previous system that may no longer be supported, will have an impact on what will be needed for the record to be managed appropriately whilst in storage.

⁴ Further information on how to develop a stakeholder engagement model is located within *PROS 10/10 Strategic Management Guideline 7: Stakeholder Engagement*.

- **The media and format of the record:** Whether the record is a paper file, a large volume, a building plan, a CD-ROM, a word-document, an excel spreadsheet, an access database, or a website, for example, will have an impact on what will be needed for the record to be managed appropriately whilst in storage.
- **Anticipated use of the record:** Whether the record is current, semi-current, or non-current will influence how often the record may need to be retrieved, and will therefore have an impact on what will be needed for the record to be managed appropriately whilst in storage.
- **Retention period of the record:** How long the record needs to be kept before it can be disposed of⁵ will have an impact on what will be needed for the record to be managed appropriately whilst in storage.

Appendix Three provides some examples of the key knowledge, resources and tools, and business units that may be useful when considering the above factors.

Managing storage of public records at a strategic level requires some additional factors to be considered. To ensure that records remain readable, accessible and useable for the duration of their retention period, records placed in storage require ongoing management. This includes making decisions regarding whether to store records onsite or offsite, whether to manage the storage of records in-house or to outsource storage, and how to best manage digital records.

Approaches will generally involve a combination of the above factors. For example, the agency may undertake storage in-house, but offsite.

In-house storage of public records involves managing the storage of agency records within the agency. For example:

- The buildings or rooms used for the storage of public records may be maintained by the agency's facilities manager;
- The storage services required for digital records may be maintained by the agency's IT team; and
- The storage services required for hardcopy records may be maintained by the agency's records management team.

Outsourced storage of public records involves contracting the services of an external provider to manage the storage of agency records. For example, the storage of non-current and semi-current agency records may be managed by an APROSS facility in accordance with a contractual agreement between the facility and the agency.

Onsite storage of records involves housing the records within the same building as the agency's office space. For example, digital records could be placed in a server (or server cluster) located within the agency's office location. The agency's IT unit would usually control the server's operations, and should be able to fix issues as they occur.

⁵ For further information about sentencing, retention periods and disposal programmes please see PROS 10/13 Disposal Standard and associated documents.

An offsite storage option would involve housing the records outside of the agency's office location. For example:

- Non-current or semi-current records stored in the agency's warehouse;
- Back-up versions of its digital records stored on a server within a shared services facility; or
- Non-current or semi-current records stored within an APROSS facility.

Appendix Four provides some examples, benefits and risks for potential storage options.

3.4. Budget & Resources

Identifying what the current budget and resources are may not be a simple task. This is due to various records storage tasks potentially being undertaken by various groups. They each may have a separate budget and resources. For example, management of facilities used for storage will probably use a budget set aside for facilities management to ensure that the building maintenance required for a storage facility is undertaken as required. A check of the relevant strategy documents or discussion with relevant stakeholders may assist with determining budget and resources available across the various business areas.

Budget and resources will impact on what is achievable regarding records storage, and how long it will take to become compliant with the PROV Storage Standard.

4. Step Two: Plan

This step builds on the information gathered in 'Step One: Research'. It concerns establishing an understanding of the desired future direction for the storage of agency records, and how this differs from what is currently occurring. This will enable a storage programme to be developed that covers what is required.

Key tasks

Key tasks for this step are as follows:

- Using the information gathered from step one, describe the current records storage situation for the agency (section 4.1)
- Map the compliance requirements to the relevant areas of the agency (or outsourced providers) that undertake similar tasks (section 4.2);
- Identify the strategies and processes of relevance to the storage of agency records (section 4.3); and
- Determine the future direction required for storage of agency records (section 4.4).

4.1. Current Records Storage Situation

From the information gathered in 'Step One: Research' the current situation regarding the storage of agency records should be able to be determined. Information sources identified should have provided the following information:

- Types and formats of records captured by the agency;
- Age and retention periods of records captured by the agency;
- Sources of information about the storage of agency records;
- Locations used for storage of public records; and
- Areas of the agency involved with the storage of public records.

Additional information required to understand the agency's capacity to store records may be needed. This may include the amount of free space available to store records and how long it is anticipated that this space may be available.

A summary of the current records situation will form part of the Storage Plan (see section 5.1).

Storage risks and their mitigation

Records that are simply stored and ignored are easily lost. Actively managing records placed in storage through a storage programme ensures that records continue to be accessible, readable, useable and understandable for the duration of their retention periods. This enables the agency to meet legislative and regulatory requirements, as well as to conduct their business more efficiently.

Conducting a risk assessment⁶ to identify the issues regarding the records that the agency places into storage provides essential background information for developing and improving a storage programme. Risk assessment can be used to identify and mitigate a number of issues regarding storage, including (but not limited to) the following:

- Being able to identify and access within a reasonable time records held in storage that are required for agency business;
- Being able to read and understand records that have been placed in storage;
- Protecting records held in storage from damage or loss; and
- Protecting records held in storage from unauthorised access.

Appendix Five provides some examples of risks and their possible mitigation.

The results of the risk assessment will form part of the Storage Plan (see section 5.1).

4.2. Mapping Tasks to Areas

Requirements in the PROV Storage Specifications cover tasks related to the maintenance of facilities and areas used to store records, storage outsourced to APROSS, and appropriate management of records in storage regardless of the format (including hardcopy and digital records). The agency will most likely have different business areas that manage these and other aspects related to records storage. Planning for the storage of agency records therefore requires the coordination and collaboration of multiple business areas.

Strategy and other business planning documents should provide an indication of what tasks the various business areas are planning to undertake in the foreseeable future. Engaging with the managers of the various business areas should provide further information. Checking this against PROV Specifications should provide an indication of which business areas are relevant for what requirements.

A clear understanding of which business area will be undertaking what work and how progress will be communicated is needed. This may be achieved through various methods, including (but not limited to) the following:

- Centralised reporting;
- Storage steering committee; or
- Ongoing stakeholder engagement.

Centralised reporting involves the various business areas providing status updates and other reports regarding the relevant records storage activities to a centralised person or location. This enables a sense of the whole to be achieved so that the agency is aware of its status regarding meeting the requirements of the Storage Standard.

A storage steering committee can be formed from representatives of each business area. Each representative could provide information about what work their business area has undertaken. Any issues or risks that have been identified can be discussed and decisions made relating to storage of records as a group. Meetings can be formalised with agendas and minutes so that a record of the actions and decisions relating to records storage are maintained.

⁶ For further information about how to conduct a risk assessment for recordkeeping, please see *PROS 10/10 Strategic Management Guideline 6: Records & Risk Management*.

Ongoing stakeholder engagement involves the records manager (or other relevant person) regularly making contact with each business area separately to determine what is happening. The status of records storage related tasks, or associated issues, may be discussed informally and information shared as part of an ongoing relationship.

4.3. Identifying Strategies & Processes

For the storage programme to be effective it will need to be integrated with the key business strategies and policies. See Appendix Two for descriptions of what strategies may be of relevance to the storage of records.

Key tasks regarding the records storage will most likely be undertaken by different business areas across the agency. Inserting records storage into the relevant strategies managed by the different business areas is one way of ensuring that the work needed is carried out and reported upon. For example, conversion and migration strategies may be managed by the Information Technology (IT) business unit. These strategies may be sufficient for IT needs regarding records in current business systems, but not for records management needs regarding digital records placed in storage. Expanding conversion and migration tasks to cover digital records stored to optical disks and other portable media used by the agency to store non-current digital records may be needed.

Storage processes should ensure that the records remain secure, readable, accessible and usable whilst they are being stored. See Appendix Six for further information on what types of processes may be of relevance to records storage.

The processes used for the storage of records will be influenced by the age, format and media, retention period, and anticipated use of the records to be stored. For example, if the records are stored on a media type whose lifespan is less than the retention period required for the records, the storage process used will include migration to new storage media.

4.4. Future Records Storage Situation

Future records storage requires an understanding of what is desired and how this is to be achieved. A clear understanding of the current situation regarding records storage, including relevant risks, strategies, and processes, should provide sufficient information for the agency to determine what the future direction for records storage will be. The future direction of storage may be referred to as the storage solution as it offers a solution to the risks and needs of the agency regarding records storage.

When choosing an effective storage solution, the needs of the agency, the preservation requirements of the records, available storage areas or facilities, and the ongoing maintenance of those areas and facilities and the records they hold, should all be considered. A storage solution will cover multiple strategies, processes and plans as a result. It will also need the cooperation of multiple areas of the agency to implement.

The storage conditions needed to best preserve various record types whilst they are in storage may be addressed through different processes. This may mean that the agency uses different storage areas or facilities for different record types, or that the areas and facilities used are divided into spaces that can cater to the different storage needs. For example, if the agency's storage area addresses the conditions required for its paper records but not its digital records, it may outsource digital storage to an APROSS facility that has a media storage vault.

Appendix Seven provides some examples of strategies and processes for various types of records.

Once the types of records being stored or to be stored is known, and the strategies or plans and processes are known, a decision can be made regarding what storage options the storage programme will use. Whether or not the processes and conditions required can be catered for within the agency or whether they will need to be provided by an outsourced provider may determine whether storage should be in-house or outsourced. The strategies and processes used by the IT team may influence a decision regarding whether digital records are stored offline, online or near-line.

