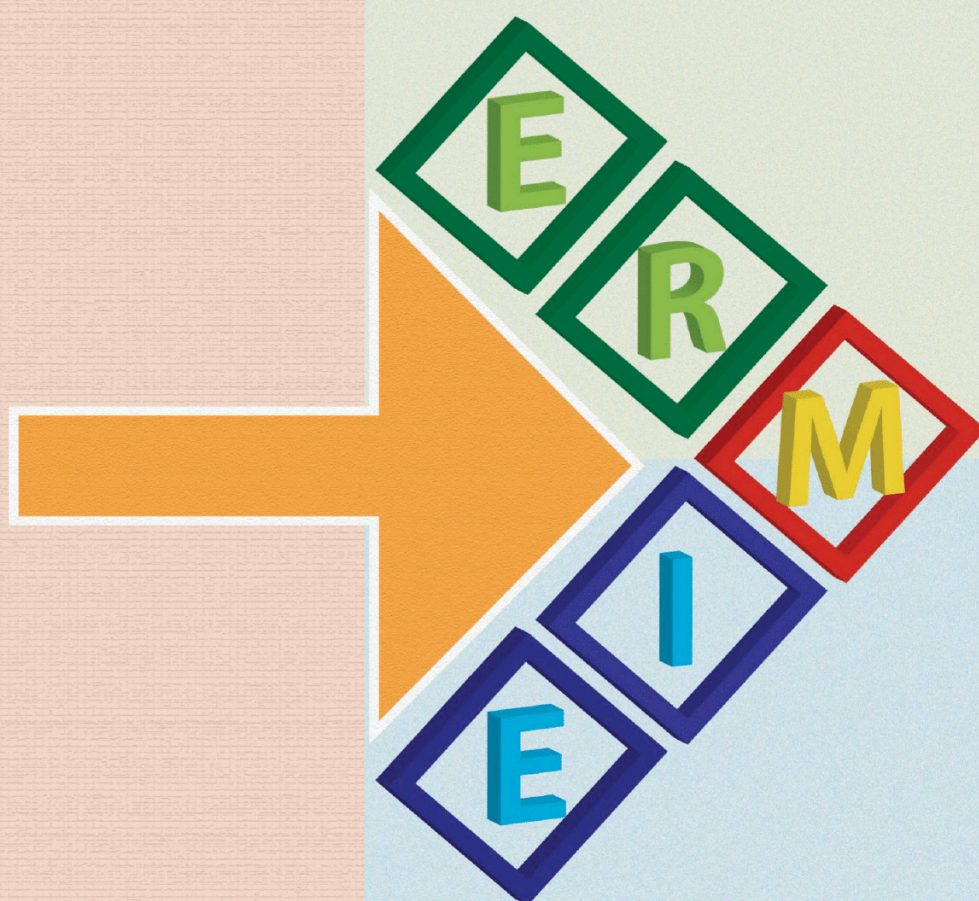


Guidelines on Mapping out Implementation of an Electronic Recordkeeping System in the Context of Developing Organisational Electronic Information Management Strategies



Guidelines on Mapping out Implementation of an Electronic Recordkeeping System

*in the Context of Developing Organisational
Electronic Information Management Strategies*

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Abbreviations

B/D	Bureau and department
CCGO	Cyber Central Government Office
CM	Content management
EDMS	Electronic document management system
EIM	Electronic Information management
EIM Framework	Government-wide Framework for Electronic Information Management
ERM	Electronic records management
ERKS	Electronic recordkeeping system
FR of an ERKS	Functional Requirements of an Electronic Recordkeeping System
GC	General Circular
GRS	Government Records Service
IT	Information technology
ITMU	Information Technology Management Unit
KM	Knowledge management
OGCIO	Office of the Government Chief Information Officer
RKMS	Recordkeeping Metadata Standard for the Government of the Hong Kong Special Administrative Region
RM	Records management

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CHAPTER 1



Introduction

Chapter 1 Introduction

Taking forward electronic records management in the Government

1.1 Records are valuable resources of the Government to support evidence-based decision making, meet operational and regulatory requirements and are essential for an open and accountable government. Good records management (RM) not only helps protect records but also enhances an organisation's operational efficiency while minimising costs. RM is therefore an important common function of bureaux and departments (B/Ds).

1.2 In line with the Government's electronic information management¹ (EIM) strategy promulgated by the Office of the Government Chief Information Officer (OGCIO) vide OGCIO Circular No. 1/2011² on 3 May 2011, **B/Ds are required to take forward electronic records management (ERM) as an integral part of EIM and adopt an electronic recordkeeping system (ERKS) as a mandatory component to drive ERM in the Government.** As the first step, B/Ds will need to formulate their organisational EIM strategies, which should include an implementation plan of an ERKS, before actual implementation of EIM projects and systems³.

1.3 In gist, B/Ds should comply with the following mandatory RM requirements in developing and implementing their EIM strategies to drive ERM in the Government -

- (a) develop or adopt an ERKS, either as a stand-alone system or as a part of an integrated EIM solution. The ERKS should comply with the **Functional Requirements of an Electronic Recordkeeping System**⁴ (FR of an ERKS) and **Recordkeeping**

¹ EIM covers three domains, namely content management (CM), records management (RM) and knowledge management (KM).

² OGCIO Circular No. 1/2011 entitled "**Electronic Information Management Strategy and Framework**" is available on the Central Cyber Government Office (CCGO) (http://itginfo.ccgohksarg/content/cir/docs/OGCIO_Cir_201101.pdf).

³ EIM projects and systems include development and implementation of an ERKS.

⁴ **Functional Requirements of an Electronic Recordkeeping System** is available on CCGO (<http://grs.host.ccgohksarg/erm/s04/435.html>).

Metadata Standard for the Government of the Hong Kong Special Administrative Region⁵ (RKMS) developed by the Government Records Service (GRS) to manage both electronic records and non-electronic records in a proper, consistent and secure manner; and

- (b) comply with the mandatory RM requirements set out in General Circular (GC) No. 2/2009 entitled “**Mandatory Records Management Requirements**”⁶. In fact, some of these requirements (including the establishment of records classification schemes for administrative and programme records, and of records retention and disposal schedules) are prerequisites for implementing an effective and efficient ERKS in a B/D.

1.4 With RM positioned as a mandatory component of EIM, B/Ds have to consider and set out how ERM should be taken forward in their organisations when developing their organisational EIM strategies.

Purpose

1.5 These guidelines provide guidance to B/Ds on the conduct of a self-assessment to -

- (a) identify specific departmental ERM requirements;
- (b) assess readiness and capabilities⁷ to take forward the implementation of an ERKS in their organisations;
- (c) identify challenges and necessary preparatory tasks to implement an ERKS; and
- (d) formulate robust strategies to meet the identified challenges and map out an action plan to implement an ERKS as a core component of EIM implementation in their organisations.

⁵ **Recordkeeping Metadata Standard for the Government of the Hong Kong Special Administrative Region** and the associated implementation guidelines are available on CCGO (<http://grs.host.ccgo.hksarg/erm/s04/457.html>).

⁶ GC No. 2/2009 is available on CCGO (<http://ref.ccgo.hksarg/csogc/en/c200902e.pdf>).

⁷ Please refer to the **Government-wide Framework for Electronic Information Management** for details of the EIM Framework capability areas, namely strategy, process, people, technology and governance.

Scope

1.6 These guidelines focus primarily on RM aspects, including departmental RM policy, programme, functions, processes and practices and issues pertinent to the implementation of an ERKS. For the sake of completeness, issues relating to change management and project management have been included but are mentioned briefly.

1.7 B/Ds may define additional issues to be reviewed, considered and assessed having regard to their specific business, operational and RM needs. For EIM issues relating to content management (CM) and knowledge management (KM), please refer to the ***Government-wide Framework for Electronic Information Management ("EIM Framework")***⁸ promulgated by OGCI for details.

1.8 A glossary of key RM terms used in this document is at **Appendix 1**.

Audience

1.9 These guidelines are intended to be used by -

- (a) officers who are responsible for steering and developing organisational EIM strategies of B/Ds;
- (b) Departmental Records Managers who are responsible for, among others, overseeing the departmental RM programme of B/Ds; and
- (c) officers who are responsible for planning, developing and implementing an ERKS in B/Ds.

Updating of the guidelines

1.10 These guidelines will be updated and supplemented from time to time having regard to the feedback obtained and experience gained by B/Ds in developing and implementing their organisational EIM strategies relating to RM.

⁸ EIM Framework is available on CCGO (<http://itginfo.ccgo.hksarg/content/eim/download.asp>).

Related publications

1.11 General Circulars, Administration Wing Circular Memoranda and RM publications⁹ promulgated by GRS that are relevant to examining and addressing RM issues in the context of developing B/Ds' organisational EIM strategies are listed below -

- (a) General Circular No. 5/2006 entitled "**Management of Government Records**"¹⁰ - This circular reminds heads of B/Ds the importance of proper management of government records and draws their attention to good RM practices.
- (b) General Circular No. 2/2009 entitled "**Mandatory Records Management Requirements**" - This circular sets out mandatory requirements on the management of government records.
- (c) Administration Wing Circular Memorandum No. 5/2012 entitled "**Establishment of Departmental Records Management Policies**" - This circular memorandum provides guidelines for B/Ds to formulate their departmental records management policies.
- (d) **Records Management Manual** - This publication provides guidance and instructions for proper and coordinated management of government records.
- (e) GRS' RM Publication No. 1 "**A Practical Guide to Records Scheduling and Disposal**" - This publication provides a detailed procedural guide on drawing up records retention and disposal schedules and explains the operation and services of the records centres operated by GRS.
- (f) GRS' RM Publication No. 3 "**Subject Filing**" - This publication establishes a comprehensive standard classification scheme for administrative records, which are grouped into six schedules, viz. Administration, Accommodation and Facilities, Equipment and Supplies, Finance, Personnel as well as Information Systems and

⁹ The RM publications stated in paragraph 1.11 are available on CCGO (<http://grs.host.ccgo.hksarg/>).

¹⁰ GC No. 5/2006 is available on CCGO (<http://ref.ccgo.hksarg/csogc/en/c200605e.pdf>).

Services. It also provides guidelines on the development of a records classification scheme for programme records.

- (g) GRS' RM Publication No. 4 "**General Administrative Records Disposal Schedules**" - As a sequel to Publication No. 3 and using the same classification scheme of administrative records, this publication sets out retention and disposal schedules of administrative records for adoption by B/Ds.
- (h) GRS' RM Publication No. 6 "**Manual on Vital Records Protection**" - This publication identifies common hazards to records, explains the importance of vital records protection, provides guidelines on selection of appropriate protection methods, and enumerates the steps in establishing a vital records protection programme.
- (i) **Functional Requirements of an Electronic Recordkeeping System** - This publication sets out the functional requirements of an ERKS for B/Ds' compliance in developing or adopting an ERKS.
- (j) **Recordkeeping Metadata Standard for the Government of the Hong Kong Special Administrative Region** and the associated implementation guidelines - This publication and the implementation guidelines set out, among others, essential recordkeeping metadata that should be created, captured, used, managed and maintained in an ERKS.
- (k) **Disposal of Original Records (for records that have been digitised and stored in a digital form)** - This publication provides guidance for B/Ds to assess potential risks of early destruction of original non-electronic records after their digitisation.

