Information Management Advice 18 - Managing records in business systems

Part 1: Checklist for decommissioning business systems

Introduction

Agencies have systems which hold business information, such as financial, payroll, email, web content management or licensing systems. Agencies may also have business systems that operate as large repositories, including data warehouses and email archive systems. Before decommissioning an old IT or business system (a legacy system) you need to assess any ongoing business requirements for the information held in the system and determine if the system contains permanent State records that may require transfer to Tasmanian Archive and Heritage Office (TAHO).

Completion of this checklist will assist agencies to assess the value of the records in the business system and decide on a suitable management/preservation/disposal strategy before decommissioning or shutting down the system.

This Advice does not constitute an authority given by the State Archivist to dispose of State records. It is intended to provide additional supporting information to assist agencies in implementing their requirements under the Archives Act 1983.

Step One – Determine what records are in the system

1.1 Begin records appraisal

In order to determine the value of the records in the system, it is necessary to begin by assessing what business actions the system is recording. This involves conducting an investigation of the system to understand what the records are.

Requirement	Explanation	For example
Does the system contain business records? Depending on the circumstances, records in the business system may be any or all of the following: • Tables in a database • Individual database records (field information) • Entire database • Reports generated by the application • Linked documents/data in other systems • Audit logs	There are a number of places to find information about business systems. Consult the agency Information Asset Register. (For information on developing an *Information Asset Register* see TAHO Advice 39). Talk to users of the system (have them perform screen captures or print screen). Read system documentation to determine what business processes are recorded in the system. Other sources of information may include: • System specifications • Functional requirements of replacement system • Migration plan • Licence and support agreements • Vendor website • System backups • System logs • User guides or cheat sheets • Reports generated from system	Many agencies use Empower as a system for managing employment processes. Recorded in this system are payroll and personnel records. Many agencies use Finance One is their financial system which also generates state records. Other types of business systems which contain or generate State records include: • Licence and permit application systems • Funding, grants and • subsidy application processing systems • Property management systems • Incident or disaster response systems • Call centre enquiries and customer relationship systems • Project management systems • Research data and analysis systems • Planning and mapping systems

Requirement	Explanation	For example
Are the records covered by a Disposal Schedule approved by TAHO? It is illegal to dispose of records, including records within a business information system, without the authority of the State Archivist. Normally this is authorised in Disposal Schedules that have been authorised and issued by the State Archivist. Downloads are available from the *Retention and Disposal Schedules* section on the Government Information Strategy Unit website.	Consult the functional Disposal Schedule for your agency to determine how long the records need to be retained. For systems which hold common administrative records such as financial or payroll records, the *Disposal Schedule for Common Administrative Records (DA2157)* will usually provide information about how long the records need to be retained. Systems that hold records that do not support or contribute to the business functions of the agency can be disposed under *Disposal Schedule for Short-term Value Records (DA2158)*.	• Records in Empower about Heads of Agencies, Chief Executive Officers, senior professional officers, and employees who have made a significant contribution to the community in areas outside their work are required to be retained permanently (DA 2157 12.11.02) • Records in Empower of individual employees are required to be retained until the employee reaches 75 years of age or 7 years after separation if older than 68 (DA 2157 12.11.03) • Summary employee history records documenting the monitoring and management of all employees including are to be retained permanently (DA2157 12.11.01)

If the records in the business system are **not covered by a Disposal Schedule**, you will need to determine what the agency requirements are for accessing, using and retaining the records contained within the system. Go to the next section **1.2 Identify recordkeeping requirements.**

For more assistance in determining the appropriate retention period for records in business systems which are **covered by a Disposal Schedule**, see *Part 3: Sentencing records in business systems covered by a Disposal Schedule.*

Why do we do records appraisal?
Records appraisal looks at both the immediate value of records for day to day business, but also the potential future value of records beyond the purpose for which they were originally created. The appraisal process informs the State Archivist's decision when making decisions on the minimum retention period for the records.

The appraisal process described here is not intended to replace the need for agencies to develop a functional Disposal Schedule and have it authorised by the State Archivist. In fact, if the business system contains **enduring or high value records** and the **records are not covered by a Disposal Schedule**

the recommended management strategy is that one be developed by the agency and approved by the State Archivist.