The strategic direction for records storage will form part of the Storage Plan (section 5.1).

5. Step Three: Draft & Endorse

This step takes the information gathered in steps one and two and places it in a document or series of documents that form the basis of the storage programme.

The storage programme describes what the agency is doing, and will do in the next few years, regarding the storage of public records. It also describes how the agency is managing the storage of records, and who is doing what.

Key tasks

Key tasks for this step are the development of the following:

- Storage plan (section 5.1);
- Compliance or inspection report (section 5.2);
- Maintenance plan (section 5.3);
- Disaster preparedness, management and recovery plan (section 5.4); and
- Endorsement of the above as key components of the Records Storage Programme (section 5.5).

5.1. Storage Plan

A storage plan enables the agency to summarise its chosen storage options, and provides a link between the strategic direction of the agency and ongoing business operations. As such, the storage plan may be attached to (or be part of) the records management strategy.

Benefits of having a storage plan include the following:

- Actions taken by multiple business units regarding the storage of public records are summarised into a single document;
- The status of storage services provided from shared services and contracted organisations, such as APROSS facilities, can be noted;
- A clear indication of what is happening and what is needed regarding storage can be obtained so that the agency can prevent or mitigate potential storage shortages or issues; and
- It can be used as a tool to plan other related records management projects, such as disposal, digitisation, or classification and indexing projects.

The storage plan will cover four main areas:

- A map or diagram of the current storage areas showing use and capacity;
- The strategic direction for storage over the next three to five years;
- A risk assessment of storage options; and
- Recommended actions for future storage.

Map of current storage

The storage plan should include a map (or series of maps or diagrams) of the storage areas and facilities used by the agency to store its records. Information contained within the map could include the following:

- What types of records are stored where (consider them in terms of how they are stored, such as oversized or heavy, and the media used to store the records, such as disk or tape);
- The location of the storage area or facility;
- What kind of equipment (e.g. shelving, servers) is used to store records;
- How much storage capacity is used, and how much remains;
- What fire or safety equipment is installed and where it is located; and
- The capacity for the shelving and floor to carry the weight of the records stored (including shelving units).

Strategic direction for storage

Begin with an overview of the current record storage options used by the agency. This provides a starting point that the strategic direction can build upon in the near future. The strategic direction for the storage of records over the next three to five years will either come from or align with the records management⁷ and ICT strategies.

When completing this section of the storage plan, consider the following:

- Which processes identified in step two may need to be used;
- What agency strategies, policies or plans may need to be adjusted or developed;
- Are there any operational elements that will be needed to ensure that the strategic direction can be carried out successfully; and
- Whether sufficient resources are available.

Risk assessment of storage options

The risk assessment⁸ should cover both the current and the recommended future storage options used by the agency. The focus of the assessment should cover risks related to the following:

- Long-term accessibility and usability of the records stored;⁹
- Availability of storage over the next three to five years;
- Location or construction of the storage area or facility;¹⁰ and
- Security and preservation of the records being stored.¹¹

⁷ For information on how to develop a records management strategy, please see *PROS 10/10 Strategic Management Guideline 5: Records Management Strategy*.

⁸ For information on how to conduct a risk assessment, please refer to *PROS 10/10 Strategic Management Guideline 6: Risk and Records Management*.

⁹ Information about preservation of records is located within *PROS 11/01 Storage Guideline 5: Records Storage*.

¹⁰ Information on location and construction of storage facilities is located within *PROS 11/01 Storage Guideline 5: Records Storage*.

¹¹ Information on security of storage facilities is located within *PROS 11/01 Storage Guideline 5: Records Storage*.

When identifying risks to records, consider the following:

- The types of records held by the agency;
- The anticipated lifespan of the storage media used;
- The retention periods of the records;
- Any actions required to ensure the records remain accessible, readable and usable for the duration of their retention periods;
- Any access or security restrictions that apply and which records they apply to;
- How often data checks of the records are undertaken when they are in storage to ensure that the information they contain continues to be readable; and
- If storage is outsourced, whether the contract covers the agency's needs regarding the stored records.

The agency should ensure that they are aware of risks associated with the location of the storage area or facility. Examples of high risk areas may include basements prone to flooding, towers, tin sheds, shipping containers and facilities located outside the Australian legal jurisdiction. Examples of mitigation of risk may include using construction materials that will protect records from moisture, dust, fire and vermin, a policy directive to not store records outside of the Australian legal jurisdiction, or locating the floor level above the estimated 100 year flood level¹² for the anticipated lifespan of the building.

If cloud computing¹³ is being considered as a storage option, the agency should ensure that they are aware of the associated risks. Legal risks regarding cloud computing are related to the jurisdiction in which the records are actually stored (remember that this may well be in a different country or state to that of the agency or the office of the outsource organisation). Business risks regarding cloud computing are the same as those regarding records in the agency's system. They relate to loss of the record or access to the record, unauthorised access to the record, or loss of evidentiary value of the record.

Recommended actions for future storage

The recommended actions should be consistent with those described in the ICT and records management strategies and other business strategies and policies. Each action should be associated with someone responsible for it, resources required for it, measures to determine when it has been completed, and a timeframe for when it is to be completed by.¹⁴

¹² Melbourne Water, *Planning for Sea Level Rise – Interim Guidelines*, Melbourne Water, East Melbourne, viewed 4 August 2010, <<http://www.melbournewater.com.au/Planning-and-building/Forms-guidelines-and-standard-drawings/Documents/Planning-for-sea-level-rise-guidelines.pdf>>.

¹³ For information on the recordkeeping risks related to cloud computing, please see the ADRI *Advice on managing the recordkeeping risks associated with Cloud Computing*, viewed on 18 August 2010 <<http://adri.gov.au/content/products/cloud-computing.aspx>>.

¹⁴ For information about how to write actions, please refer to *PROS 10/10 Strategic Management Guideline 5: Records Management Strategy*.

Some examples of possible recommended actions for the future storage of records include the following:

- The development of procedures for the regular and routine examination of records held in storage on various media for information integrity (for example, that the print on paper records remains legible, that digital records have not been corrupted, or that the media used to capture records remains readable);
- Amendment of the ICT strategy to ensure that the migration and conversion strategies cover the storage needs of digital records, including non-current records stored on optical disk and other storage media;
- The development of off-site back-up storage for records considered to be vital to ongoing business operations as part of the disaster preparedness, management and recovery plan; or
- A review of the security of records stored within the agency to identify what improvements are required.

5.2. Compliance or Inspection Report

There will be a number of reports related to the storage of records. The majority of these are discussed later in this Guideline (see section 7) and are divided into compliance reports and maintenance reports.

The main document that will be needed for the storage programme is a compliance or inspection report that assesses the storage options chosen for the agency against the *PROV Agency Records Storage Specification* requirements. This may involve input from different teams across the agency. Where action is required to become compliant, this should be noted and planned for using the appropriate strategy or operational plan. In such instances, the evidence supplied to support the requirement would be the strategy or plan that covers the actions required. This provides evidence that the agency is working towards meeting the requirement.

The compliance or inspection report may include the following components:

- Summary of the current compliance status;
- Table of actions required and evidence supplied for each requirement;
- Endorsement by senior executive; and
- Appendix of evidence specified in the table.

The rating scale for determining the level of compliance with the *Agency Records Storage Specification* may be as follows:

- **Level 1 – Ad-hoc:** No systematic or formal approach exists in relation to this component of records management activity. Processes and practices are fragmented or nonexistent. Where processes and practices exist they are applied in an ad-hoc manner.
- **Level 2 – Managed:** Processes and practices are defined to varying degrees but are not applied consistently. Basic management controls and disciplines are in place.
- **Level 3 – Standardised:** Processes and practices are defined, documented, well understood and used consistently across the whole agency.

- **Level 4 – Predictable:** Processes and practices are actively managed and routinely measured to ensure delivery of desired results.
- **Level 5 – Optimised:** Processes and practices are continuously improved through innovation and organisational learning based on ongoing monitoring and review.

Appendix Eight provides an example of what a table of actions required and evidence supplied may look like.

5.3. Maintenance Plan

Maintenance is an ongoing activity that is part of routine agency operations. A maintenance plan as part of a records storage programme unifies various processes across the agency so that storage of public records may be holistically managed. Please see *PROS 11/01 Storage Guideline 5 Records Storage* for more information about maintenance plans.¹⁵

5.4. Disaster Preparedness, Management & Recovery Plan

The agency may already have a disaster management, business continuity or disaster recovery plan in place that adequately covers the storage of public records. If not, one may need to be developed. Please see *PROS 11/01 Storage Guideline 5 Records Storage* for more information about disaster management and preparedness and recovery plans.¹⁶

5.5. Endorsement

The reason for endorsing the storage programme for records is to ensure that management across the various sections of the agency agree with the chosen storage solution. That way, operations undertaken in different business units and across different teams can compliment each other and key knowledge can be shared.

Before submitting the final draft programme for endorsement request feedback from those responsible for the strategies and policies that the storage programme integrates with. This will help to build managerial support for the programme across the agency.

As the storage programme is linked directly to the agency's strategic plans, it should be endorsed by the agency executive when the strategic plans are endorsed.

¹⁵ More information on maintenance of storage facilities is located within *PROS 11/01 Storage Guideline 5: Records Storage*.