1.12 This manual is part of the series of ERKS Implementation Guidelines to guide B/Ds to initiate, plan and implement an ERKS in their organisations for managing government records in accordance with the Government's RM policy and ERM requirements.¹¹

¹¹ Other ERKS implementation guidelines include *Guidelines on Implementation of an Electronic Recordkeeping System: Key Considerations and Preparation Work Required*, *A Handbook on Records Management Practices and Guidelines for an Electronic Recordkeeping System* and *Manual on Evaluation of an Electronic Recordkeeping System*. They are available on CCGO (<http://grs.host.ccg.hksarg/erm/s04/424.html>).

Structure of the guidelines

1.13 Other than this chapter, these guidelines are organised into three chapters as follows -

- Chapter 2:** Identifying challenges and preparatory tasks to implement an ERKS
- Chapter 3:** Developing an implementation plan to initiate, plan and implement an ERKS
- Chapter 4:** Mapping out implementation of an ERKS in organisational EIM strategies

Further information

1.14 Enquiries arising from these guidelines should be addressed to Senior Executive Officer (Record Systems Development) 1 on 2195 7750 or Executive Officer (Record Systems Development) 1 on 2195 7783.

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CHAPTER 2



Identifying Challenges and Preparatory Tasks to Implement an ERKS

Chapter 2 Identifying Challenges and Preparatory Tasks to Implement an ERKS

Introduction

2.1 This chapter sets out key RM issues to be reviewed and examined by B/Ds in the context of developing organisational EIM strategies so as to identify challenges and preparatory tasks to plan for the implementation of an ERKS.

Overview of pertinent RM issues

2.2 To ensure smooth and successful implementation of ERM and an ERKS, B/Ds should review their departmental RM policy and programme when developing their organisational EIM strategies. Such a review helps B/Ds assess their specific ERM requirements and readiness to implement an ERKS, identify challenges and key preparatory tasks, and formulate a robust strategy to take forward the implementation of an ERKS as a core component of EIM implementation in their organisations.

2.3 The RM issues to be reviewed and studied should include -

- (a) legal and regulatory requirements and their implications on departmental RM;
- (b) Government's RM policy and ERM requirements;
- (c) business and operational requirements and their implications on departmental RM;
- (d) implementation of an ERKS and changes in departmental RM policy and programme;
- (e) implementation of an ERKS and changes in RM roles and responsibilities;
- (f) specific ERKS functionality to meet departmental RM and business needs;
- (g) implementation approach and rollout strategy of an ERKS;

- (h) need for data conversion and retention of legacy recordkeeping systems;
- (i) implementation of an ERKS and changes in RM processes, practices and procedures;
- (j) staff skills and training required to take forward ERM and ERKS; and
- (k) monitoring and auditing of RM functions and activities.

2.4 A self-assessment checklist has been drawn up at **Appendix 2** to assist B/Ds in reviewing those issues specified in paragraph 2.3. Elaboration is set out in paragraphs 2.5 to 2.29. Upon the completion of the self-assessment, B/Ds should take follow-up actions as set out in paragraphs 2.30 and 2.31.

Legal and regulatory requirements

2.5 B/Ds need to identify the legal and regulatory environment and requirements that affect the management of records in their organisations, including the potential implications on implementing an ERKS, such as whether some particular types of paper records are suitable for conversion into digital form for management and storage in an ERKS. The legal and regulatory environment and requirements may comprise elements such as laws and regulations, codes of best practices, codes of conduct, etc. Some examples are set out below -

- (a) **Limitation Ordinance**, Cap. 347 (e.g. retention of relevant records for specified limitation periods to serve as evidence in possible legal proceedings);
- (b) **Personal Data (Privacy) Ordinance**, Cap. 486 (e.g. timely destruction of personal data in accordance with the Code of Practice on Human Resource Management issued by the Privacy Commissioner for Personal Data);
- (c) **Electronic Transactions Ordinance**, Cap. 553 (e.g. admissibility of electronic records in a court of law);

- (d) **Civil Service Regulations/Civil Service Bureau Circulars/Civil Service Bureau Circular Memoranda** (e.g. handling of personal records of government employees);
- (e) **General Regulations/General Circulars** (e.g. regulating matters relating to the conduct of Government business);
- (f) **Financial and Accounting Regulations/Accounting Circulars** (e.g. handling of financial and accounting records);
- (g) **Security Regulations** (e.g. handling of classified records); and
- (h) **Code on Access to Information** (e.g. proper organisation of records to facilitate efficient retrieval for timely response to public access requests).

Government's RM policy and ERM requirements

2.6 The Government's RM policy requires each B/D to implement a comprehensive RM programme that will -

- (a) make and keep full and accurate records;
- (b) minimise the costs of managing government records;
- (c) provide quality services to users;
- (d) provide necessary security for government information;
- (e) facilitate public access to records and information that encourages better understanding of government policies and operations; and
- (f) identify, preserve and provide access to archives that have continuing or permanent value for research, educational, cultural and other related purposes.

2.7 GC No. 2/2009 entitled "**Mandatory Records Management Requirements**" sets out the mandatory RM requirements that B/Ds must comply with to practise good RM in their organisations. In fact, some of the mandatory requirements, such as establishment of a records classification scheme(s) for administrative and programme records, and of

records retention and disposal schedules, are pre-requisite requirements for implementing an ERKS.

2.8 As far as ERM and ERKS are concerned, B/Ds should make reference to ERM standards and guidelines developed by GRS for developing and implementing an ERKS. Specifically, B/Ds should ensure that requirements prescribed in the following standards and guidelines are adhered to -

- (a) **FR of an ERKS;**
- (b) **RKMS** and its implementation guidelines; and
- (c) ***Guidelines on Disposal of Original Records (for records that have been digitised and stored in a digital form).***

2.9 In the context of developing organisational EIM strategies, B/Ds should ensure that the resultant organisational EIM strategies should be in line with the Government's RM policy and ERM requirements.

Business and operational requirements

2.10 RM is important because it supports B/Ds to meet business and operational requirements and enhances operational efficiency and effectiveness while minimising costs. B/Ds should review their business and operational requirements and assess the implications of those requirements on the implementation of ERM and ERKS in their organisations.

2.11 B/Ds should also examine whether the implementation of an ERKS should be carried out in one go with other EIM modules such as a knowledge management system so as to optimise EIM synergy.

Departmental RM policy and programme

2.12 Good RM starts with a policy which takes into account a B/D's unique business and RM needs and sets out what the B/D intends to do in RM. B/Ds should formulate a clear policy direction and demonstrate support for, and commitment to, the management of government records through the issue and maintenance of their departmental RM policies, in accordance with the requirements set out in Administration Wing Circular

Memorandum No. 5/2012 entitled “***Establishment of Departmental Records Management Policies***”. In the context of developing organisational EIM strategies, B/Ds should review its departmental RM policy¹² and examine whether the policy is instrumental to the implementation of ERM and ERKS in their organisations.

2.13 With a clear departmental RM policy in place guiding the strategic direction, B/Ds should implement the policy through a comprehensive RM programme together with proper RM processes, practices and procedures, so as to ensure compliance with legal and regulatory requirements, government regulations and directives and departmental policy. In gist, a departmental RM programme should cover essential RM functions, including but not limited to the following -

- (a) setting out what records should be created in each business process;
- (b) specifying the form of records that should be created and captured, such as an electronic form;
- (c) specifying the recordkeeping system(s)¹³ and technologies to be used for the capture, management and storage of records;
- (d) specifying the classification and organisation of records so as to support efficient and effective retrieval and use;
- (e) setting out what recordkeeping metadata should be created with a record and through which RM processes; and how those recordkeeping metadata will be managed and persistently linked to the record;
- (f) setting out requirements for retrieving, using and transmitting records and how long the records need to be kept to satisfy those requirements;

¹² The departmental RM policy of B/Ds should be subject to review as and when necessary having regard to changing legal and regulatory requirements, government RM policy and requirements as well as business needs. B/Ds may review their departmental RM policy in the process of formulating and implementing organisational EIM strategies so as to ensure that such policy will always reflect their needs.

¹³ See the definition in the glossary at Appendix 1.

- (g) preserving records and making them accessible over time, in order to meet business requirements and community expectations;
- (h) maintaining records in a safe and secure environment;
- (i) retaining records for as long as needed or required;
- (j) defining clearly RM roles and responsibilities; and
- (k) monitoring the effectiveness and efficiency of RM functions, processes, practices and procedures on an on-going basis.

2.14 As the implementation of an ERKS will necessitate changes in the departmental RM programme and the associated RM practices and procedures, B/Ds should assess the implications of changes including the need for change management and staff training, the estimated resources and skills required and timeline to devise a new RM programme and the associated RM practices and procedures.

Changes in RM roles and responsibilities

2.15 Defining RM roles and responsibilities and assigning them to appropriate staff; and promulgating such roles and responsibilities are crucial to good RM and to meeting the needs of internal and external stakeholders of B/Ds. Senior management of B/Ds should demonstrate its commitment by -

- (a) providing the resources to establish, implement, maintain and continually improve the departmental RM policy, programme, practices, procedures, etc.;
- (b) ensuring that RM roles, responsibilities and authorities are clearly defined, assigned and communicated throughout the organisation;
- (c) providing proper training to staff members to ensure that they are competent to discharge duties in relation to RM; and
- (d) directing and supporting continual improvement of RM.

2.16 B/Ds should assess whether significant changes in RM roles and responsibilities should be made in light of the implementation of an ERKS and gauge the potential implications of changes to staff members of different roles. This will help B/Ds estimate the manpower resources and expertise required to implement an ERKS and plan for change management.

Specific ERKS functionality to meet departmental RM and business needs

2.17 A recordkeeping system such as an ERKS is a tool to manage records. It can be a manual or an automated information system having the necessary functionality that enables it to carry out and support various RM functions and processes including collection, organisation and classification of records to facilitate retrieval, distribution, use, disposal or preservation of records throughout their life cycle.

2.18 The Government's EIM strategy requires B/Ds, among others, to develop or adopt an ERKS to drive ERM in the Government. When designing and implementing an ERKS, B/Ds should ensure that the functionality of the ERKS is able to meet the Government's and their departmental RM policies and requirements in full. In this connection, B/Ds should assess if more than one ERKS should be implemented in their organisations and whether additional functionality¹⁴ (other than those specified in **FR of an ERKS** developed by GRS) should be included in their ERKSs to be developed to support specific departmental RM requirements. B/Ds should also study whether the departmental information technology (IT) infrastructure, hardware and software have to be upgraded or replaced as appropriate to support efficient operation of an ERKS¹⁵.