1.2 Identify recordkeeping requirements

This a simple appraisal exercise to determine how long the records in the system will need to be retained to meet business, legal, social, historical and other needs. Complete this checklist if the records in the business system were **not covered by an existing Disposal Schedule**.

Requirement	Explanation	Example
Are the records created because of a legislative requirement or are the records mentioned in any legislation or regulation?	List any relevant legislation, formal directives and standards	Licence and permit application processing and registration systems. Keeping registers may be an explicit requirement of legislation.
Is there a business or policy requirement to keep the records?	List any relevant corporate policies and other relevant documents	Call centre enquiries and customer relationship systems. The information in the system may be used for benchmarking, accreditation, workforce planning or for service delivery.
Will records in the system allow the agency to take or defend legal action or support any other form of investigation?	List any risks relating to legal discovery and incident investigation	In the event of formal Disposal Freezes issued in response to Royal Commissions or inquiries.
Does the system have any dependencies or links to another business system?	Describe links and dependencies	A health service planning and workforce management system may be linked to a patient management system.
Do the records have a historical or social significance that warrants their retention beyond the minimum retention period?	Describe historical or social significance	Property management systems may hold records relating to cultural heritage.
Apart from the agency, are there any other stakeholders who require access to the record?	List any external stakeholders	Systems that hold regulatory or enforcement records will often involve other stakeholders.

1.3 Determine the records retention period

What is the minimum retention period?
In the previous steps (1.1 and 1.2) a high-level appraisal determined what value the records have to the agency and to other stakeholders. Use this information to decide how long the records need to be retained. This appraisal process will not provide agencies with a specific retention period, but rather a range or 'ball park' within which records are likely to fall. This has been split into two types, and defined as records with **short-term value** and records with **enduring or high value**. A more detailed appraisal matrix is available in *Part 4: Appraisal of records in business systems with no disposal coverage.*

Requirement	Explanation	Example
Taking into account business needs, accountability requirements and community expectations, what is the minimum the records retention period?	Based on the recordkeeping requirements identified in Step 1.1 and 1.2 what **minimum** retention period do you recommend for the records?	A more detailed appraisal matrix is available in *Part 4: Appraisal of records in business systems with no disposal coverage* which accompanies this Advice.
Short-term value	If the records need to be retained for **less than 5 years** they have short-term or low value and are considered temporary records.	In a purchasing system, the records may only need to be retained for 2 years after the purchase has been finalised.
Enduring or high value	If the records need to be retained **more than 5 years** the records have enduring or high value. Some of these records may be deemed permanent by the State Archivist. Such records must be retained in the agency for 25 years before transfer to TAHO.	In a property management system, records about heritage and conservation projects may need to be retained permanently for eventual transfer to TAHO, and the records about all other properties may need to be retained until the building is demolished or sold.

This process is not intended to constitute an authority to dispose of the records, but to define a management strategy for decommissioning business systems which contain State records. By assigning a retention period to the records, you will be able to select the most appropriate system management scenario in Step Two of this Advice. The information gathered will also form part of the supporting evidence the agency requires to complete the *Destruction Authority Checklist* which accompanies *Advice 10 - Disposal of Unscheduled records*. Note that some systems will contain both records with **short-term value** and records with **enduring or high value**. This will be covered in Step Two by a separate scenario.

Step Two – Recommended management strategy

2.1 Are the records covered by a Disposal Schedule?

TAHO has developed a matrix which agencies can use to determine an appropriate management strategy for records during the decommissioning process. The process relies on the agency first determining if the records in the business system are **covered by an approved Disposal Schedule**. The system appraisal matrix is then broken down further according to system accessibility and if the system contains **short-term value** or records with **enduring or high value.**

By determining the best-fit category for the business system, agencies will be able to decide on a suitable management/preservation/disposal strategy for the State records before decommissioning or shutting down the legacy system.

2.2 System appraisal matrix

In this step, you will use the records retention period(s) you have identified in the previous steps to select the most appropriate system management strategy.