¹⁶ More information on disaster preparation and management is located in *PROS 11/01 Storage Guideline 5: Records Storage*.

6. Step Four: Deliver

This step involves implementing the endorsed records storage programme by storing public records in the manner determined as being suitable for their ongoing useability and readability according to the procedures developed.

Key tasks

Key tasks for this step are as follows:

- Set key delivery tasks for the implementation of the storage programme (section 6.1);
- Develop and implement procedures in effective records storage practices (section 6.2); and
- Provide ongoing and regular communication (including relevant training) to all stakeholder groups on records storage (section 6.3).

6.1. Key Delivery Tasks

One of the difficulties regarding delivering the agency's storage programme for records is that the actions required will be undertaken by different units, and perhaps by people outside of the agency itself. The components of the storage programme provide a way to link the strategic aspects of records storage to operations. They enable work undertaken by multiple business units to occur as part of a single business programme.

For example, as an operational plan, the storage plan is more detailed and specific regarding the storage needs of public records than the records management or ICT strategies. This makes translation of the actions required into section, team and individual performance plans easier.

Appendix Nine provides some examples of possible routine operational tasks that may be needed when incorporating delivery of the storage programme into business and performance plans.

6.2. Consistent & Efficient Practice

Successful delivery of the storage programme for records will depend on how well the strategic direction (described in the storage plan and related strategies) is captured into routine work processes. Two elements that will assist this process and aid good practice are:

- Documented processes and procedures¹⁷; and
- Practical information sessions and training.

¹⁷ Definitions of processes and procedures are located within section 4.6 of *PROS 10/10 Strategic Management Guideline 1: Records Management Policy*.

Documenting processes involved with the storage of records will help to identify the:

- Person or unit responsible for various parts of each process;
- Procedures needed to provide consistent and efficient work practice; and
- Content for information and training sessions.

This will help to unify actions required for the storage of records that need to be conducted by different business units across the agency, or by an external provider.

Procedures document good working practice and help to provide consistency of action, which is especially important for practices undertaken by more than one business unit. Procedures covered by a storage programme for records include (but are not limited to) the following:

- Inspection of storage areas and facilities for potential risks;
- Placing records in storage, including capture of sufficient information to enable them to be identified quickly;
- Tracking records when in transit to or from the storage area or facility;
- Retrieving records from storage;
- Refreshing of digital media;
- Conversion of digital records;
- Migration of digital records;
- Labelling and handling of digital media;
- Boxing and handling of hardcopy media;
- Checking records stored for information integrity;
- Conducting virus checks on media storing digital records;
- Identification and handling of pest infestation in records;
- Recovering infected or corrupted digital records identified in the data integrity or virus checks; and
- Determining appropriate storage media for digital records.

6.3. Communications & Training

To ensure a successful delivery of the storage programme, clear and effective communication is needed. The agency's communication plan will help with identifying who should be informed about what, and the best communication methods to use to achieve the desired results. This ensures that the right information is being supplied to the right people in an efficient manner, and that feedback is being received, collated, and fed into improving storage of records across the agency.

Appendix Ten provides the possible components of a communications plan for the storage of records.

When identifying key stakeholder groups to target regarding communications on the storage of records, consider the following:

- Who has responsibility for the storage of what records?
- Who can influence the storage of records?
- Who is usually communicated with regarding the storage of records?
- Who is reliant on what agency team or service provider for services regarding the storage of records?
- Who represents the interests of internal and external stakeholders regarding the storage of records?
- Who creates or uses agency policies regarding the storage of records?
- Who mandates, gives permission to, or resources the storage of records?

Appendix Eleven provides suggested stakeholder groups that records managers may engage with regarding the storage of records.

Communications may consist of procedures, templates and information manuals regarding acceptable records storage practices, supported by information sessions and training¹⁸. Promote continued good practice through regular stakeholder engagement.

Training may need to be provided on the following:

- Identifying possible conservation and preservation risks;
- Handling fragile records;
- Safe manual handling practices;
- The storage needs of different types of records; and
- Boxing and labelling practices.

Conservation and preservation risks will be relevant to the type of record, type of media, and the storage environment.¹⁹ The risk assessment conducted in step two can be used to identify the kinds of conservation and preservation risks that will be of most relevance. Consideration should also be given to the kinds of risks that various staff would have the opportunity to identify. For example, staff whose role is to retrieve records from shelves may be able to identify mould on a record, but not data corruption.

Communications should also include regular meetings, either formal or informal, designed to foster partnerships with other sections of the agency or relevant service providers. The reason for this is to enable a common understanding to be reached regarding what the possibilities, responsibilities and expectations are regarding the storage of records. This may involve negotiations with other teams where some of their needs are met by records management processes in order for recordkeeping requirements to be included in the other teams' processes.

Appendix Twelve provides examples of some key messages that may be required regarding records storage programme.

¹⁸ PARBICA's *Recordkeeping for Good Governance Toolkit* includes a very useful guideline on developing and implementing a training course on recordkeeping.

¹⁹ For more information on preservation please refer to *PROS 11/01 Storage Guideline 5: Records Storage*

7. Step Five: Monitor & Review

This step monitors the progress of the records storage programme. Undertaking regular monitoring and assessment activities provides valuable information about how successful the storage programme is. Information gathered can be used to feed into the annual assessment report required as part of the PROV *Storage Standard*, and for the improvement of the records storage programme.

Key tasks

Key tasks for this step are as follows:

- Identifying and implementing key monitoring and review tasks (section 7.1); and
- Placing the results of the monitoring and review tasks into reports so that it may be utilised for the continuous improvement of the agency's records storage practices (section 7.2).

7.1. Key Monitor & Review Tasks

The storage of records will require a range of monitoring and inspection activities that are likely to be undertaken by different sections across the agency, as well as by service providers and external professionals. For example, monitoring of fire-safety equipment may be undertaken by the local fire brigade or other external specialist, where as monitoring of digital media for potential data loss may be undertaken by the IT team. Keeping track of the various monitoring and inspection activities can be difficult if such activities are not part of a holistic agency plan.

Types of monitoring and inspection activities may generally be classified as being related to either compliance or maintenance.

Compliance

Compliance assessments or audits²⁰ are used to determine whether or not the current situation meets specified criteria.²¹ This information can be used to plan future actions, support business decisions, or feed into agency reporting activities.

For example, compliance assessments or audits can be used to determine whether:

- The agency is complying with its legislative and regulatory obligations regarding the storage of records;
- The direction described in the storage plan complies with the PROV *Storage Standard*;
- The agency is meeting its strategic direction regarding storage of records as documented in the records management and ICT strategies;
- Practice complies with the direction taken as described in the storage plan;

²⁰ For information on how to undertake a compliance audit programme please see *PROS 10/17 Operations Management Guideline 5: Compliance Audits*.

²¹ *PRO 53 Agency Storage Self-Assessment Checklist* may be a useful tool to assess storage facilities against the requirements of the Agency Records Storage Specification.

- The direction described in the storage plan is effective at managing the storage of records; and
- There have been any changes that will require adjustment of the direction taken, or the storage plan.

Appendix Thirteen provides some possible monitoring and assessment activities for compliance situations.

Maintenance

Maintenance inspections and assessments are undertaken to proactively address, or identify and remedy, risks to the accessibility, security, readability, and usability of public records in storage.²² This involves inspections of the following:

- Facilities (for example, to ensure that the facilities remain dust and pollutant free, that there is no threat of water leakage or seepage, and that the Building Code of Australia requirements continue to be met);
- Disaster prevention, management and recovery equipment and procedures (for example, to ensure that fire safety equipment installed is sufficient and appropriate for the types of records that it would be used to protect);
- Digital media (for example, to ensure that the digital media stored continues to be readable, usable and accessible whilst in storage);
- Digital records (for example, to determine whether or not there is risk of data loss or corruption, and therefore whether the records need to be migrated to new media);
- Pest prevention regimes (for example, to ensure that action has been taken to prevent threat of pest infestation); and
- Conservation or preservation works (for example, to identify records that need conservation works or preservation actions to ensure the records remain accessible, readable and useable for the duration of their retention periods).

Appendix Thirteen provides some possible monitoring activities for maintenance situations.

7.2. Report & Review for Continuous Improvement

Regular reports will provide essential information on three key areas:

- Progress (tracking what has been done and what is yet to be done);
- Areas for improvement (identifying what is not working to enable workable solutions to be identified and incorporated into future plans); and
- Risks in need of mitigation (identifying what the risk is and determining practical methods for successfully mitigating the risks).

Reporting against the storage programme will provide a means for collecting information from the various areas that impact on the storage of records. This will help with informed decision making and the setting of future strategy regarding records storage. It can also be used to feed into continuous improvement of the storage programme by identifying what is working, what is not working, and why.

²² For more information on storage maintenance please see *PROS 11/01 Storage Guideline 5: Records Storage*.

Appendix Fourteen provides a list of possible reports that may be useful.

The records storage programme should be reviewed at least every three to five years to match the coverage or review cycle of the agency plans (strategic and operational). This will ensure that the programme continues to meet business needs and legislative and regulatory obligations, whilst considering environmental and technological changes²³.