Implementation approach and rollout strategy

2.19 Given that the implementation of an ERKS will bring profound changes to the business operations and RM of B/Ds, B/Ds should consider and adopt an appropriate implementation approach, e.g. a phased rollout

¹⁴ B/Ds should ensure that additional functionality to be built in an ERKS will not compromise the objectives of an ERKS to ensure authenticity, integrity, reliability and usability of records.

¹⁵ The Information Technology Management Units (ITMUs) of B/Ds should be tasked to examine the relevant technical issues and provide recommendations on IT infrastructure, IT security, hardware, software, etc. required for an ERKS.

strategy to help manage the identified risks of implementing an ERKS. In determining a suitable implementation approach and rollout strategy, B/Ds should take into account their ERM capabilities and expertise, users' readiness to adopt an electronic approach to managing records, operational needs, budgetary control, etc.

2.20 Specifically, B/Ds should assess whether it is appropriate to procure a commercial off-the-shelf ERKS solution with a certain degree of customisation to meet their specific business and/or RM requirements, or to develop an ERKS from scratch, having regard to considerations such as business and operational needs, resource implications, expertise in RM and IT and subsequent maintenance efforts.

2.21 In case B/Ds intend to implement CM and/or KM module(s) together with an ERKS, they should assess the need for system integration and plan for the implementation of different EIM modules carefully so as to ensure that the project scope is manageable at all times.

Need for data conversion and retention of legacy recordkeeping systems

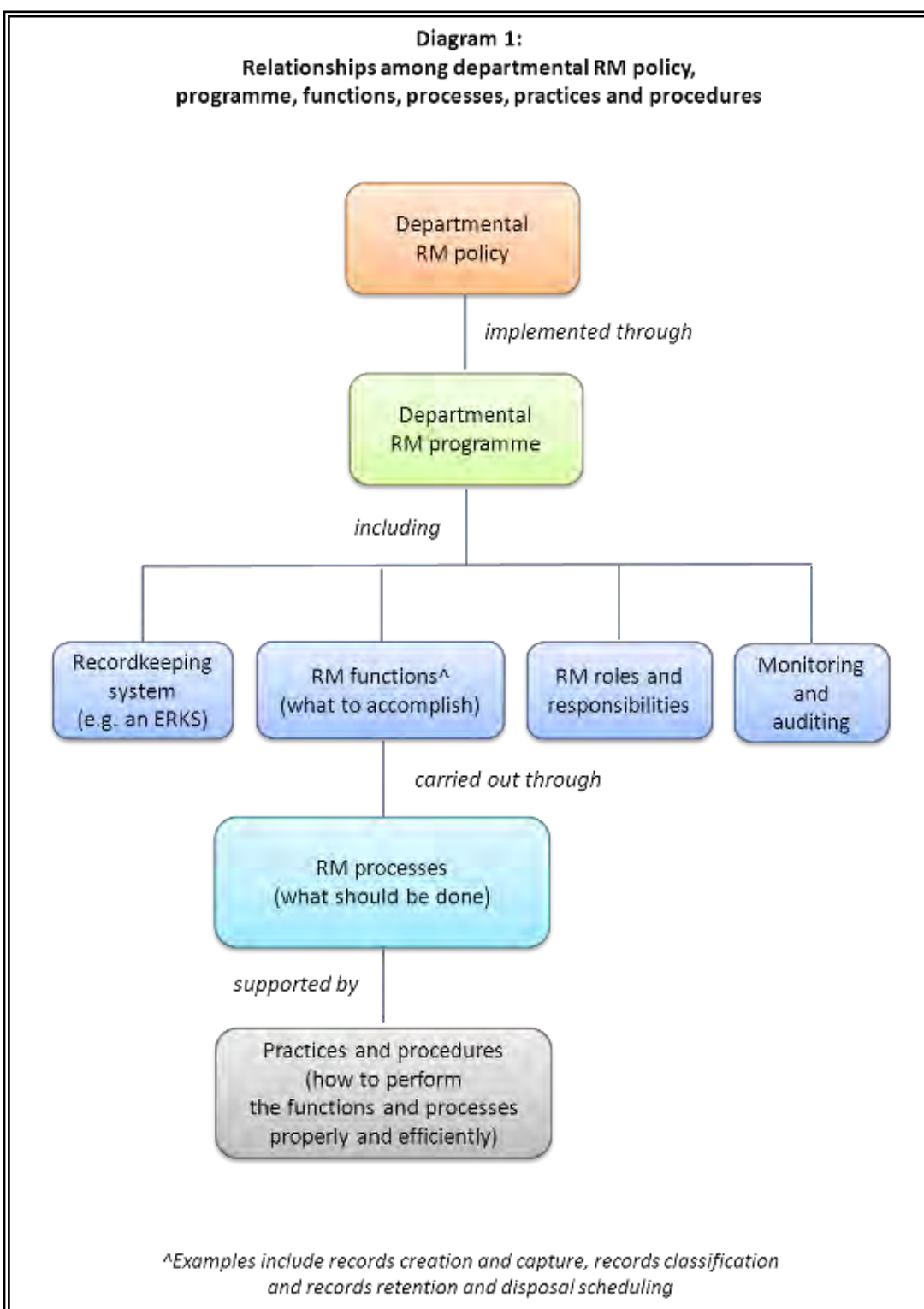
2.22 When developing their organisational EIM strategies, B/Ds should consider whether there is a need to conduct data conversion for existing non-electronic records and migration of existing electronic records into an ERKS. If such need is confirmed and the data conversion and/or data migration involves a large quantity of records, B/Ds should assess the magnitude of work involved and the implications in terms of costs and time on implementing an ERKS.

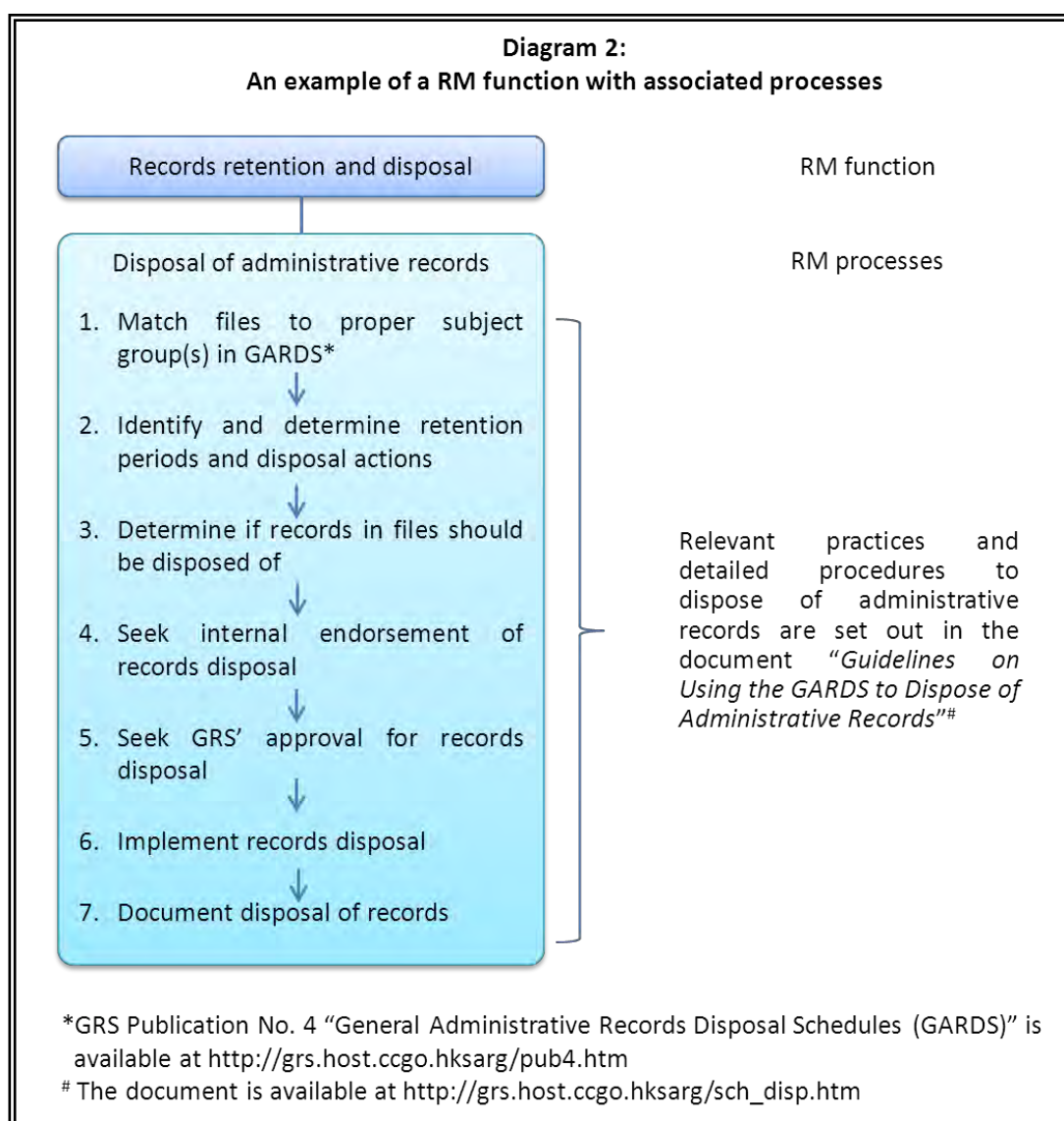
2.23 In addition, B/Ds should assess and determine whether legacy recordkeeping system(s) should be kept in parallel with the operation of an ERKS and examine the pros and cons in so doing.

Changes in RM processes, practices and procedures

2.24 A departmental RM policy, programme and recordkeeping system cannot operate efficiently and effectively without implementing a set of proper RM processes, practices and procedures in tandem. RM practices and procedures set out the proper ways, authorities and the responsible party(ies) performing RM functions and processes with a view

to demonstrating the accountability of a departmental RM programme and specifying the expected behaviour required of staff members on RM. RM processes, practices and procedures should be formulated to support the implementation of departmental RM policy and programme. The relationships among the departmental RM policy, programme, functions, processes, practices and procedures are depicted in **Diagram 1** and **Diagram 2** below.





2.25 Implementation of an ERKS will bring profound changes to the existing departmental RM processes, practices and procedures which are commonly geared to a paper-based recordkeeping system. In this connection, B/Ds need to assess the scale and magnitude of work involved, and assess resource implications to develop the new RM processes, practices and procedures to support smooth operation of an ERKS.