System status	Records are covered by a Disposal Schedule	Records are not covered by a Disposal Schedule	Recommended management strategy
System is accessible and contains short-term/temporary records (less than 5 years)	Scenario 1 (a)	Scenario 2 (a)	Continue to **maintain the system** until the records retention period expires or until TAHO approves destruction. Migration is not recommended.
System is accessible and contains enduring or high value records (longer than 5 years)	Scenario 1 (b)	Scenario 2 (b)	Digital records, including any potentially permanent value records, must be maintained by the agency. **Export** or **migrate** all records and associated metadata to an EDRMS or new business system with inbuilt recordkeeping functionality. Go to *Part Two - Assessing recordkeeping functionality in business systems.*

System status	Records are covered by a Disposal Schedule	Records are not covered by a Disposal Schedule	Recommended management strategy
System is accessible and contains both short-term/temporary records (less than 5 years) **and contains enduring or high value records** (longer than 5 years)	Scenario 1 (b)	Scenario 2 (b)	Digital records, including any potentially permanent value records, must continue to be maintained by the agency. **Export** or **migrate** long-term/permanent records and associated metadata to an EDRMS or new business system with inbuilt recordkeeping functionality. Go to *Part Two - Assessing recordkeeping functionality in business systems.*
Data has been migrated to a new system (all data, not just newer data)	Scenario 3 (a)	Scenario 3 (b)	Go to *Part Two - Assessing recordkeeping functionality in business systems.*
Data is not accessible or only partially accessible in the business system. In rare cases the hardware or software supporting the system may be severely corrupted and no records can be accessed or extracted, regardless of resources spent on recovery efforts and no uncorrupted backup copies exist.	Scenario 4 (a)	Scenario 4 (b)	TAHO requires agencies to submit evidence to the State Archivist that documents attempts to access or recover the system. If the inaccessible system was not replaced and/or these functions are no longer carried out by the agency, the information about the system gathered during this appraisal process should also be submitted to TAHO.

2.3 Recommended management strategies explained

Migration of the records

1. *Migrating to a new business system*: Agencies migrating records should choose a new business system with improved recordkeeping functionality which has active recordkeeping controls in place. The migration process is not without risk to the authenticity and integrity of the records. Business arrangements will need to be made to maintain recordkeeping continuity and compliance during the period when the migration activities are performed up to when the target system becomes live and available for use. For example, certain business transactions may need to be suspended or recorded manually until the new system is available, with any updates made or repeated in the new system once it is live.

   For more information see *Advice 18 - Part 2: Assessing recordkeeping functionality in business systems.* Agencies are also encouraged to consult *ISO 16175-3:2010 Guidelines and functional requirements for records in business systems* to incorporate recordkeeping functionality into new business systems and *Advice No. 14 - Recordkeeping Metadata Standard.*

2. *Migration to an EDRMS or digital repository*: This approach may be suitable where the business system is being decommissioned without replacement but the records are still required for reference, or if the business system is being replaced but the legacy records do not need to be migrated into the new application. Records stored in these environments need to be actively managed, monitored for technological obsolescence and have integrity and virus checks performed. Storing records that have been exported from a business system on an external hard drive or storage area network without any further management is **not** a managed recordkeeping environment.

   Where an agency exports the records (including data and contextual metadata) to an EDRMS or digital repository that has appropriate recordkeeping controls, the choice of file format should be informed by the type of data in the system and consideration of its potential future use requirements, such as manipulability. Ideally this should be a widely supported, open, non-proprietary format such as XML. Any system that holds State records not yet eligible for disposal must to retained and preserved in a managed recordkeeping environment until all records retention periods have expired. Agencies place themselves at significant risk and may incur unnecessary expenditure if an aging business system becomes inaccessible or data is lost. For more information see *Guideline 19 - Digital Preservation Formats* for preserving exported records.

Maintaining the records in the original system

1. *Virtualise the business system*: Virtualisation allows multiple systems to be run on a single physical server at a lower cost. The server may be in a data centre or in the cloud. This option involves maintaining the business system as a virtual machine until the records within the application are eligible for disposal. This may be an appropriate solution where, for example, the records only need to be retained for a short time. For more advice refer to *Guideline 17 - Managing recordkeeping risks associated with Cloud Computing.*

A risk assessment should be undertaken to determine if this approach is acceptable. This assessment should consider the agency's recordkeeping obligations, lawful retention periods of the records, and all related risks including those associated with ongoing support, licensing, maintenance and likely loss of staff knowledge of how to use the system over time. TAHO does not endorse virtualisation as a long-term strategy due to these risks.