Triggers for undertaking a review of the records storage programme include (but are not limited to) the following:

- Identification of areas of high risk regarding current storage practices;
- Hardware or software advances regarding identification and management of data corruption and loss;
- Changes regarding the best media to store records on;
- Changes regarding the best conservation or preservation methods to use;
- Changes in strategic direction;
- Changes to the PROV *Storage Standard* and associated Specifications;
- Changes in agency business practice;
- Changes in the practice of shared service providers or APROSS facilities; and
- Other environmental, legislative or technological change.

²³ For further information about continuous improvement activities, please see *PROS 10/17 Operations Management Guideline 6: Continuous Improvement*.

8. References

Archives Office of Tasmania 2005, *Guideline 11: Physical Storage of State Records*, Tasmanian Archives and Heritage Office (TAHO), Hobart, accessed August 2014, <http://www.linc.tas.gov.au/__data/assets/pdf_file/0003/334974/State_Records_Guideline_No_11.pdf>.

Australasian Digital Recordkeeping Initiative (ADRI) 2010, *Advice on managing the recordkeeping risks associated with cloud computing*, Council of Australasian Archives and Records Authorities (CAARA), accessed August 2014, <<http://adri.gov.au/content/products/cloud-computing.aspx>>.

Blue Shield Australia 2010, *Prevent and Prepare*, Blue Shield Australia, accessed August 2014, <<http://www.blueshieldaustralia.org.au/prevent.html>>.

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Pacific Regional Branch International Council on Archives (PARBICA) 2010, *The Recordkeeping for Good Governance Toolkit Introduction Page*, PARBICA, viewed 17 July 2014, <<http://www.parbica.org/sharing/publications/recordkeeping-for-good-governance/index.aspx>>.

State Records Authority New South Wales 2000, revised 2004, 2012, *Solutions for Storage: Guidelines on the Physical Storage of State Records*, State Records Authority New South Wales, Sydney, accessed August 2014, <<http://www.records.nsw.gov.au/recordkeeping/advice/storage-and-preservation/solutions-for-storage/solutions-for-storage>>.

State Records South Australia 2009, *Adequate Records Management in Perspective: Storing Official Records*, State Records South Australia, Adelaide, accessed August 2014, <http://www.archives.sa.gov.au/files/management_ARM_storing.pdf>.

Territory Records Office 2008, *Guideline 7: Guideline for Records Management: Physical Storage of Records*, Territory Records Office, Canberra, accessed August 2014, <http://www.territoryrecords.act.gov.au/__data/assets/pdf_file/0005/472703/Guideline-No-7-Physical-Storage-August-2008.pdf>.

Legislation

Information Privacy Act 2000 (Vic)

Public Records Act 1973 (Vic)

All current Victorian legislation is available at <http://www.legislation.vic.gov.au>.

Standards

Archives New Zealand 2007, *Storage Standard*, Archives New Zealand, Wellington, New Zealand, accessed August 2010,
<<http://continuum.archives.govt.nz/files/file/standards/s2.pdf>>.

International Organization for Standardization 2003, *ISO 11799 Information and Documentation – Document Storage Requirements for Archive and Library Materials*, ISO, Geneva, Switzerland.

National Archives of Australia 2002, *Standard for the Physical Storage of Commonwealth Records*, National Archives of Australia, Canberra, accessed August 2010,
<<http://www.naa.gov.au/records-management/publications/storage-standard.aspx>>.

Standards Australia 1996, *AS 4390-6 Australian Standard on Records Management: Part 6 Storage [Withdrawn]*, Standards Australia, Homebush.

Standards Australia 2002, *AS ISO 15489.1 Australian Standard Records Management Part 1 General*, Standards Australia, Sydney.

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Territory Records Office 2008, *Standard 7: Standard for Records Management: Physical Storage of Records*, Territory Records Office, Canberra, accessed July 2014,
<<http://www.legislation.act.gov.au/ni/2008-436/default.asp>>.

Other Resources

For further information on disaster management please refer to the following:

Blue Shield Australia 2010, *Blue Shield Australia Home Page*, Blue Shield Australia, accessed July 2014, <<http://www.blueshieldaustralia.org.au/index.html>>.

Library and Archives Canada 2008, *Emergency Preparedness*, Library and Archives Canada, accessed December 2010, <<http://www.collectionscanada.gc.ca/about-us/emergency-preparedness/index-e.html>>.

The National Archives 2010, *Disaster Management*, The National Archives, United Kingdom, accessed December 2010, <<http://www.nationalarchives.gov.uk/information-management/guidance/d.htm>>.

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Soderlund Consulting 2000, *Be Prepared: Guidelines for Small Museums for Writing a Disaster Preparedness Plan*, Heritage Collections Council, Canberra, accessed July 2014, <http://www.collectionsaustralia.net/includes/get_file.inc.php?id=1>.

Standards Australia 2006, *HB 292: A practitioners guide to business continuity management*, Standards Australia, Sydney.

For more information about the storage of public records, please contact:

Government Services
Public Record Office Victoria
Ph: (03) 9348 5600
Fax: (03) 9348 5656
Email: agency.queries@prov.vic.gov.au
Web: www.prov.vic.gov.au

Appendix One: ISO Storage Standards

| <i>Number (Year)</i> | <i>Title</i> | <i>Possible Relevance</i> |
|----------------------|---|---|
| ISO 11799 (2003) | Information and documentation – Document storage requirements for archive and library materials | <ul style="list-style-type: none"> • Temperature and humidity table for extended term storage of most media types • Provides information on storage facilities, including floor loading capacity, security, equipment, lighting, air quality and disaster control |
| ISO 18911 (2010) | Imaging materials – Processed safety photographic films – Storage practices | <ul style="list-style-type: none"> • Covers photographic film that meet the flammability specifications identified in ISO 18906 (nitrate based films are identified as a potential fire hazard and recommended to be stored separately from other records) • Divides the storage environment into medium term (up to ten years) and extended term storage (temperature and humidity range provided) • Provides information on warm up time, air purity, handling practice, inspection practice and the possible result of storing the media in incorrect temperature and humidity ranges |
| ISO 18918 (2000) | Imaging materials – Processed photographic plates – Storage practices | <ul style="list-style-type: none"> • Divides the storage environment into medium term (up to ten years) and extended term storage (temperature and humidity range provided) • Provides information on environmental conditions, handling practice, and inspection practice |
| ISO 18920 (2011) | Imaging materials – Processed photographic reflection prints – Storage practices | <ul style="list-style-type: none"> • Divides the storage environment into medium term (up to ten years) and extended term storage (temperature and humidity range provided) • Provides information on environmental conditions, handling practice, inspection practice |
| ISO 18923 (2000) | Imaging materials – Polyester-base magnetic tape – Storage practices | <ul style="list-style-type: none"> • Divides the storage environment into medium term (up to ten years) and extended term storage (temperature and humidity range provided) • Provides information on enclosures, preparation, housing, monitoring, cleaning and acclimatisation times to reach the desired temperature and humidity levels for tapes of various widths |
| ISO 18925 (2013) | Imaging materials – Optical disc media – Storage practices | <ul style="list-style-type: none"> • Provides information on the environmental conditions, including temperature and humidity limits, contaminants, and magnetic fields • Provides information on the enclosures (including labelling), preparation (including acclimatization), housing, rooms, fire protection, and inspection practice |
| ISO 18928 (2013) | Imaging materials – Unprocessed photographic films and papers – Storage practices | <ul style="list-style-type: none"> • Provides information on the temperature ranges, humidity levels, and handling conditions (including acclimatisation times) for unprocessed films and papers |
| ISO 18934 (2011) | Imaging materials – Multiple media archives – Storage environment | <ul style="list-style-type: none"> • Divides the temperature and humidity ranges into four main sectors (room, cool, cold and sub-zero) to enable storage of multiple media types in the same space • Provides guidance on times for different media to adjust to storage temperatures |

Appendix Two: Key Business Strategies

For the storage programme to be effective it will need to be integrated with the key business strategies and polices. These include (but are not limited to) the following:

- Records management strategy and policy;
- Risk management strategy and policy;
- Information management or knowledge management strategy and policy;
- ICT strategy and policy;
- Occupational health and safety strategy and policy;
- Environmental management strategy and policy;
- Security strategy and policy;
- Facilities management plan;
- Disaster preparedness, management and recovery plans; and
- Contract management plans.

Records Management

The records management strategy²⁴ provides the overarching plan for records management in the agency. This includes the overarching plan for the storage of the agency's records. The strategic direction described in the records management strategy regarding storage will be implemented through the storage programme. The records management policy²⁵ supports this process by providing any directives that must be followed regarding storage of records.

Risk Management

The risk management strategy provides the overarching plan for risk management in the agency. There are a number of risks associated with the storage of public records (see section 3.6 above). Alignment of the risk management and records management strategies is requirement 13 of *Strategic Management Specification*. The storage programme will need to include a process to identify potential risks related to records storage, report them to the risk manager in accordance with the strategy and policy, and mitigate the risks identified.

Information or Knowledge Management

The information management strategy or knowledge management strategy provides the overarching plan for information management or knowledge management in the agency. Alignment of the information or knowledge management and records management strategies is requirement 11 of the *Strategic Management Specification*. The storage programme will need to address any areas of overlap between records storage and information or knowledge management.

²⁴ For information on how to develop a records management strategy, please see *PROS 10/10 Strategic Management Guideline 5: Records Management Strategy*.

²⁵ For information on how to develop a records management policy, please see *PROS 10/10 Strategic Management Guideline 1: Records Management Policy*.