Staff skills and training required

2.26 To successfully implement an ERKS, B/Ds need to draw on necessary skills, knowledge and expertise in IT, RM, change management and project management so that they may design proper RM processes, practices and procedures under the ERKS environment; integrate business processes with RM processes; work out the technical architecture, systems

integration; implement change management programme, etc. Staff members with a suitable mix of skills and expertise are therefore required to plan and implement an ERKS. If required, B/Ds may consider engaging external consultancy services to fill the gap of expertise.

2.27 In particular, B/Ds should plan for change management strategy and develop staff training programme to assist records users and RM staff in adapting to changes associated with the implementation of an ERKS.

Monitoring and auditing of RM functions and activities

2.28 To demonstrate that their RM programmes are functioning properly and effectively, B/Ds should undertake on-going monitoring and regular internal audits to ensure that the Government's RM policy and requirements and departmental RM policy and programme, practices and procedures are adhered to. B/Ds should also identify non-conformities and take proper actions to redress and correct non-conformities timely.

2.29 In terms of departmental RM review, B/Ds should examine whether the monitoring and auditing practices and measures should be revised by way of using an ERKS. For example, an ERKS possesses the capability to generate records management reports to audit RM activities conducted by a group of records users during a specified time period to identify non-conformities, thereby obviating the need to collate various RM returns.

Next Step

2.30 Upon the completion of the self-assessment, B/Ds should consolidate the findings and recommendations with a view to -

- (a) determining their readiness to implement an ERKS;
- (b) mapping out the ERKS functionality that need to meet specific departmental business and RM requirements;
- (c) planning for the necessary preparatory tasks, e.g. conducting a review of the departmental records classification scheme, to implement an ERKS; and

- (d) working out the estimated costs and resource requirements, e.g. the estimated costs for upgrading IT infrastructure and conducting data conversion to digitise some selected existing paper records, associated with the implementation of an ERKS.

2.31 With the information collected, considerations examined and recommendations made as a result of conducting the self-assessment, B/Ds should then proceed to map out an action plan and formulate a timetable for implementation of an ERKS as part of their EIM strategies. The development of the said action plan will be elaborated in **Chapter 3**.

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CHAPTER 3



**Developing an Implementation Plan
to Initiate, Plan and Implement an
ERKS**

Chapter 3 Developing an Implementation Plan to Initiate, Plan and Implement an ERKS

Introduction

3.1 This chapter advises B/Ds to formulate a robust implementation plan to initiate, plan and implement an ERKS in their organisations upon the completion of a RM review as set out in **Chapter 2**. In addition to the salient points described below, an example of such an ERKS implementation plan is provided at **Appendix 3** for reference.

Need for an ERKS implementation plan

3.2 An implementation plan is a management tool designed to assist an organisation in managing and monitoring the implementation of a policy, programme, project, etc. effectively and delivering the expected outcomes on time, within budget and up to expectations.

3.3 B/Ds are required under the Government's EIM strategy to take forward ERM as an integral part of EIM and adopt an ERKS as a mandatory component to drive ERM in the Government. To this end, **B/Ds should formulate an implementation plan for an ERKS when developing their organisational EIM strategies**. The RM review as set out in **Chapter 2** provides the basis and key information for B/Ds to formulate such an implementation plan to seek necessary funding and gain senior management's support and commitment to implementing an ERKS.

Scope of an ERKS implementation plan

3.4 Generally speaking, an ERKS implementation plan¹⁶ should set out essential information on why and how an ERKS should be implemented. The implementation plan should cover major aspects including but not limited to the following -

¹⁶ To ensure that the implementation plan of an ERKS is self-contained, B/Ds may suitably include essential information, e.g. a cost estimate for implementing an ERKS on those tasks specified in paragraph 4.2 of Chapter 4.

- (a) **current problems/issues** - describing the background and the crux of the matter to be dealt with through executing the implementation plan of an ERKS (*please see examples in sections 3 and 4 of **Appendix 3***);
- (b) **project objectives** - setting out the project scope and objectives to plan for implementation (*please see examples in sections 5 and 7 of **Appendix 3***);
- (c) **expected outcomes** - setting out the anticipated benefits, expected outcomes and deliverables to solicit buy-in and support (*please see examples in section 6 of **Appendix 3***);
- (d) **management control/project management** - setting out the implementation approaches, methodologies and frameworks applied by a B/D to plan and control the implementation of an ERKS, etc. (*please see examples in section 8 of **Appendix 3***);
- (e) **governance and accountability** - establishing a clear and effective governance structure, e.g. a committee to govern the planning and management of implementation of an ERKS and clearly defining roles and responsibilities of key stakeholders (*please see examples in section 9 of **Appendix 3***);
- (f) **stakeholder engagement** - identifying and communicating effectively with those people or groups who have an interest or influence on the planning, implementation and expected outcomes of an ERKS; and providing necessary training to equip staff members to lead and support the implementation of an ERKS¹⁷ (*please see examples in section 10 of **Appendix 3***);
- (g) **risk management** - explicitly identifying and addressing the challenges and risks involved in implementing an ERKS (*please see examples in section 11 of **Appendix 3***);

¹⁷ An effective change management and communication plan and a comprehensive training plan should be drawn up to engage key stakeholders in initiating, planning and implementing an ERKS and equip staff members with necessary expertise, knowledge and skills to lead and support the implementation of an ERKS. If a B/D intends to develop an integrated EIM solution including an ERKS and other EIM modules, they may incorporate the change management and communication plan and the training plan of an ERKS into the overall communication and training plans of an integrated EIM solution.

- (h) **resource management** - planning for and managing the expenditures, constraints and availability of resources for implementing an ERKS (*please see examples in section 12 of Appendix 3*);
- (i) **time management** - setting out schedules and key milestones for implementing an ERKS and identifying dependencies among planned tasks and activities (*please see examples in section 13 of Appendix 3*); and
- (j) **review, monitoring and evaluation** - establishing methods and metrics to monitor and measure the realisation of benefits/expected outcomes and evaluating the effectiveness of the implementation of an ERKS (*please see examples in section 14 of Appendix 3*).

3.5 B/Ds should ensure that the implementation plan of an ERKS is -

- (a) clear on the decision, direction and way forward;
- (b) logical with well-defined assumptions, expectations, inputs and expected outcomes, and with explanations on their relationships and interdependencies;
- (c) clear on timeframes, project phases, especially where there are interdependencies with other policies, programmes or projects;
- (d) clear on risks, constraints and challenges;
- (e) clear on the roles and responsibilities and governance mechanism to take forward and monitor the implementation and to evaluate the actual outcomes against the expected outcomes; and
- (f) succinct, consistent and easily understood by everyone dealing with and using it.

3.6 B/Ds should formulate a realistic and effective implementation plan to meet their specific business and operational needs. B/Ds should exercise judgment over the level of details that will enable them to effectively manage the implementation of an ERKS.

3.7 The example of an implementation plan of an ERKS at **Appendix 3** is not intended to be exhaustive. B/Ds may include other aspects of tasks and activities, such as those set out in paragraph 4.2 of **Chapter 4**, in the implementation plan of an ERKS as appropriate.

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CHAPTER 4



Mapping out Implementation of an ERKS in Organisational EIM Strategies

Chapter 4 Mapping out Implementation of an ERKS in Organisational EIM Strategies

Introduction

4.1 This chapter advises B/Ds on the key RM issues pertinent to the implementation of an ERKS that should be included in their organisational EIM strategies.

ERM aspects of organisational EIM strategies

4.2 The review of relevant RM, ERM and ERKS issues set out in **Chapter 2** help B/Ds identify their ERM requirements, assess their ERM capabilities and readiness, and map out key preparatory tasks to take forward the implementation of an ERKS in their organisations. After conducting such a comprehensive review, B/Ds should be in a better position to plan for the implementation of an ERKS as a core component of their organisational EIM strategies. The following essential aspects should be covered in the organisational EIM strategies -

- (a) key challenges and opportunities identified for improving departmental RM programme, functions, processes, practices and procedures in the context of implementing an ERKS having regard to legal, regulatory, business and operational requirements;
- (b) strategies and measures to tackle the identified key challenges to implement an ERKS;
- (c) an estimate on the resources, manpower and expertise required to implement an ERKS;
- (d) an implementation plan¹⁸ of an ERKS including major aspects specified in paragraph 3.4 of **Chapter 3** having regard to ERM capabilities and readiness, resources, manpower and expertise in RM;

¹⁸ An example of an ERKS implementation plan with explanations is provided at Appendix 3.

- (e) a list of major preparatory tasks, such as conducting a revamp of the departmental records classification scheme(s) and upgrading of IT infrastructure prior to implementing an ERKS; and
- (f) a list of high-level functionality of an ERKS¹⁹ in accordance with **FR of an ERKS** and **RKMS** developed by GRS and having regard to B/Ds' specific RM, business and operational needs; and the associated IT infrastructure, hardware and software required²⁰.

4.3 The organisational EIM strategies, including recommendations to implement an ERKS, should be approved by senior management of B/Ds.

4.4 In case a B/D, in the context of developing its organisational EIM strategies, concludes that its organisation is not so ready to commence the ERKS implementation in the coming two to three years, the B/D should spell out the pertinent problems and challenges. More importantly, the B/D should formulate strategies and measures to tackle these problems and difficulties within a reasonable timeframe so as to enable an early implementation of an ERKS.

Taking forward ERM recommendations of the organisational EIM strategies

4.5 For the major preparatory tasks identified in the departmental RM review, B/Ds should work out a timetable to implement the work as soon as practicable. B/Ds may document the proposed preparatory tasks in the column "Recommendation/Follow-up action" of the checklist at **Appendix 2**.

4.6 When planning and carrying out the preparatory tasks, B/Ds should assess its implications on the implementation schedule, resources and expertise required, cost estimates, etc. of subsequent ERKS implementation to avoid incurring abortive work and costs once the system design and development stage of an ERKS has started.

¹⁹ Similar to other IT system development and implementation, B/Ds need to develop a specification setting out the functional requirements of an ERKS to procure system development and/or implementation services.

²⁰ See footnote 15.

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APPENDICES



Appendix 1

Glossary

Term	Definition
Administrative records	Administrative records are records created or received during the course of day-to-day administrative activities that deal with finance, accommodation, procurement and supplies, establishment, human resources and other general administrative activities. Records of this nature are common to B/Ds.
Authenticity	An authentic record is one that can be proven (a) to be what it purports to be; (b) to have been created or sent by the person purported to have created or sent it; and (c) to have been created or sent at the time purported.
Capture (verb)	Capturing records means all of the processes involved in getting a record into an ERKS, namely registration, classification and addition of metadata.
Content	Information or idea the record contains.
Context	Information about the circumstances in which the record is created, transmitted, maintained and used (e.g. who created it, when, to whom was it sent, why).
Digitisation	<p>Process of converting a non-electronic record, e.g. a paper record, a photograph and an audio recording, into an electronic representation.</p> <p>Examples of digitisation include scanning or imaging, taking digital photographs of the original records, or converting analogue voice recordings to digital media.</p>
Electronic record	A record generated in digital form by an information system, which can be (a) transmitted within an information system or from one information system to another, and (b) stored in an information system or other medium.