2. ***Retain the system on the original software and hardware platform***: If the records cannot be migrated or exported immediately or easily, or the system cannot be virtualised, this may be an option. Decommissioning should therefore not occur. If the information needs to be retained for a number of years, staff changes, technology obsolescence or outsourcing arrangements may mean knowledge of the system is lost and the records become inaccessible. Because of these very high risks, TAHO generally does not encourage retaining old business systems. However if other retention solutions are unsuitable, this may be an option in those cases where the records only need to be retained for a short time (e.g. less than 5 years) or until an alternative solution can be found.

Checklist

Complete the checklist by selecting the appropriate scenario from the System appraisal matrix (section 2.2), to determine what steps to take to manage State records in business systems during the decommissioning process.

Scenario 1 (a)

Records are **covered by a Disposal Schedule**, system is accessible and system contains records with **short-term value:**	
Continue to **maintain** the legacy system until retention period expires or until TAHO approves destruction. Migration is not recommended. Records with short-term value which are not required for any further business or legal purpose may be disposed of in accordance with *Advice 9 - Disposal of Scheduled Records.*	
Action	**Complete?**
1 Sentence records under the approved Disposal Schedule. Consult *Part 3: Sentencing records in business systems covered by a Disposal Schedule* for more advice	
2 If the minimum retention period for records in the legacy system has not yet been reached, the agency should contact TAHO to request early disposal. If early disposal is granted or the minimum retention period has been reached:	
3 Destroy the records. Consult *Guideline 21 - Approved destruction methods for State records* for proper destruction methods.	
4 Enter records disposed of into the agency's *Register of Records Destroyed.*	
5 The legacy system may be decommissioned.	

Scenario 1 (b)

Records are **covered by a Disposal Schedule,** system is accessible and
- System contains records with **enduring or high value**, or
- System contains both **short-term value** and **enduring or high value** records:

Enduring and high value records must be maintained by the agency in the legacy system or export/migrate the records and associated metadata to an EDRMS or new business system with inbuilt recordkeeping functionality. See *Part 2* of this Advice - *Assessing recordkeeping functionality in business systems.*

	Action	Complete?
1	Sentence records under the approved Disposal Schedule. Consult *Part 3: Sentencing records in business systems covered by a Disposal Schedule* for more advice	
2	Complete the worksheet from *Part 2: Minimum recordkeeping requirements in business systems* for the new system.	
3	If practical, contact TAHO to request early disposal for any short-term/temporary records in the legacy system. Consult *Advice 10 - Disposal of Unscheduled records.* Complete the *Destruction Authority Checklist* that accompanies that Advice, and attach this along with the completed worksheet to an *Application to Dispose of State Records (AOT48)* and send to Government Recordkeeping at TAHO.	
4	The legacy system may only be decommissioned if all enduring or high value records are exported in approved formats (consult *Guideline 19 - Digital Preservation formats)* or migrated to a new system with sufficient recordkeeping functionality.	

Scenario 2 (a)

Records are **not covered by a Disposal Schedule**, system is accessible and system contains records with **short-term value**:

Continue to **maintain** the legacy system until retention period expires or until TAHO approves destruction. Migration is not recommended. Records which are not required for any further business or legal purpose may be disposed of in accordance with *Advice 10 - Disposal of Unscheduled Records.*

	Action	Complete?
1	Consult *Part 4: Appraisal of records in business systems with no disposal coverage* for more advice about determining retention periods.	
2	Complete the worksheet from *Part 2: Minimum recordkeeping requirements in business systems* for the new system.	
3	Contact TAHO to request early disposal for short-term/temporary/low-value records in the legacy system. Consult *Advice 10 - Disposal of Unscheduled records.* Complete the *Destruction Authority Checklist* that accompanies that Advice, and the *Application to Dispose of State Records (AOT48).* Send to Government Recordkeeping along with the completed worksheet. If the State Archivist approves of the disposal:	
4	Destroy the records. Consult *Guideline 21 - Approved destruction methods for State records* for proper destruction methods.	
5	The legacy system may be decommissioned.	