Information & Communication Technologies

The ICT strategy provides the overarching plan for information and communication technology management in the agency. Alignment of the ICT and records management strategies is requirement 12 of the *Strategic Management Specification*. The storage programme will need to cover storage of all agency records (including digital), and the ICT strategy may well identify methodologies the ICT unit uses that can assist with the ongoing preservation of digital records in storage.

Occupational Health & Safety

The occupational health and safety (OH&S) strategy provides the overarching plan for OH&S in the agency. Alignment of the OH&S and records management strategies is requirement 13 of the *Strategic Management Specification*. The storage programme will need to address OH&S concerns regarding the storage of records as storage will involve manual handling, and other actions that may concern the health and safety of storage personnel.

Environmental Management

The environmental management strategy provides the overarching plan for environmental management in the agency. Alignment of the environmental management and records management strategies is requirement 13 of the *Strategic Management Specification*. The storage programme will need to ensure that any environmental issues affecting storage areas, storage facilities, or records in storage, are identified and addressed.

Security

The security strategy provides the overarching plan for security in the agency. Alignment of the security and records management strategies is requirement 13 of the *Strategic Management Specification*. The storage programme will need to ensure that records held in storage and the areas or facilities that hold them are protected from unauthorised access, tampering, and unauthorised destruction.

Facilities Management

The facilities management plan provides direction regarding how the agency's facilities are to be managed over the next few years. Such plans will need to cover the requirements of agency managed storage areas and facilities. This includes actions required to upgrade facilities and ongoing maintenance. The maintenance plan for the storage programme will need to be aligned with or be part of the facilities management plan.

Facilities management includes (but is not limited to) the following:

- Integrated pest management;
- General cleaning and vacuuming to remove dirt and dust; and
- Monitoring storage areas for signs of leaks or water influx.

Disaster Preparedness, Management & Recovery

The disaster preparedness, management and recovery plans (which may include a business continuity plan) provide direction regarding how the agency will manage, recover, and continue business operations in the event of a disaster. Storage of public records is an essential element of such plans as the conditions in which records are held and managed play an important part in the survival of records required for ongoing business operations. The development of a disaster preparedness, management and recovery plan is a requirement of the *Agency Records Storage Specification*. The storage programme will need to ensure that disaster preparedness, management and recovery plans are developed by the agency and that they appropriately cover records held in storage.²⁶

Contract Management

Contract management plans provide the direction regarding how the agency will manage its outsourced activities²⁷. Storage of public records may be outsourced by the agency to secondary storage suppliers approved by PROV under the APROSS programme. Although the APROSS programme certifies that the storage facilities meet PROV's criteria²⁸, the agency will need to manage other elements of their storage programme through their contracts with the specific APROSS facility. This includes (but is not limited to) the following:

- Retrieval management and costs;
- Exit fees and conditions;
- Authorised destruction services;
- Digitisation or scan upon demand services;
- Processing records scheduled for transfer to PROV as State Archives;
- Identification and tracking; and
- Additional access or security measures required.

²⁶ For further information about disaster preparedness and management please see *PROS 11/01 Storage Guideline 5: Records Storage*.

²⁷ For further information about managing records of outsourced activities, please see *PROS 10/10 Strategic Management Guideline 2: Managing Records of Outsourced Activities*.

²⁸ Requirements for APROSS certification may be found within *PROS 11/01 S3 APROSS Specification* and associated Fact Sheets on *Becoming an APROSS (Storage FS1)* and *Maintaining APROSS Certification (Storage FS 2)*. For information about placing records in an APROSS please see *PROS 11/01 Storage Guideline 1: APROSS*.

Appendix Three: Key Knowledge Table

The key knowledge table below provides some examples of where information about various aspects of storage may be located. This may be a key resource, such as a specific document or system, or a relevant stakeholder, such as someone from a relevant business unit.

| <i>Key Knowledge Required</i> | <i>Key Resources and Tools</i> | <i>Key Business Units</i> |
|--|---|---|
| Records currently placed in storage | <ul style="list-style-type: none"> Storage Plan Register of records placed in storage, or put onto back-up tape List of records currently stored in an APROSS facility | <ul style="list-style-type: none"> IT Team Records Management Team APROSS |
| Records likely to be placed in storage over the next three to five years | <ul style="list-style-type: none"> Storage Plan | <ul style="list-style-type: none"> IT Team Records Management Team |
| Equipment or systems required to identify, read, understand or use records held or to be placed in storage | <ul style="list-style-type: none"> Business Classification Scheme Instruction Manuals Procedures governing use of systems | <ul style="list-style-type: none"> IT Team Records Management Team |
| Creation date of the record | <ul style="list-style-type: none"> Register of files and other records - Document or Record Management System | <ul style="list-style-type: none"> IT Team Records Management Team |
| Risks associated with aging records | <ul style="list-style-type: none"> Risk Assessment Inspection Logs Risk Register | <ul style="list-style-type: none"> IT Team Records Management Team Risk Management Team Legal Services Team |
| Media and formats of records held by the agency | <ul style="list-style-type: none"> ICT Policy Records Management Policy | <ul style="list-style-type: none"> IT Team Records Management Team |
| Longevity of the media and formats used by the agency | <ul style="list-style-type: none"> ICT Policy ICT Strategy Records Management Strategy Records Management Policy <i>VERS Specification 4: Long Term Preservation Formats</i> <i>PROV Advice 13: Advice on VERS Long Term Preservation Formats</i> | <ul style="list-style-type: none"> IT Team Records Management Team |
| Risks associated with the media and formats used | <ul style="list-style-type: none"> Risk Assessment Inspection Logs Risk Register | <ul style="list-style-type: none"> IT Team Records Management Team Risk Management Team Legal Services Team |
| Housings, carriers, or boxes best suited to the media and format of the record | <ul style="list-style-type: none"> Relevant International Standard²⁹ Storage or Boxing Procedures | <ul style="list-style-type: none"> IT Team Records Management Team APROSS |
| Shelving best suited to the media and format of the record | <ul style="list-style-type: none"> Relevant International Standard³⁰ Storage Procedures | <ul style="list-style-type: none"> IT Team Records Management Team APROSS |

²⁹ For a list of International and Australian Standards of relevance to Storage please see the *PROS 11/01 S1 Agency Records Storage Specification* Appendix 1.

³⁰ For a list of International and Australian Standards of relevance to Storage please see the *PROS 11/01 S1 Agency Records Storage Specification* Appendix 1.

| <i>Key Knowledge Required</i> | <i>Key Resources and Tools</i> | <i>Key Business Units</i> |
|---|---|---|
| Environmental conditions preferred by the media and format of the record | <ul style="list-style-type: none"> • Relevant International Standard³¹ • Storage Plan • ICT Policy • Records Management Policy | <ul style="list-style-type: none"> • IT Team • Records Management Team • APROSS Facility Staff |
| Retention period of records held in storage or to be placed in storage over the next few years | <ul style="list-style-type: none"> • Relevant Retention and Disposal Authority³² • Register of records placed in storage, or put onto back-up tape • List of records currently stored in an APROSS facility | <ul style="list-style-type: none"> • Records Management Team • IT Team |
| Conditions that the records will need to be placed in to ensure their survival for the duration of their retention period | <ul style="list-style-type: none"> • <i>PROS 11/01 S1 Agency Records Storage Specification</i> • Relevant International Standard³³ | <ul style="list-style-type: none"> • Records Management Team • IT Team • Facilities Manager • APROSS |
| Disposal requirements of records held in storage or to be placed in storage over the next few years | <ul style="list-style-type: none"> • Relevant Retention and Disposal Authority³⁴ • Register of records placed in storage, or put onto back-up tape • List of records currently stored in an APROSS facility | <ul style="list-style-type: none"> • Records Management Team • IT Team • |
| Which records held in storage are vital to the ongoing operations of the agency | <ul style="list-style-type: none"> • Vital Records Register • Business Continuity Plan • Disaster Preparedness, Management and Recovery Plan | <ul style="list-style-type: none"> • IT Team • Records Management Team • Other agency business units |
| Any access or security provisions required | <ul style="list-style-type: none"> • Security Policy • ICT Policy • Records Management Policy • Protective Security Manual | <ul style="list-style-type: none"> • Facilities Manager • APROSS • IT Team • Records Management Team |
| Retrieval processes for records held in storage including those held by APROSS facilities or shared services | <ul style="list-style-type: none"> • Record retrieval procedures • ICT document retrieval procedures • Information Manuals | <ul style="list-style-type: none"> • IT Team • Records Management Team • APROSS |
| Disaster preparedness, management and recovery | <ul style="list-style-type: none"> • Vital Records Register • Business Continuity Plan • Disaster Preparedness, Management and Recovery Plan • <i>Blue Shield Australia - Disaster Management</i> | <ul style="list-style-type: none"> • IT Team • Records Management Team • Other agency business units • Facilities Manager • APROSS |
| How often records held in storage will be required for use by the agency | <ul style="list-style-type: none"> • Access and retrieval logs • ICT Policy • Records Management Policy | <ul style="list-style-type: none"> • IT Team • Records Management Team • Registry Office Staff • APROSS |
| Risks associated with the media and formats used | <ul style="list-style-type: none"> • Risk Assessment • Inspection Logs • Risk Register | <ul style="list-style-type: none"> • IT Team • Records Management Team • Risk Management Team • Legal Services Team |

³¹ For a list of International and Australian Standards of relevance to Storage please see the *PROS 11/01 S1 Agency Records Storage Specification* Appendix 1.