Term	Definition
Electronic recordkeeping system (ERKS)	An information/computer system with the necessary records management capabilities designed to electronically collect, organise, classify and control the creation, storage, retrieval, distribution, maintenance and use, disposal and preservation of records.
File	See <i>folder</i> below.
Folder file (i.e. file)	<p>An organised unit of records grouped together because they relate to the same subject, activity or transaction.</p> <p><i>Notes:</i></p> <p>(a) <i>This is the records management usage of the term file. It differs from the IT usage, for which the term component is used. Where this term is used in isolation in the context of this document, it refers to both electronic folders, hybrid folders and physical folders unless specified otherwise.</i></p> <p>(b) <i>B/Ds may choose to implement sub-folders in an ERKS. Use of sub-folders is optional.</i></p> <p>(c) <i>Records are not directly stored in a folder or sub-folder. They are stored in a part of a folder or a sub-folder.</i></p>
Inactive records	Records which are no longer or rarely required for action or reference.
Integrity	The integrity of a record refers to its being complete and unaltered.

Term	Definition
Metadata	<p>Literally defined as “data about data”. In the records management context, they are data describing the context, content and structure of records and their management through time. Metadata will accrue during the life cycle of records.</p> <p>Metadata contains two concepts -</p> <p>(a) A data structure, or “container” for information. Examples of this for records are “title” and “date created”. The common term for this is “metadata element”.</p> <p>(b) Specific values (i.e. metadata values) of information that apply to a record or other entity. Examples of this for records, to match the above examples, are “Arrangements for initiating the ABC project” and “2011-04-30”.</p>
Non-electronic record	A record that is in hardcopy form such as paper record, microfilm and audio recording.
Programme records	Programme records are records created or received by a B/D whilst carrying out the primary functions, activities or mission for which the B/D was established. Records of this nature are unique to each B/D.
Recordkeeping system	Recordkeeping system is a manual or an automated information system in which records are collected, organised and categorised to facilitate their retrieval, distribution, use, disposal or preservation.
Records classification scheme	Also known as file plan. A records classification scheme is a plan or list in which records of an organisation are categorised according to its business functions and/or contents of the records and a coding system expressed in symbols (i.e. alphabetical, numerical, alphanumerical, or decimal, etc.) that correspond to aggregations of records and are affixed to the records so categorised.
Records management policy	Deliberate plan of action to guide decisions and achieve rational outcome(s) in relation to management of records.

Term	Definition
Records management procedure	Documented set of actions which is the official or accepted way of carrying out records management.
Records management process	Series of actions taken in order to achieve a result in relation to management of records.
Records retention and disposal schedule	<p>A systematic listing or description of an organisation's records which indicates the arrangements to be made for their custody, retention, and final disposition.</p> <p><i>Notes:</i></p> <p>(a) <i>Records retention and disposal schedules of programme records of government agencies should be drawn up with the concurrence of the Government Records Service Director. For the retention and disposal schedules of administrative records, please refer to the Government Records Service's Records Management Publication No. 4 – General Administrative Records Disposal Schedules.</i></p> <p>(b) <i>In the context of RKMS, rules governing how long specified record(s) and/or aggregation(s) are retained, and the disposal process to be followed at the end of this time is expressed in the form of a retention and disposal schedule.</i></p>
Reliability	A reliable record is one whose contents can be trusted as a full and accurate representation of the transactions, activities or facts to which they attest and can be depended upon in the course of subsequent transactions or activities.
Retention period	The time the records are to be kept after the records become inactive but before their final disposal.
Structure	Physical and logical format of the record, and the way parts of the record related to each other (e.g. the structure of an e-mail record covers its header, body, attachments and corresponding reply).

Term	Definition
Usability	A usable record is one that can be located, retrieved, presented and interpreted. It should be capable of subsequent presentation as directly connected to the business activity or transaction that produced it.
Vital record	A record containing information essential to the survival and continued operation of a B/D during and after an emergency or a disaster.

Appendix 2

Self-assessment checklist for key RM and ERKS implementation issues**Explanatory notes**

1. To assist B/Ds in examining key RM and ERM issues pertinent to the initiation, planning and successful implementation of an ERKS in a systematic manner in the context of developing their organisational EIM, a total of **45** questions have been drawn up in the following self-assessment checklist for key RM and ERKS implementation issues (Checklist). B/Ds are advised to document the identified issues/problems and make recommendations in the corresponding fields of the “Recommendation/Follow up action” column. Upon the completion of the Checklist, B/Ds should take actions set out in paragraphs 2.30 and 2.31 in **Chapter 2**.
2. All questions have been grouped according to the nature of RM issues to be examined as specified in paragraph 2.3 of **Chapter 2**. B/Ds should note that the scope of RM and ERM issues to be reviewed and evaluated is intentionally broad and comprehensive. For the sake of completeness, issues relating to change management and project management which are unique to departmental circumstances have been included but they are only mentioned briefly.
3. To assist B/Ds in consolidating findings and recommendations upon the completion of the self-assessment to develop an implementation plan of an ERKS, information collected from each question has been used to -
 - (a) assess RM capability and readiness to implement an ERKS;
 - (b) plan for key preparatory tasks;
 - (c) map out the ERKS functionality to meet specific departmental business requirements; and
 - (d) gauge the anticipated costs and resource requirements.
4. Regarding 3 (a) above, out of the 45 questions, **11** have been designed in such a way that affirmative answers (“Yes”) to those questions, where applicable, are expected so as to demonstrate that the B/D concerned has strong RM capability and readiness to implement an ERKS. That means, the more affirmative answers a B/D has, the higher its RM capability and readiness to implement an ERKS.

Note: NA denotes “not applicable”. Please provide a reason(s) for selecting NA.

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
I. Legal and regulatory requirements					
The following questions assess whether a B/D’s current departmental RM policy, programme, functions, processes, practices and procedures meet legal and regulatory requirements, and examine whether those legal and regulatory requirements have any implications on the implementation of an ERKS in the B/D.					
1.	<p><i>[Information collected helps assess a B/D’s readiness to implement an ERKS and the answer is expected to be affirmative.]</i></p> <p>Has my B/D incorporated relevant legal and regulatory requirements into the departmental RM policy and complied with these requirements relating to the creation, organisation, use, management, maintenance, access to and disposal of records?</p> <p>Examples of the requirements and the implications include -</p> <ul style="list-style-type: none">• Evidence Ordinance (Cap. 8) - e.g. proper keeping of records to ensure its legal admissibility;• Limitation Ordinance (Cap. 347) - e.g. retention of relevant records for the specified limitation periods to serve as evidence in possible legal proceedings;• Personal Data (Privacy) Ordinance (Cap. 486) - e.g. timely destruction of personal data in accordance with the Code of Practice on Human Resource Management issued by the Privacy Commissioner for Personal Data;• Electronic Transactions Ordinance (Cap. 553) - e.g. admissibility of electronic records in a court of law; and• Code on Access to Information - e.g. proper organisation of records to facilitate their efficient retrieval to				

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	respond timely to public access requests.				
2.	<p><i>[Information collected helps map out the ERKS functionality to address specific departmental business and records management needs.]</i></p> <p>Are there any implications of relevant legal and regulatory requirements on the implementation of an ERKS particularly on the functionality of the ERKS, e.g. enhanced security measures to control access to records to meet specific regulatory requirements? If the answer is affirmative, please document the major implications in the "Recommendation /Follow-up action" column.</p>				
II. Government's RM policy and ERM requirements <p>The following questions assess whether the current departmental RM policy and programme of a B/D meet the Government's RM policy and mandatory RM requirements specified in GC No. 2/2009 and assess whether the departmental EIM requirements are in line with the Government's RM policy and ERM requirements.</p>					
3.	<p><i>[Information collected helps assess a B/D's readiness to implement an ERKS and the answer is expected to be affirmative.]</i></p> <p>Has my B/D implemented all mandatory RM requirements as specified in GC No. 2/2009 entitled "Mandatory Records Management Requirements"? If not, will those outstanding tasks affect the schedule for implementation of an ERKS?</p> <p>[Note: Some of the mandatory RM requirements (including the establishment of records classification schemes for administrative and programme records, and of records retention and disposal schedules) are prerequisites for implementing an effective and efficient ERKS in a B/D.]</p>				
4.	<p><i>[Information collected helps assess a B/D's readiness to implement an ERKS and the answer</i></p>				

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	<i>is expected to be affirmative.]</i> Are the EIM requirements of my B/D in line with the Government's RM policy and ERM requirements?				
5.	<i>[Information collected helps assess a B/D's readiness to implement an ERKS and the answer is expected to be affirmative.]</i> Are RM and IT staff members in my B/D familiar with the Government's ERM requirements including FR of an ERKS and RKMS ?				
III. Business and operational requirements The following questions assess whether a B/D's specific business and operational requirements have any implications on implementation of ERM and ERKS in its organisation.					
6.	<i>[Information collected helps map out the ERKS functionality to address specific departmental business and records management needs.]</i> How will an ERKS help enhance the overall operational efficiency of my B/D? Please make recommendations in the "Recommendation/Follow-up action" column. [Note: For example, officers in my B/D occasionally complain that they have spent a lot of efforts to locate and retrieve records so as to conduct business or respond to public enquiries. Management of records in an ERKS supports users to conduct speedy search and retrieval of records thereby saving officers' substantial time and efforts. As such, the search and retrieval functionality of an ERKS should be robust and powerful to suit the operational needs of my B/D.]				
7.	<i>[Information collected helps identify preparatory tasks.]</i> Does my B/D need to conduct a business process re-engineering exercise in the context				

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	<p>of implementing an ERKS to dovetail new RM practices and procedures with business processes?</p> <p>[Note: B/Ds should estimate the complexity of such process re-engineering exercise when drawing up the implementation plan.]</p>				
8.	<p><i>[Information collected helps map out the ERKS functionality/system integration with other EIM related modules to address specific departmental business needs.]</i></p> <p>Are there operational and business needs to develop and implement an ERKS together with other EIM systems such as collaborative workspace or a knowledge management system to address business and operational needs? If the answer is affirmative, please document other EIM modules to be implemented with the ERKS in the “Recommendation /Follow-up action” column.</p> <p>[Note: B/Ds are given the flexibility to implement a stand-alone ERKS for records management purpose or develop an ERKS together with other EIM systems having regard to their business and operational needs. B/Ds should be mindful of the resource implications and the complexity of project implementation if multiple EIM modules are developed and implemented in one go.]</p>				

IV. Departmental RM policy and programme

The following questions assess whether a B/D has established a clear direction and demonstrated support for, and commitment to, the proper management of records through the formulation, promulgation and maintenance of departmental RM policy and programme; and examine whether the departmental RM policy and programme have to be revised in light of the implementation of EIM, including an ERKS.