Scenario 2 (b)

Records are **not covered by a Disposal Schedule**, system is accessible and	
• System contains records with **enduring or high value**, or	
• System contains both **short-term value** and **enduring or high value** records:	
Enduring and high value records must be maintained by the agency in the legacy system or export/migrate the records and associated metadata to an EDRMS or new business system with inbuilt recordkeeping functionality. See *Part 2* of this Advice - *Assessing recordkeeping functionality in business systems*.	

	Action	**Complete?**
1	Consult *Part 4: Appraisal of records in business systems with no disposal coverage* for more advice about determining retention periods.	
2	Complete the worksheet from *Part 2: Minimum recordkeeping requirements in business systems* for the new system.	
3	Contact TAHO for advice on submitting a Disposal Authority and/or developing a Functional Disposal Schedule.	
4	The legacy system may only be decommissioned if all enduring or high value records are exported in approved formats (consult *Guideline 19 - Digital Preservation formats)* or migrated to a system with sufficient recordkeeping functionality.	

Scenario 3 (a)

Records are **covered by a Disposal Schedule,** and all data has been **migrated** to a new system	
See *Part 2* of this Advice - *Assessing recordkeeping functionality in business systems*.	

	Action	**Complete?**
1	Sentence records under the approved Disposal Schedule. Consult *Part 3: Sentencing records in business systems covered by a Disposal Schedule* for more advice	
2	Complete the worksheet from *Part 2: Minimum recordkeeping requirements in business systems* for the new system.	
3	Contact TAHO regarding the evidence that the agency will need to submit to the State Archivist to prove that reproduction standards have been met.	
4	If the State Archivist determines that reproduction standards have been met, sentence source records using *Disposal Schedule for Source records (DA 2159)*.	
5	Destroy the records. Consult *Guideline 21 - Approved destruction methods for State records* for proper destruction methods.	
6	The legacy system may be decommissioned.	

Scenario 3 (b)

	Records are **not covered by a Disposal Schedule,** and all data has been **migrated** to a new system	
	See *Part 2* of this Advice - *Assessing recordkeeping functionality in business systems*.	
	Action	**Complete?**
1	Consult *Part 4: Appraisal of records in business systems with no disposal coverage* for more advice about determining retention periods.	
2	Complete the worksheet from *Part 2: Minimum recordkeeping requirements in business systems* for the new system.	
3	Contact TAHO for advice on submitting a one-off Disposal Authority and/or developing a Functional Disposal Schedule, and the evidence that the agency will need to submit to the State Archivist to prove that reproduction standards have been met.	
4	If the State Archivist determines that all minimum recordkeeping requirements and reproduction standards have been met, sentence source records using *Disposal Schedule for Source records (DA 2159)*.	
5	Destroy the records. Consult *Guideline 21 - Approved destruction methods for State records* for proper destruction methods.	
6	The legacy system may be decommissioned.	

Scenario 4 (a)

	Records are **covered by a Disposal Schedule,** and the **system is not accessible**.	
	Agencies must submit evidence to the State Archivist of attempts to access or recover the legacy system.	
	Action	**Complete?**
1	Sentence records under the approved Disposal Schedule. Consult *Part 3: Sentencing records in business systems covered by a Disposal Schedule* for more advice	
2	Contact TAHO for advice about submitting formal notification of the loss. The notification must be supported by detailed evidence of the loss; including a risk analysis for the business system and the lost records, the circumstances surrounding the loss, supporting evidence, and any remedial actions taken by the agency to reduce the risk of future loss.	
3	If the inaccessible system was not replaced and/or these functions are no longer carried out by the agency, the information about the system gathered during this appraisal process should also be submitted to TAHO.	