³² For a list of current Retention and Disposal Authorities for Victorian Government please see PROV's website <<http://prov.vic.gov.au/government/disposal-and-transfer/retention-and-disposal-authorities>>.

³³ For a list of International and Australian Standards of relevance to Storage please see the *PROS 11/01 S1 Agency Records Storage Specification* Appendix 1.

³⁴ For a list of current Retention and Disposal Authorities for Victorian Government please see PROV's website <<http://prov.vic.gov.au/government/disposal-and-transfer/retention-and-disposal-authorities>>.

Appendix Four: Storage Options

The following table provides some examples, benefits, and risks for the storage options of in-house, outsourced, onsite, and offsite.

| <i>Storage Option</i> | <i>Examples</i> | <i>Benefits</i> | <i>Risks</i> |
|-----------------------|--|--|--|
| In-house | <ul style="list-style-type: none"> • Digital media vault • Shelves or compactus • Agency warehouse or purpose built facility | <ul style="list-style-type: none"> • Direct agency control of the storage facilities or area | <ul style="list-style-type: none"> • Insufficient monitoring and maintenance due to lack of resources |
| Outsourced | <ul style="list-style-type: none"> • APROSS facility • Shared Services | <ul style="list-style-type: none"> • Records are in conditions likely to preserve their longevity • Vital records are more likely to survive if a disaster occurs at the agency's location | <ul style="list-style-type: none"> • Unless specifically captured in the contract, recordkeeping requirements may not be addressed |
| Onsite | <ul style="list-style-type: none"> • Agency computer room or digital media vault • Agency room with shelving • Compactus shelving in office space area | <ul style="list-style-type: none"> • Records are located close to the office space • Direct agency control of the storage facilities | <ul style="list-style-type: none"> • More likely to store and ignore, reducing the longevity of records • Less likely to have ongoing preservation conditions required for the records |
| Offsite | <ul style="list-style-type: none"> • APROSS facility • Back up copies on a second server in a separate location • Agency warehouse or purpose built facility, away from office space area | <ul style="list-style-type: none"> • Records are in conditions likely to preserve their longevity • Vital records are more likely to survive if the agency is involved in a disaster situation | <ul style="list-style-type: none"> • Information security breaches if the records are not protected with appropriate security • Non-compliance with legislative and regulatory requirements if contracts do not adequately convey them |

Appendix Five: Examples of Storage Risks

The following table provides some examples of storage risks described in accordance with the risk methodology outlined in *PROS 10/10 Strategic Management Guideline 6: Records and Risk Management*.

| <i>Risk Category</i> | <i>Risk</i> | <i>Treatment Option</i> | <i>Description</i> |
|-------------------------|---|-------------------------------------|---|
| Accidental Loss | Risk of the agency failing to win a court case due to not being able to identify and access a key document that was placed in storage. | Changing the likelihood of the risk | All records held in storage are identified and clearly described in the agency database along with the details needed for retrieval and access |
| Accidental Loss | Risk of the agency not being able fulfil its legislative responsibilities regarding supplying a freedom of information request due to the inability to read and understand the record once it has been accessed | Accepting the risk | The current storage programme includes processes for monitoring, migrating, converting and preserving records, which minimises the risk occurring |
| Environmental Damage | Risk of the agency being incapable of continuing operations of a key function due to not being able to protect from damage or loss some vital records due to a fire. | Changing the likelihood of the risk | All records identified as being vital to the agency are copied, and the copies are stored in a different location to that of the original record |
| Unauthorised Disclosure | Risk of political and public embarrassment due to the agency not protecting a confidential file of a child at risk from unauthorised access | Changing the likelihood of the risk | All records held in storage or in transit to or from storage have security measures in place to protect them from unauthorised access |

Appendix Six: Records Storage Processes

Records storage processes discussed fall into the following basic categories:

- Compliance;
- Preservation;
- Facilities maintenance;
- Security; and
- Retrieval.

Compliance

Processes for compliance are assessment based. Their purpose is to determine how well the agency is meeting a specific standard, policy, or directive by assessing against specific criteria. Processes for compliance include (but are not limited to) the following:

- Self-assessments³⁵ or inspections against specific criteria;³⁶
- Third party audits or inspections against specific criteria; and
- Completion of actions required to address any compliance gaps.

A compliance process can be used to demonstrate how well the agency meets the PROV *Storage Standard* (PROS 11/01) and to feed actions needed into future agency strategies and business plans.

Preservation

Processes for preservation are designed to ensure that the records remain accessible, readable, and useable for the duration of their retention periods whilst they are in storage.³⁷ Preservation processes include (but are not limited to) the following:

- Appropriate shelving and casings for the records;
- Appropriate handling, boxing and labelling practices;
- Use of the Victorian Electronic Records Strategy (VERS)³⁸;
- Use of migration strategies;
- Use of conversion strategies; and
- Undertaking a programme of planned conservation works.

Preservation processes can be used to demonstrate how the agency ensures that a record remains accessible, readable and useable for the duration of its retention period.

³⁵ For further information about how to conduct a self-audit for recordkeeping, please see *PROS 10/17 Operations Management Guideline 5: Compliance Audits*.

³⁶ Please see *PRO 53 Agency Storage Self Assessment Checklist*.

³⁷ For information on preservation of records please see *PROS 11/01 Storage Guideline 5: Records Storage*.

³⁸ For further information about VERS please refer to the PROV Website <<http://prov.vic.gov.au/government/vers/implementing-vers/standard-2>>.

Facilities Maintenance

Processes for maintenance of facilities can be used for storage areas as well as for storage facilities.³⁹ The purpose of facilities maintenance processes is to ensure that the building or room used to store public records provides the conditions required for the ongoing storage of public records. Facilities maintenance processes include (but are not limited to) the following:

- Floor loading capacity assessment;
- Integrated pest management systems;
- Temperature and humidity controls and monitoring;
- Ongoing building maintenance and monitoring; and
- Fire safety systems.

Facilities maintenance processes can be used to demonstrate how the storage areas and facilities used to store public records protect the records whilst they are in storage.

Security

Processes for the security of public records are designed to ensure that records held in storage remain free from unauthorised deletion, destruction, tampering or access.⁴⁰ Security processes include (but are not limited to) the following:

- Building security management;
- Access codes and restrictions management; and
- Management of the security of records in transit.

Security processes can be used to demonstrate how the public records stored by the agency remain free from unauthorised deletion, destruction, tampering and access.

Retrieval

Processes for the retrieval of records are designed to identify, locate, and access within a reasonable time agency records held in storage. Retrieval processes include (but are not limited to) the following:

- Capture⁴¹ of sufficient information when placing records into storage to retrieve them efficiently;
- Controls⁴² for the tracking of records to and from storage; and
- Systems for ensuring that access⁴³ is authorised.

Retrieval processes can be used to demonstrate how aware the agency is of the current location of its records and who is using them.

³⁹ For more information on maintenance of storage facilities, please see *PROS 11/01 Storage Guideline 5: Records Storage*.

⁴⁰ For information on security of storage facilities, please see *PROS 11/01 Storage Guideline 9: Records Storage: Security*

⁴¹ For further information about Capture of records, please see *PROS 11/07 Capture Standard* and associated documentation.

⁴² For further information about Controls for records, please see *PROS 11/09 Control Standard* and associated documentation.

⁴³ For further information about Access of records, please see *PROS 11/10 Access Standard* and associated documentation.

Appendix Seven: Examples of Strategies & Processes

The following table provides some examples, processes and strategies for various record types.

| <i>Record type</i> | <i>Example</i> | <i>Process</i> | <i>Strategy / Plan</i> |
|---------------------|---|--|---|
| Digital records | <ul style="list-style-type: none"> • Optical disk (CD / DVD) • Magnetic tape • Hard disk drive | <ul style="list-style-type: none"> • VERS • Migration • Conversion | <ul style="list-style-type: none"> • ICT • Risk management |
| Large sized volumes | <ul style="list-style-type: none"> • Registers • Rate books | <ul style="list-style-type: none"> • Floor loading capacity • Shelf size and weight capacity • Appropriate handling | <ul style="list-style-type: none"> • Facilities management • Occupational health and safety |
| Maps and plans | <ul style="list-style-type: none"> • Survey maps • Building plans | <ul style="list-style-type: none"> • Conservation • Appropriate handling • Conversion | <ul style="list-style-type: none"> • Security • Digitisation |
| Photographs | <ul style="list-style-type: none"> • Glass plate negatives • Black and white • Colour | <ul style="list-style-type: none"> • Climate control • Appropriate housing • Appropriate handling | <ul style="list-style-type: none"> • Records management • Information or knowledge management |
| Paper file | <ul style="list-style-type: none"> • Correspondence file • Subject file | <ul style="list-style-type: none"> • Appropriate boxing • Tracking controls • Metadata capture | <ul style="list-style-type: none"> • Disaster preparedness, management and recovery • Contract management |

Appendix Eight: Possible Compliance Report Table

The following table provides an example of how a compliance report may be set up. A compliance table is being used that summarises how the requirement is to be met. This includes the current rating, position title of the person responsible for undertaking the check, action planned to meet compliance, and a list of the evidence supporting the information supplied.