9.	<p><i>[Information collected from question (a) helps identify preparatory tasks.]</i></p> <p><i>[Information collected from question (b) helps</i></p>				
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S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	<p><i>gauge the anticipated costs and other resource requirements.]</i></p> <p>(a) Is there a need to revise and supplement my B/D's departmental RM policy and RM programme to foster adoption of ERM and ERKS in my organisation? Please document the information in the "Recommendation/Follow-up action" column.</p> <p>(b) Are additional resources required to implement necessary changes to departmental RM policy and programme in light of the implementation of an ERKS? What are those resources, when and how should they be obtained and deployed? Please document the information in the "Recommendation/Follow-up action" column.</p>				
10.	<p><i>[Information collected helps assess a B/D's readiness to implement an ERKS and the answer is expected to be affirmative.]</i></p> <p>Has my B/D developed an information management policy supporting integrated information management and RM?</p> <p>[Note: This question is applicable only if a B/D intends to develop an EIM solution covering both the information management module and ERKS.</p> <p>The information management policy should cover all information and records created and received by a B/D and seek to -</p> <ul style="list-style-type: none"> • identify business processes that create, receive and store information and/or records; • identify information systems (including business systems) that keep whole-of-process information and/or records, e.g. the Paperless Meeting 				

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	<p>application developed by OGCIO;</p> <ul style="list-style-type: none"> • identify and show the relationships between different information systems that keep the whole-of-process information and/or records; and • set standards for metadata and terminology for use in all information systems, including an ERKS. This will enable the use of same metadata across different systems thereby reducing efforts to capture metadata. <p>The statement of information management policy provides useful information for B/Ds to consider whether an ERKS should integrate with other EIM systems (such as a content management system) so as to facilitate capturing/import of records from other EIM modules into the ERKS for management and storage. If an information system does not provide comprehensive RM functions to manage and store records, B/Ds should consider integrating the system with an ERKS for the latter to manage and store records in a proper and secure manner, so that the authenticity, integrity, reliability and usability of the records are maintained.]</p>				

V. Changes in RM roles and responsibilities

The following questions assess whether changes in RM roles and responsibilities should be made in light of the implementation of an ERKS and whether additional resources and manpower are required to enable those changes.]

11.	<p><i>[Information collected helps identify preparatory tasks.]</i></p> <p>Is my B/D ready to establish a governance mechanism with clear roles and responsibilities to oversee the planning and implementation of EIM, including implementation of an ERKS?</p>				
12.	<p><i>[Information collected from question (a) helps</i></p>				

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	<p><i>identify preparatory tasks.]</i></p> <p><i>[Information collected from questions (b) and (c) help gauge the anticipated costs and other resource requirements.]</i></p> <p>(a) Will the RM roles and responsibilities of my B/D be re-defined after the use of an ERKS?</p> <p>(b) If the answer to (a) is affirmative, will the anticipated changes in RM roles and responsibilities bring significant implications, e.g. generating staff training needs? Please document the implications in the “Recommendation/Follow-up action” column.</p> <p>(c) Will additional manpower resources be required to implement an ERKS? Will any requisite RM expertise be engaged? Please document the estimation and relevant information in the “Recommendation/Follow-up action” column.</p> <p>[Note: Responsibilities for RM should include but are not limited to the following -</p> <ul style="list-style-type: none"> • development, management and review of departmental RM policy, programme, practices and procedures; • provision of RM advice within a B/D; • design and implementation of RM systems, including an ERKS; • monitoring and maintaining compliance with the Government’s and departmental RM policy, programme, practices, procedures and RM systems; • creation, capturing, management and storage of records; • development, management and maintenance of records classification scheme(s); • establishment and review of records 				

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	<p>retention and disposal schedules; and</p> <ul style="list-style-type: none"> orderly and timely disposal of time-expired records according to the approved records retention and disposal schedules. <p>There may be a need to specify new roles and responsibilities, e.g. a system administrator to manage an ERKS.]</p>				
13.	<p><i>[Information collected helps identify preparatory tasks.]</i></p> <p>(a) Will specific RM functions and processes (e.g. establishing, maintaining and reviewing records classification schemes, establishing and reviewing records retention and disposal schedules) be centrally performed and managed by a small number of well-trained staff or be delegated to be performed by individual divisions or registries after the implementation of an ERKS? Please document the selected approach in the “Recommendation/Follow-up action” column.</p> <p>(b) Regarding (a), what are the pros and cons of the selected approach? Please document the pros and cons in the “Recommendation/Follow-up action” column.</p> <p>(c) Are there operational needs to continue the existing mode of operation of registry services? Are there any benefits for my B/D to maintain decentralised registry services?</p> <p>[Note: Adoption of an ERKS will enable RM staff as well as records users to carry out RM functions and processes, e.g. records capturing, retrieval and disposal through their desktop computers irrespective of their office locations. Therefore, keeping registries in specified physical locations to serve records users should</p>				

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	no longer be a primary concern. B/Ds should critically review which approach, “centralised” or “decentralised”, is more efficient and cost effective in their operational context.]				
VI. Specific ERKS functionality to meet departmental RM and business needs The following questions assess whether additional functionality should be included in a B/D’s ERKS; departmental IT infrastructure, hardware and software should be updated; and more than one ERKS should be implemented in a B/D. This helps a B/D work out a cost estimate for implementing one or more ERKS in its organisation as appropriate. A B/D should ensure that the additional functionality to be built in its ERKS will not compromise the objectives of an ERKS to ensure the authenticity, integrity, reliability and usability of records.					
14.	<i>[Information collected helps map out the ERKS functionality to address specific departmental business and records management needs.]</i> (a) Are there any additional functionalities that should be included in the ERKS other than those set out in the FR of an ERKS and RKMS to meet specific business and RM needs of my B/D? (b) What are those additional functionalities? If the answer to (a) is affirmative, please document the proposed additional functionalities in the “Recommendation/Follow-up action” column.				
15.	<i>[Information collected helps map out the ERKS functionality to address specific departmental business and records management needs.]</i> (a) Is it my B/D’s intention to implement more than one ERKS having regard to specific business and operational needs? (b) If the answer to (a) is affirmative, what are the pros and cons (such as the efforts and resources to maintain multiple ERKSs) of having more than one ERKS in my B/D? Please document the pros and cons in the “Recommendation/Follow-up action”				

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	<p>column.</p> <p>[Note: An ERKS is able to support and control multiple repositories. Therefore, B/Ds may manage and store records created and received in different business areas in one single ERKS. Proper design of security and access control and records classification are able to restrict access to records by users belonging to different business areas. B/Ds should critically consider whether there are genuine business and operational needs to implement and maintain more than one ERKS.]</p>				
16.	<p><i>[Information collected from question (a) helps identify preparatory tasks.]</i></p> <p><i>[Information collected from question (b) helps gauge the anticipated costs and other resource requirements.]</i></p> <p>(a) Does my B/D need to upgrade or replace IT infrastructure, hardware and software to support efficient and effective operation of an ERKS?</p> <p>(b) If the answer to (a) is affirmative, what are the implications and the estimated costs for the upgrading or replacement? Please document the implications and the estimated costs in the “Recommendation/Follow-up action” column.</p>				
VII. Implementation approach and rollout strategy of an ERKS <p>The following questions assess which implementation approach and rollout strategy should be adopted by a B/D and help a B/D work out a cost estimate for implementing an ERKS.</p>					
17.	<p><i>[Information collected from question (a) helps identify preparatory tasks.]</i></p> <p><i>[Information collected from question (b) helps gauge the anticipated costs and other resource requirements.]</i></p>				

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	<p>Please document the answers to this question in the “Recommendation/Follow-up action” column.</p> <p>(a) What is the most suitable approach to implement an ERKS (e.g. procuring a commercial off-the-shelf ERKS solution with a certain degree of customisation, adopting the common shared ERKS services to be developed by OGCIO or developing an ERKS from scratch by my B/D)?</p> <p>(b) What are the estimated costs and resources required to adopt the selected approach?</p>				
18.	<p><i>[Information collected helps identify preparatory tasks.]</i></p> <p>Is there a need for my B/D to conduct a small scale pilot run of an ERKS to identify implementation issues?</p> <p>[Note: A pilot run can help B/Ds identify areas of improvement in system functionality, change management needs and project risks.]</p>				
19.	<p><i>[Information collected helps identify preparatory tasks.]</i></p> <p>Please document the selected approach in the “Recommendation/Follow-up action”.</p> <p>(a) Does my B/D need to adopt a phased changeover to roll out an ERKS to different divisions/sections over time or a ‘big bang’ approach to roll out the ERKS to all records users in one go?</p> <p>(b) Regarding (a), what are the pros and cons of the selected approach? Please document the pros and cons in the “Recommendation/Follow-up action” column.</p> <p>[Note: The purpose of this question is to enable B/Ds to be aware of the scale and complexity of</p>				

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	<p>project implementation. Either approach is doable. Factors that can help a B/D determine the most suitable implementation approach and rollout strategy to its organisation include -</p> <ul style="list-style-type: none"> • size and structure of a B/D; • uniformity of business practices across a B/D. If business practices are more or less uniform across a B/D, a 'big bang' approach may be appropriate; • readiness of records users; • degree of change management required; • need for data conversion, e.g. converting existing paper records into electronic form. A B/D should allow sufficient time for conducting data conversion and quality assurance checking; and • resource limitations.] 				
20.	<p><i>[Information collected helps gauge the anticipated costs and other resource requirements.]</i></p> <p>What are the implications of the selected implementation approach and rollout strategy on the schedule and the estimated costs for implementing an ERKS in my B/D? Please document the implications in the "Recommendation/Follow-up action" column.</p>				
VIII. Need for data conversion and retention of legacy recordkeeping systems <p>The following questions assess the need for data conversion and migration/import of existing non-electronic and electronic records into an ERKS and examine the need to keep legacy paper-based recordkeeping systems.</p>					
21.	<p><i>[Information collected helps gauge the anticipated costs and other resource requirements.]</i></p> <p>(a) Are there significant operational needs and benefits to keep legacy paper-based recordkeeping systems in tandem with the</p>				