Scenario 4 (b)

	Records are **not covered by a Disposal Schedule,** and the **system is not accessible**.	
	Agencies must submit evidence to the State Archivist of attempts to access or recover the legacy system.	
	Action	**Complete?**
1	Consult *Part 4: Appraisal of records in business systems with no disposal coverage* for more advice about determining retention periods.	

| 2 | Contact TAHO for advice on submitting a one-off Disposal Authority and/or developing a functional Disposal Schedule, and submitting formal notification of the loss. The notification must be supported by detailed evidence of the loss; including a risk analysis for the business system and the lost records, the circumstances surrounding the loss, supporting evidence, and any remedial actions taken by the agency to reduce the risk of future loss. | |
| 3 | If the inaccessible system was not replaced and/or these functions are no longer carried out by the agency, the information about the system gathered during this appraisal process should also be submitted to TAHO. | |

Self-Assessment Summary

TAHO does not recommend decommissioning a business system without first determining if the system contains State records required to be kept for business and legal purposes.
Use of this Advice does not replace the need for agencies to develop a functional Disposal Schedule and have it authorised by the State Archivist.
This Advice is not intended to replace *Advice 10 - Disposal of un-scheduled records*, but the information gathered here can be used to complete the *Destruction Authority Checklist* which accompanies that Advice.
All records that are destroyed need to be documented in a *Register of Records Destroyed* (a sample register is available from the GISU website, and is discussed further in *Advice 69 Register of Records Destroyed*). This Register is permanently retained by the agency as evidence of the lawful destruction of the records.
TAHO does not endorse virtualisation or storage in the cloud as a long-term records preservation strategy.
TAHO does not encourage retaining old business systems unless the records in the system are nearing the end of their retention period. In this case, the system should be retained until minimum retention period is met, or alternatively, contact TAHO to request early disposal.
TAHO will require the agency to submit evidence to the State Archivist proving that reproduction standards have been met for migrated records.
TAHO will require the agency to submit evidence that forensic processes were conducted to access the records in inaccessible systems.
Agencies with business systems that contain records of enduring or high value must implement a management strategy to ensure that all records, including any potentially permanent value records, remain accessible. For more advice on this, see *Part 2: Assessing recordkeeping functionality in business systems.*
For enduring value and high value records, TAHO recommends preserving the records in an EDRMS. An alternative option is migrating records to a new business system with improved recordkeeping functionality. For more advice, see *Part 2: Assessing recordkeeping functionality in business systems*.

Recommended Reading

- Guideline 8 - Management of source records that have been copied, converted or migrated

- Guideline 17 - Managing recordkeeping risks associated with Cloud Computing.

- Guideline 19 - Digital Preservation Formats

- Guideline 21 - Approved destruction methods for State records

- Advice 9 - Disposal of Scheduled Records

- Advice 10 - Disposal of Unscheduled Records and Destruction Authority checklist for unscheduled records

- Advice 14 - Recordkeeping Metadata Standard

- Advice 18 - Part Two: Assessing recordkeeping functionality in business systems

- Advice 25 - Management of Backups

- Advice 29 - Advice for Agencies on Managing Legacy Records

- Advice 37 - Keeping Digital Records Accessible

- Advice 38 - Information Custodians and Digital Continuity

- Advice 39 - Developing an Information Asset Register

- Advice 69 – Register of Records Destroyed

- Form AOT 48 - Application to Dispose of State Records

Further Advice

For more detailed advice, please contact:

Government Information Strategy Unit,

Tasmanian Archive and Heritage Office

91 Murray Street

HOBART TASMANIA 7000

Telephone: 03 6165 5581

Email: gisu@education.tas.gov.au

Acknowledgements

- Queensland State Archives Methodology on Decommissioning Business Systems and the associated Toolkit
- State Records NSW Recordkeeping in Brief 42 – Checklist for assessing business systems.

Information Security Classification

This document has been security classified using the Tasmanian Government Information Security classification standard as PUBLIC and will be managed according to the requirements of the Tasmanian Government Information Security Policy.

Document Development History
Build Status

Version	Date	Author	Reason	Sections
1.0	28-04-2014	Samara McIlroy	Initial Release	All

Amendments in this Release

Section Title	Section Number	Amendment Summary
		This is the first release of this document.

Issued: May 2014

Ross Latham
State Archivist