| <i>Requirement⁴⁴</i> | <i>Rating</i> | <i>Checked by</i> | <i>Action Required</i> | <i>Evidence</i> |
|---|---------------------|--------------------|--|--|
| 1. All semi-current and non-current public records in the custody of the agency are stored in a storage area or facility that has been certified as being compliant with this specification | Level 2: Managed | Facilities Manager | <ul style="list-style-type: none"> Device to measure temperature and humidity of storage area to be installed | <ul style="list-style-type: none"> Maintenance Plan |
| | | Records Manager | <ul style="list-style-type: none"> Status of records currently stored in the old meeting room to be determined | <ul style="list-style-type: none"> Storage Plan |
| | | IT Manager | <ul style="list-style-type: none"> Back-up tapes held by shared services to be checked | <ul style="list-style-type: none"> ICT Strategy Storage Plan |
| 2. Storage areas and facilities used by the agency have been assessed as being compliant with this Specification by the agency, and a report of compliance has been endorsed by a senior executive and submitted to PROV who may inspect the premises at the discretion of the Keeper of Public Records | Level 2: Managed | Facilities Manager | <ul style="list-style-type: none"> Device to measure temperature and humidity of storage area to be installed | <ul style="list-style-type: none"> Maintenance Plan |
| | | Records Manager | <ul style="list-style-type: none"> Status of records currently stored in the old meeting room to be determined Completed and signed report to be submitted to PROV | <ul style="list-style-type: none"> Storage Plan Records Management Strategy |
| | | IT Manager | <ul style="list-style-type: none"> Back-up tapes held by shared services to be checked | <ul style="list-style-type: none"> ICT Strategy Storage Plan |
| | | Senior Executive | <ul style="list-style-type: none"> To endorse Disaster Preparedness, Management and Recovery Plan To sign completed report | <ul style="list-style-type: none"> Disaster Preparedness, Management and Recovery Plan Storage Compliance Report |

⁴⁴ Requirements have been taken from *PROS 11/01 S1 Agency Records Storage Specification*.


Appendix Nine: Examples of Storage Tasks

The following table provides some examples of operational storage tasks that may need to be undertaken, the recommended frequency, responsibility and possible measure.

| <i>Task</i> | <i>Frequency</i> | <i>Responsibility</i> | <i>Measure</i> |
|---|------------------|-----------------------------------|---|
| Check of records storage capacity to ensure that the level remaining will be sufficient for the agency's recordkeeping needs | Monthly | Records Management Team / IT Team | % available space |
| Check of media in storage to ensure that integrity of the information contained on them remains intact | Quarterly | Records Management Team / IT Team | % identified information integrity issues resolved |
| Identification and migration of digital media in storage to new media to ensure that digital records contained on them remain accessible and readable | As required | IT Team | % media identified as having digital records requiring migration successfully migrated to new media |
| Check of containers that house records to ensure they protect the records from damage | Monthly | Records Management Team / IT Team | % requiring re-housing in appropriate containers |
| Check of temperature and humidity levels in the storage areas containing records to ensure they remain stable | Monthly | Facilities Team | % °C and RH deviation |
| Check of storage areas to ensure they are free of dust and other pollutants | Weekly | Facilities Team | % dust and pollutants identified removed |
| Check of storage areas to ensure they are free from direct sunlight or UV radiation | Monthly | Facilities Team | % detected source of direct sunlight or UV radiation removed |
| Check of fire safety equipment within storage areas to ensure they meet required standards | Monthly | Facilities Team | % identified fire safety equipment issues resolved |
| Check of digital storage areas to ensure they remain free from magnetic electrical fields | Monthly | Facilities Team | % detected magnetic fields removed |

Appendix Ten: Components of a Communication Plan

The following table provides definitions and examples of text that may be used for the various components of a communication plan for the storage of records.

| Component | Definition | Examples |
|------------------|--|--|
| Objectives | The main outcomes that are desired through communications regarding the storage programme | <ul style="list-style-type: none"> Identify target audiences with common interests in the storage of records Develop key messages to promote the effective storage of records |
| Scope | What is to be covered, and what is not to be covered by the communication plan | <ul style="list-style-type: none"> The scope of this communication plan extends to all stakeholders that have some interest in the storage of records It covers marketing and communication activities for all storage of agency records, including those held within shared services and within APROSS facilities It does not include secondary, internal communication within shared services or APROSS facilities |
| Goal | The main desired outcome that the objectives will achieve | <ul style="list-style-type: none"> The overall communication goal is to foster collaboration and an understanding among all stakeholders of the need to store records in compliance with the PROV Storage Standard and associated Specifications The overall communication goal is to foster collaboration and an understanding among all stakeholders of the need to store records in a manner that ensures they remain readable, accessible, usable, and secure for the duration of their retention period |
| Target Audiences | Identification of the main stakeholder groups that are to be targeted in communications regarding storage of digital records | <ul style="list-style-type: none"> Those responsible for ICT or IT Those responsible for the management of agency facilities Those responsible for the development and management of agency contracts Those responsible for the management of agency records Those responsible for the storage of agency records |
| Key Messages | Divided into target audience groups, key messages identify the main high level points that are to be communicated | <ul style="list-style-type: none"> Active management of records in storage is required Semi-current and non-current records stored need regular information integrity checks Digital records stored on digital media need to be refreshed or migrated to new media regularly (every five years) |
| Branding | An easily recognisable name, logo or slogan to link products as belonging to a single project or goal | <ul style="list-style-type: none"> Victorian Electronic Records Strategy  <ul style="list-style-type: none"> <forever digital> |
| Tools | Identification of the main tools to be used in communications to target audiences | <ul style="list-style-type: none"> Meetings Email Posters |
| Delivery | Identification of which communications will be delivered to which audiences (delivery may be divided into stages or phases) | <ul style="list-style-type: none"> Activity 1: Email quarterly status reports Activity 2: Monthly stakeholder meeting |

Appendix Eleven: Possible Stakeholder Groups

The following table provides some relevant stakeholder groups that should be engaged with to ensure that records storage is effectively managed. It also provides a reason for engaging with the suggested stakeholder group.

| <i>Stakeholder Group</i> | <i>Reason for Engagement</i> |
|---|--|
| The IT or ICT team | To ensure that the requirements of digital storage are mapped into ICT strategies and policies |
| The executive or leadership team | To endorse the records storage programme, and support actions required to achieve it |
| The person or people responsible for risk management | To ensure that risks identified with the current storage of records are recorded, and that possible future risks are captured in risk management plans so they may be mitigated |
| The person or people responsible for contract management | To ensure that contracts with outsourced providers include provisions for the storage of records, and to ensure that contracts with APROSS facilities cover the agency's records storage needs |
| Agency employees (including contractors and volunteers) who store records | To ensure that they are aware of what is required regarding the storage of current, semi-current and non-current records |
| Shared services or APROSS facilities involved with the storage of records | To ensure that records continue to be preserved so that they remain secure, useable, accessible and readable for the duration of their retention period |
| The person or people responsible for facilities management | To ensure that facilities within the agency used for the storage of records meet the conditions required by the Storage Standard |

Appendix Twelve: Examples of Storage Communications

The following table provides some examples of key messages, methods and audiences for various aspects of records storage.

| <i>Key Message</i> | <i>Method</i> | <i>Audience</i> |
|---|---|---|
| Records stored must remain accessible and usable for the duration of their retention periods | <ul style="list-style-type: none"> Meeting to clarify recordkeeping requirements for records in storage | <ul style="list-style-type: none"> ICT Team Records Management Team Information Management Team Shared Services IT Unit Contract Managers APROSS facilities |
| ICT and records management activities regarding the storage of digital records must be aligned | <ul style="list-style-type: none"> Ongoing catch-up meetings between key personnel | <ul style="list-style-type: none"> ICT Team Records Management Team Information Management Team |
| Prevent damage to records by using best practice methods when labelling, boxing, and handling records | <ul style="list-style-type: none"> Information sessions Posters Procedures | <ul style="list-style-type: none"> Agency staff who store records Contractors who store records Volunteers who store records |
| Including records storage requirements in business strategies other than records management, including ICT and facilities management, has business benefits | <ul style="list-style-type: none"> Meeting to clarify Business case | <ul style="list-style-type: none"> Executive or Leadership Team |
| Including requirements for the storage and management of records in contracts ensures that the agency's responsibilities regarding all records stored are addressed | <ul style="list-style-type: none"> Meeting to clarify Document outlining key points that a contract should include regarding records storage Information session | <ul style="list-style-type: none"> Contract Managers |
| Mitigation of the risks related to information loss through improved records storage methods and practices | <ul style="list-style-type: none"> Meeting to clarify Addition to risk register | <ul style="list-style-type: none"> Risk Management Team IT Team |
| Appropriate management of the facilities used to store records is an essential aspect of preventing information loss | <ul style="list-style-type: none"> Meeting to clarify Information sessions | <ul style="list-style-type: none"> Facilities Management Team |

Appendix Thirteen: Examples of Assessment Activities

The following tables provide some examples of situations and associated monitoring or assessment actions regarding the storage of records.⁴⁵ The tables are divided into compliance and maintenance to illustrate the difference between the two types of monitoring and assessment activities.