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	<p>use of an ERKS? What are those operational needs? Please document the needs in the “Recommendation/Follow-up action” column.</p> <p>(b) If the answer to (a) is affirmative, what are the implications and the estimated costs for maintaining the legacy paper-based recordkeeping systems? Please document the implications and the estimated costs in the “Recommendation/Follow-up action” column.</p>				
22.	<p><i>[Information collected helps identify preparatory tasks.]</i></p> <p>Are there business and operational needs to convert (a) existing non-electronic records, e.g. paper and microfilm records and/or (b) new non-electronic records into digitised records for management and storage in an ERKS?</p>				
23.	<p><i>[Information collected helps identify preparatory tasks.]</i></p> <p>What are the legal, business and operational implications for converting non-electronic records into digitised records? Please document the relevant implications in the “Recommendation/Follow-up action” column.</p>				
24.	<p><i>[Information collected helps identify preparatory tasks.]</i></p> <p>Should the original paper records be destroyed after conversion?</p> <p>[Note: B/Ds should obtain the prior agreement of the GRS Director before destroying any government records in accordance with paragraph 18 of GC No. 2/2009 entitled “Mandatory Records Management Requirements”.</p> <p>Although it might seem logical on efficiency grounds to destroy non-electronic records</p>				

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	<p>immediately after their conversion and to use the digitised copies of the non-electronic records in their stead to conduct business and serve as evidence, the full implications of early destruction of the original non-electronic records before the expiry of their approved retention period should be assessed to safeguard the Government's interests. To this end, prior to seeking the agreement of the GRS Director for destruction of the original records, a B/D should conduct a risk analysis and satisfy itself on the basis of the findings of the risk analysis that early destruction of original records will not or is unlikely to jeopardise the interests of the Government as a whole and the B/D itself.</p> <p>To provide guidance for B/Ds to assess potential risks of early destruction of original records after digitisation, GRS has promulgated guidelines entitled "<i>Disposal of Original Records (for records that have been digitised and stored in a digital form)</i>" on CCGO (http://grs.host.ccgo.hksarg/erm/s04/415.html) for compliance by B/Ds.]</p>				
25.	<p><i>[Information collected helps identify preparatory tasks.]</i></p> <p>(a) Is there a need to import existing electronic records into an ERKS for management and storage?</p> <p>(b) If the answer to (a) is affirmative, what strategy (e.g. migration of records at one go or by phases) should be adopted to migrate the records? Please document the answers in the "Recommendation/Follow-up action" column.</p> <p>[Note: Due care should be exercised to conduct migration and conversion activities so as to ensure the authenticity, integrity, reliability and usability of records. These activities should be well documented and testing should be used to</p>				

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	<p>verify the conversion and migration processes.</p> <p>Existing electronic documents managed and stored in an electronic document management system (EDMS) should not be migrated to and registered as records in an ERKS given that an EDMS does not have comprehensive RM functionalities to safeguard the authenticity, integrity, reliability and usability of records. In order to serve as reliable evidence, a record must possess the necessary attributes, namely, content, context and structure; and be authentic, complete, reliable and usable. Electronic records can be easily updated, deleted and altered without being discovered. The authenticity, integrity, reliability and usability of electronic records may be challenged in a court of law if there are suggestions of tampering, incompetence, improper system functionality or malfunction of the EDMS, etc. The challenges can lead to an investigation into the EDMS from which the records came, including the method of storage, practices, procedures and processes of system management and operations, etc. of the EDMS.]</p>				

IX. Changes in RM processes, practices and procedures for an ERKS

The following questions assess whether the existing departmental RM processes, practices and procedures should be revised, supplemented and strengthened to underpin the implementation and use of an ERKS.

A. *Records creation, capture and registration*

All records, regardless of format and technological environment in which they are collected, created or generated, should be captured into and maintained in an identifiable and proper recordkeeping system to meet operational, fiscal, legal and other requirements. The purpose of capturing a record into a recordkeeping system is to establish a relationship between the record, the creator and the business context that originated it, and to link it to other records. **The captured records should be complete, and contain the content, structure and contextual information which are necessary to document an official activity or transaction as evidence of business activities.**

A record is registered when it is captured into the recordkeeping system, providing evidence

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
that it has been captured. In an ERKS, a record captured into a folder (i.e. file) is registered through entering such contextual information as name of creator/addressee(s) of the record and the assignment of a unique system identifier.					
The following questions assess whether a B/D has established clear and sufficient guidelines to guide records users to capture sufficient but not excessive records; and examine whether those guidelines should be revised in light of the implementation of an ERKS.					
26.	<p><i>[Information collected from question (a) helps assess a B/D's readiness to implement an ERKS and the answer is expected to be affirmative.]</i></p> <p><i>[Information collected from question (b) helps identify preparatory tasks.]</i></p> <p>(a) Has my B/D developed departmental RM practices and procedures to create and capture records including electronic records in a proper and secure manner to meet operational, fiscal, legal and other requirements?</p> <p>[Note: The practices and procedures should include directions on -</p> <ul style="list-style-type: none">• what records should be created;• who and when to create a record;• who and when to capture a record;• into which system to capture the records;• what metadata should be created for these records; and• who should have access to these records.] <p>(b) Is there a need to revise and update these practices and procedures to tie in with the use of an ERKS?</p>				
B. Records classification					
To facilitate a wide range of RM activities, including identification, capturing and retrieval of records, security and access control as well as disposal, records should be systematically organised according to records classification schemes (also called file plans), which are plans					

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	<p>for logical arrangement of records according to one or more of the following: business functions, activities and contents of the records. A records classification scheme should allow modifications such as addition of new records series/groups to cater for changing circumstances.</p> <p>A departmental records classification scheme serves an important function in RM. To meet changing business and operational needs, a B/D should review its departmental records classification scheme(s) at regular intervals.</p> <p>The following questions assess whether the records classification scheme(s) of a B/D should be revised and enhanced prior to implementing an ERKS.</p>				
27.	<p><i>[Information collected from question (a) helps assess a B/D's readiness to implement an ERKS and the answer is expected to be affirmative.]</i></p> <p><i>[Information collected from question (b) helps identify preparatory tasks.]</i></p> <p>(a) Has my B/D developed and implemented a systematic, logical, consistent and scalable records classification scheme(s) which cover all records irrespective of natures or formats and is able to -</p> <ul style="list-style-type: none"> • facilitate accurate and complete documentation of policies, procedures and decisions for carrying out the B/D's functions, activities and transactions efficiently; • support accurate capturing and easy retrieval of records; • provide robust security and access control for records; • facilitate segregation of vital records for protection; and • facilitate establishment of records retention and disposal schedules and segregation of records with different retention periods to support timely and orderly disposal. <p>(b) If the answer to (a) is negative, what are the</p>				

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	problems and inadequacies? Please document those problems and inadequacies in the “Recommendation/Follow-up action” column.				
28.	<p><i>[Information collected from question (a) helps identify preparatory tasks.]</i></p> <p><i>[Information collected from question (b) helps gauge the anticipated costs and other resource requirements.]</i></p> <p>(a) Is my B/Ds’ intention to continue to adopt multiple records classification schemes in an ERKS setting?</p> <p>(b) If the answer to (a) is affirmative, what are the operational needs to do so and the associated costs and implications? Please document the answers in the “Recommendation/Follow-up action” column.</p> <p>[Note: As a best practice, B/Ds should consider whether a single records classification scheme covering both administrative and programme records of their organisations should be adopted in an ERKS setting to facilitate easy management of records and sharing of information and minimise the need for merging records classification schemes in case of subsequent re-organisation of business within the organisation.]</p>				

C. Records tracking

In a recordkeeping system, tracking of the movement and use of records is required to -

- identify outstanding action required;
- enable retrieval of records;
- prevent loss or missing of records;
- monitor usage for recordkeeping system maintenance and security (e.g. growth of records, disposal of records); and

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
<ul style="list-style-type: none">identify the operational origin of individual records where the recordkeeping systems have been amalgamated or migrated. <p>B/Ds should decide the type of information that needs to be maintained to facilitate tracking of records, and to adopt means to track the whereabouts and movement of records.</p> <p>The following questions assess whether the records tracking mechanism of a B/D should be revised and enhanced. A B/D may consider whether the tracking functionality of its ERKS should be strengthened having regard to its specific RM needs.</p>					
29.	<p><i>[Information collected helps assess a B/D's readiness to implement an ERKS and the answer is expected to be affirmative.]</i></p> <p>Has my B/D maintained an updated records inventory including at least the file title, file reference number, date opened and date closed, and storage location in accordance with GC No. 2/2009?</p> <p>[Note: If not, an updated records inventory should be prepared prior to implementation of an ERKS.]</p>				
30.	<p><i>[Information collected helps map out the ERKS functionality to address specific departmental business and records management needs.]</i></p> <p>Has my B/D implemented a system (e.g. bar-coding file management system) to track the movement and use of records? Should this tool be maintained in tandem with the use of an ERKS?</p>				
<p>D. Records access</p> <p>B/Ds should ensure that records should be classified according to their level of sensitivity at a particular time in accordance with the Security Regulations and provide timely access to records to authorised users for conducting business. B/Ds should also lay down guidelines on the protection, processing and transmission of classified records.</p> <p>The following questions assess whether the access control and security of records in a B/D should be revised and strengthened in the context of implementing an ERKS.</p>					

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
31.	<p><i>[Information collected helps map out the ERKS functionality to address specific departmental business and records management needs.]</i></p> <p>(a) Are my B/D's records classified according to their level of sensitivity in order to provide them with adequate protection as set out in the Security Regulations?</p> <p>(b) Does my B/D manage access to records according to legal and regulatory requirements, e.g. Personal Data (Privacy) Ordinance, Security Regulations and Code on Access to Information?</p>				
32.	<p><i>[Information collected helps map out the ERKS functionality to address specific departmental business and records management needs.]</i></p> <p>(a) Has my B/D put in place adequate security measures and access control to protect records from unauthorised access, and to prevent unauthorised and accidental loss or destruction of records?</p> <p>(b) Is there a need to revise and strengthen these security measures in the ERKS to be implemented in my B/D?</p>				
<p>E. Records storage</p> <p>Records should be stored in such a manner so as to facilitate users' access and ensure that they are protected from unauthorised access, use, disclosure, removal, deterioration, loss or destruction. B/Ds should lay down guidelines on the storage of records including classified records.</p> <p>For storage of electronic records, the selection of storage media (e.g. CDs and DVDs), storage system, storage environment and handling procedures should be based on RM and business considerations, e.g. volume and growth rate of records, records security needs, retrieval requirements and preservation needs.</p> <p>The following questions assess the costs for paper records storage and benefits for implementing an ERKS in terms of records storage.</p>					
33.	<i>[Information collected helps gauge the</i>				