Compliance Monitoring & Assessment

| Situation | Actions |
|--|---|
| Legislative and regulatory obligations | <ul style="list-style-type: none"> • Identity of legislative and regulatory obligations regarding the storage of records have been noted • Legislative and regulatory obligations regarding the storage of records are addressed by the strategic direction of the agency regarding storage as described in strategies and business plans |
| Strategic direction | <ul style="list-style-type: none"> • Key performance indicators (KPI) from the strategies associated with the storage of records are placed into the appropriate business and performance plans • KPI regarding the storage of records are met • KPI regarding the storage of records are reviewed and updated |
| Direction complies with the <i>PROV Storage Standard</i> | <ul style="list-style-type: none"> • Annual assessment of records storage programme against the requirements of the <i>PROV Storage Standard</i> • Areas of non-assessment have been noted • The storage plan and relevant strategies have been amended to include actions required to remedy the situation |
| Practice complies with direction | <ul style="list-style-type: none"> • Performance reviews address KPI related to storage of records • Procedure reviews identify practice that has not been documented or that differs from the procedure and appropriate adjustments are made • Performance audit of business unit identifies and rectifies areas where practice does not comply with the direction |
| Environmental, regulatory or technological change | <ul style="list-style-type: none"> • The impact of new software, hardware, or business systems on the storage of records has been identified and factored into the storage plan • The impact of new legislation and regulations on the storage of records has been identified and factored into the storage plan • The impact of organisational change has been factored into the storage plan |

⁴⁵ Please see *PRO 53 Agency Storage Self-Assessment Checklist* for an assessment action list based on the requirements of PROS 11/01 S1 Agency Records Storage Specification.

Maintenance Monitoring & Assessment

| Situation | Actions |
|--|--|
| Storage conditions | <ul style="list-style-type: none"> • Routine checks of storage facilities identify potential threats to the records stored • Identified threats are reported and measures taken to remedy them as soon as possible |
| Information loss | <ul style="list-style-type: none"> • Routine checks of the data stored on digital media are conducted to determine the potential information loss, and include check-sum evaluations and random checks of files • Records identified as having a high risk of imminent information loss are reported • High risk of information loss is used as a trigger for conservation or preservation strategies, such as the migration of digital records onto new media |
| Effective storage of digital records | <ul style="list-style-type: none"> • Identity and location of all records stored have been noted in a system that controls, tracks, and aids their retrieval • Routine checks of the records have been undertaken and any incidents of information loss are noted • Routine virus checks of the digital media are undertaken and noted action required • Actions undertaken to recover records identified from the information and virus checks • Annual assessment identifies preservation or conservation needs for records, such as the digital media / digital records due to be refreshed, converted or migrated • Preservation and conservation works, including media refreshment, and digital records conversion or migration, are routinely completed and the accuracy of the process checked |
| Disaster preparedness, management and recovery | <ul style="list-style-type: none"> • A disaster preparedness, management and recovery plan that covers the storage of records is developed and endorsed • Those responsible for the implementation of the disaster preparedness, management and recovery plan receive relevant training • Disaster bins and disaster recovery rooms are prepared, adequately equipped, and maintained to aid a swift response to an emergency situation |

Appendix Fourteen: Examples of Storage Reports

The following table provides some examples of the kinds of reports that may be needed for records storage. It also provides the reason for the report, the frequency of the report, and the business unit that may be responsible for providing the report.

| <i>Report</i> | <i>Frequency</i> | <i>Reason</i> | <i>Responsible Unit</i> |
|------------------------------------|------------------|---|--|
| Fire safety | 6 Months | To report on measures taken to ensure fire safety equipment meet safety standards | Facilities Team |
| Integrated pest management | 6 Months | To report on measures taken to prevent pest infestation | Facilities Team |
| Information integrity check | 6 Months | To report any instances of information loss | Records Management Team |
| Data integrity check | 6 Months | To report any instances of data corruption or loss | IT Team |
| Virus check | 6 Months | To report any virus detected that may damage the preservation of the digital records for the duration of their retention period | IT Team |
| Media refresh | Annual | To report actions regarding digital media due to be refreshed to new media, and which have been refreshed to new media | IT Team |
| Migration / conversion | Annual | To report actions regarding the migration or conversion of digital records | IT Team |
| Temperature / humidity | 6 Months | To report deviations from acceptable temperature and humidity levels | Facilities Team |
| Records recently placed in storage | 6 Months | To report the identity and location of records recently placed into storage | Facilities / IT Team / Records Management Team |
| Security | Annual | To report on the status regarding security of records in storage | Facilities / IT / Security Team |
| Training | Annual | To report on training related to the storage of records, such as disaster management or recovery training | Human Resources (HR) Team |
| Risk assessment | Annual | To report any detected risks or potential risks to records in storage | Facilities / IT / Risk Management Team / Records Management Team |
| Assessment with PROV Standard | Annual | To report on the assessment of the storage programme with the PROV <i>Storage Standard</i> | Facilities / IT Team / Records Management Team |

Appendix Fifteen: Implementing a Storage Programme Checklist

Step One: Research

| Question | Yes | No | Unsure | Comments |
|--|-----|----|--------|----------|
| Is the current location of all agency records (regardless of format) held in storage known? | | | | |
| Are the current storage options (in-house, outsourced, onsite, or offsite) used by the agency known? | | | | |
| Is the age of records currently held in storage or likely to be placed in storage over the next three to five years known? | | | | |
| Are the media and formats of all records held in storage or likely to be placed in storage over the next three to five years known? | | | | |
| Is the anticipated use of all records held in storage or likely to be placed in storage over the next three to five years known? | | | | |
| Are the retention periods and disposal sentences of all records held in storage or likely to be placed in storage over the next three to five years known? | | | | |
| Have the stakeholders involved in the storage of records been identified? | | | | |
| Has a risk assessment been undertaken to determine the risks associated with the agency's current records storage options? | | | | |

Step Two: Plan

| <i>Question</i> | <i>Yes</i> | <i>No</i> | <i>Unsure</i> | <i>Comments</i> |
|---|------------|-----------|---------------|-----------------|
| Have the methodologies needed to ensure that the records may continue to be used when in storage been identified? | | | | |
| Have the agency strategies needed to address the storage of public records been identified? | | | | |
| Have the agency policies needed to address the storage of public records been identified? | | | | |
| Have the agency plans needed to address the storage of public records been identified? | | | | |
| Have the agency programmes needed to address the storage of public records been identified? | | | | |
| Have the elements required for a storage programme that will address the agency's needs and responsibilities regarding the storage of public records been identified? | | | | |

Step Three: Draft & Endorse

| Question | Yes | No | Unsure | Comments |
|--|-----|----|--------|----------|
| Has the agency developed a storage plan covering the storage of public records over the next three to five years? | | | | |
| Does the storage plan cover all agency records regardless of format? | | | | |
| Does the storage plan cover all agency records held in storage or likely to be placed in storage over the next three to five years, regardless of whether the records are stored within the agency or by an APROSS facility? | | | | |
| Has the agency completed a compliance or inspection report detailing the current status of the agency's storage option against the PROV <i>Agency Custody Storage Specification</i> requirements? | | | | |
| Has the agency identified areas of non-compliance and included actions required to become compliant in relevant strategies and plans? | | | | |
| Has the agency developed a maintenance plan covering its storage areas and facilities? | | | | |
| Does the agency maintenance plan for storage areas and facilities cover routine maintenance, preventative maintenance, responsive maintenance and long-term maintenance? | | | | |
| Has the agency developed a disaster preparedness, management and recovery plan? | | | | |
| Does the agency disaster preparedness, management and recovery plan cover all agency records regardless of format or location? | | | | |
| Has the completed agency storage programme been endorsed by a senior executive? | | | | |

Step Four: Deliver

| Question | Yes | No | Unsure | Comments |
|---|-----|----|--------|----------|
| Have the key tasks required for the delivery of the storage programme been identified? | | | | |
| Have the key tasks required for the delivery of the storage programme been assigned to the relevant section or team? | | | | |
| Have the key tasks required for the delivery of the storage programme been incorporated into business and performance plans? | | | | |
| Have the key processes required for the storage of agency records been identified and documented? | | | | |
| Have the procedures required for the storage of agency records been identified and documented? | | | | |
| Do the procedures cover all aspects of storage, including the storage of digital records, management of facilities, management of storage services, and key preservation actions? | | | | |
| Has a communication plan for the storage programme been developed outlining the key messages for the storage of agency records? | | | | |
| Have the key messages been delivered to all stakeholders identified in the communication plan? | | | | |

Step Five: Monitor & Review

| Question | Yes | No | Unsure | Comments |
|---|-----|----|--------|----------|
| Have the monitoring activities required to address compliance related storage needs been developed? | | | | |
| Have the monitoring activities required to address compliance related storage needs been undertaken? | | | | |
| Have the monitoring activities required to address maintenance related storage needs been developed? | | | | |
| Have the monitoring activities required to address maintenance related storage needs been undertaken? | | | | |
| Have the reports required to assess the progress of the storage programme been identified? | | | | |
| Have the reports required to monitor and assess the progress of the storage programme been assigned to the relevant sections or teams? | | | | |
| Are the reports required to monitor and assess the progress of the storage programme fed into the improvement of the storage programme? | | | | |
| Are the reports required to monitor and assess the progress of the storage programme collated? | | | | |