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	<p><i>anticipated costs and other resource requirements.]</i></p> <p>Please document the answer to this question in the “Recommendation/Follow-up action” column.</p> <p>What are the estimated total costs (including accommodation, equipment, environmental control, etc.) for existing records storage?</p>				
34.	<p><i>[Information collected helps gauge the anticipated costs and other resource requirements.]</i></p> <p>Please document the answer to this question in the “Recommendation/Follow-up action” column.</p> <p>What are the estimated costs and savings for records storage if an ERKS is adopted or developed by my B/D?</p>				
<p>F. Records retention and disposal</p> <p>It is important to establish records retention and disposal schedules to ensure systematic planning and orderly implementation of records disposal after records have been kept the right length of time to meet the purposes they are created and in compliance with legal or statutory requirements. Approved records retention and disposal schedules will not serve their intended purposes if they are not followed. B/Ds should initiate regular disposal of records in accordance with approved records retention and disposal schedules. Records disposal takes different forms, e.g. permanent retention as archival records, transfer of records to the Public Records Office of GRS for appraisal of their archival value, destruction, microfilming and then destruction, etc.</p> <p>The following questions assess whether disposal of records, including destruction are conducted in a systematic and auditable manner in a B/D and whether records retention and disposal schedules should be reviewed and revised in the context of implementing an ERKS.</p>					
35.	<p><i>[Information collected helps assess a B/D's readiness to implement an ERKS and the answer is expected to be affirmative.]</i></p> <p>Has my B/D established records retention and disposal schedules for all its records and linked</p>				

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	the retention and disposal requirements with the records classification scheme(s) so as to facilitate efficient and effective disposal of records at the end of the records' life cycle?				
36.	<i>[Information collected helps identify preparatory tasks.]</i> Is there a need to review and revise the records retention and disposal schedules of my B/D to ensure that those schedules to be established in the ERKS meet the current business and operational needs of my B/D?				
37.	<i>[Information collected helps map out the ERKS functionality to address specific departmental business and records management needs.]</i> Has my B/D instituted safeguards, e.g. administrative procedures against unauthorised destruction of records? Should these safeguards be implemented and strengthened in the ERKS to be implemented in my B/D?				

G. Vital records protection

Vital records are those records containing information essential to the continued and effective operation of an organisation during and after an emergency²¹ or a disaster²², e.g. a prolonged electricity blackout, a serious flood and a blaze. Although B/Ds may take precautionary measures to protect records from perils in their day-to-day operations, even foolproof measures may not prevent damage to or loss of records when an emergency or a disaster strikes. Therefore, vital records protection should be put in place to reduce the risks of loss or damage of records and to mitigate the possible adverse effects on the operation of organisations during and immediately after an emergency or a disaster. Vital records are specific to each B/D having regard to its unique functions and responsibilities.

The following questions assess whether a vital records protection programme is in place in a B/D and whether such programme should be revised in light of the implementation of an ERKS.

²¹ An emergency refers to a situation or an occurrence of a serious nature developed suddenly or unexpectedly that warrants immediate action. It may lead to an interruption of normal operation of short duration.

²² A disaster is an unexpected occurrence which inflicts widespread destruction and distress and has long-term adverse effects on the operation of an organisation.

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
38.	<p><i>[Information collected helps identify preparatory tasks.]</i></p> <p>(a) Has my B/D established and implemented a vital records protection programme?</p> <p>(b) If the answer to (a) is affirmative, should the vital records protection programme be reviewed and revised in light of the use of an ERKS?</p>				
39.	<p><i>[Information collected helps identify preparatory tasks.]</i></p> <p>(a) Has my B/D determined records protection methods (e.g. duplication of paper records through means such as scanning and microfilming for off-site storage outside the prime office location)?</p> <p>(b) If the answer to (a) is affirmative, should these methods be reviewed and revised in light of the use of an ERKS?</p>				
<p>H. Documentation</p> <p>B/Ds should document major RM functions and processes, e.g. -</p> <ul style="list-style-type: none"> • guidelines on what records should be created, captured and kept; • records security policy, including security classifications of records, access rights and security breach management; • approval for adoption of new records classification schemes; • endorsement on establishing records retention and disposal schedules; • endorsement on disposal of records; and • records disposal procedures. <p>The following question assesses whether sufficient documentation has been created and kept relating to the RM processes and RM programme of a B/D.</p>					
40.	<p><i>[Information collected from question (a) helps assess a B/D's readiness to implement an ERKS and the answer is expected to be affirmative.]</i></p>				

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	<p><i>[Information collected from question (b) helps identify preparatory tasks.]</i></p> <p>(a) Has my B/D documented the departmental RM policy, RM programme, recordkeeping system, RM guidelines and procedures and subsequent revisions to them? The documentation should include but is not limited to the following -</p> <ul style="list-style-type: none"> • guidelines on what records should be created, captured and kept; • guidelines on access rights and security of records; • approval for adoption of new records classification schemes and revision to the existing records classification schemes; • endorsement on establishing and revising records retention and disposal schedules; • endorsement on disposal of records; and • records disposal procedures. <p>(b) Does the documentation stated in (a) need to be reviewed, revised and supplemented to support the smooth operation of an ERKS?</p>				

X. Staff skills and training required

The following questions assist a B/D in evaluating staff skills, change management and training needs with a view to formulating proper staff training strategy and work out resource commitment to support the implementation and use of an ERKS.

41.	<p><i>[Information collected helps assess a B/D's readiness to implement an ERKS and the answer is expected to be affirmative.]</i></p> <p>Does my B/D have sufficient and suitable staffing to plan, implement and manage an ERKS?</p>				
42.	<i>[Information collected helps gauge the</i>				

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	<p><i>anticipated costs and other resource requirements.]</i></p> <p>Please document the answers to this question in the “Recommendation/Follow-up action” column.</p> <p>What kinds of training on ERM, IT, project management, etc. should be provided to the responsible staff members so that they are capable of implementing an ERKS and developing RM practices and guidelines to support the operation of an ERKS?</p>				
43.	<p><i>[Information collected from question (a) helps gauge the anticipated costs and other resource requirements.]</i></p> <p><i>[Information collected from question (b) intends to identify preparatory tasks.]</i></p> <p>Please document the answers to this question in the “Recommendation/Follow-up action” column.</p> <p>(a) What kinds of training should be provided to records users to facilitate the new way of working by using an ERKS?</p> <p>(b) Does my B/D need to establish an on-going staff training plan to support the use, management and maintenance of an ERKS?</p> <p>[Note: Training should -</p> <ul style="list-style-type: none"> • outline general RM responsibilities; • be included in the induction training for new staff; • be tailored to suit the needs of certain work areas and roles; and • be provided to existing staff as a form of refresher training as appropriate.] 				
44.	<p><i>[Information collected helps gauge the anticipated costs and other resource</i></p>				

S/N	Issue	Result			Recommendation/ Follow-up action
		Yes	No	NA	
	<p><i>requirements.]</i></p> <p>(a) Does my B/D need to engage external consultancy services to help plan and implement an ERKS?</p> <p>(b) What are the estimated costs for acquiring such services? Please document the estimated costs in the "Recommendation/Follow-up action" column.</p>				
<p>XI. Monitoring and auditing of RM functions and activities</p> <p>A B/D should undertake compliance monitoring and internal audits regularly to ensure that the Government's RM policy and requirements and the departmental RM policy, programme, practices and procedures are adhered to. It should also identify non-conformities and take proper actions to redress and correct non-conformities timely.</p> <p>The following question assists a B/D in evaluating its compliance with key RM functions and requirements and identifying areas requiring improvements.</p>					
45.	<p><i>[Information collected helps identify preparatory tasks.]</i></p> <p>(a) Does my B/D continuously monitor its compliance with the Government's RM policy and requirements and established departmental RM policy, programme, practices and procedures?</p> <p>(b) Is there a need for my B/D to review and revise those monitoring and auditing practices by way of using an ERKS?</p>				
<p>XII. Other RM issues specific to the B/D</p> <p><i>[Note: A B/D should consider whether there are issues specific to its business environment and add the identified issues.]</i></p>					
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Appendix 3

An example of an implementation plan for an ERKS project

*(Assuming an implementation of a stand-alone ERKS
in a bureau/department (B/D) of medium size with about 1000 staff)*

Note: *B/Ds may use this example as a draft when developing their ERKS implementation plans.*

Implementation plan for initiating, planning and implementing
an electronic recordkeeping system in **[Name of the B/D]**

1 Purpose

- 1.1 This implementation plan has been formulated to guide the initiation, planning and implementation of an electronic recordkeeping system (ERKS) in [name of B/D] (“ERKS Implementation Project”).

2 Terms of the implementation plan

- 2.1 This implementation plan²³ will commence as soon as approval is given by **[the proper authority in the B/D]** and cease on **[e.g. the completion of a post-implementation review of the ERKS Implementation Project]**.
- 2.2 This implementation plan is subject to revisions by obtaining approval from **[the proper authority in the B/D]**. All revisions will be properly documented and promulgated to key stakeholders of the ERKS Implementation Project.

3 Background

Development of organisational EIM strategies

- 3.1 Information and records are created and received in considerable amount during the course of official business. All officers rely on information and

²³ Please see footnote 16.

records to perform their work, make decisions, provide public services and deliver internal services. Proper management of information and records supports the pursuit of our departmental strategic goals, enhances overall operational efficiency and complies with the Government electronic information management (EIM) and records management (RM) policies.

- 3.2 In line with the Government's EIM strategy promulgated by the Office of the Government Chief Information Officer in May 2011, bureaux and departments (B/Ds) are required to take forward electronic records management (ERM) as an integral part of EIM and adopt an ERKS as a mandatory component to drive ERM in the Government. As the first step, B/Ds will need to formulate their organisational EIM strategies, which should include an implementation plan of an ERKS.
- 3.3 The development of organisational EIM strategies commenced in [date] and completed on schedule in [date]. In the process of developing the said strategies, we have reviewed and assessed the overall management of information and records in the department.

Existing inadequacies, problems and limitations of departmental RM programme

- 3.4 As far as RM is concerned, we have identified a number of inadequacies, problems and limitations in the existing departmental RM policy, programme, processes, practices and procedures. They have been summarised below -

[Note: *Please summarise the issues, e.g.*

- (a) *the departmental RM policy is unable to meet the changing business and operational needs of the department;*
- (b) *the departmental records classification scheme has not been reviewed and revised for the past two years to reflect new business functions of the department;*
- (c) *there are no standardised RM practices and procedures. Each division has its own RM practices and procedures;*
- (d) *RM functions and activities such as disposal of time-expired records have not been properly documented in a number of offices;*

- (e) *capturing of records is inadequate to meet business and evidence purposes;*
- (f) *loss of [number] files is reported in a number of offices;*
- (g) *lack of finding aids to help search and retrieve records speedily;*
- (h) *some [number] time-expired files have been retained for longer than necessary but timely disposal action have not been taken;*
- (i) *records inventory is inaccurate and incomplete;*
- (j) *some old files which still carry business value have not been preserved in good condition; and*
- (k) *responsibilities for capturing records and managing access to records are ill-defined.]*

3.5 The inadequacies, problems and limitations stated in paragraph 3.4 above have adversely affected the effective and efficient operation of the department and our capability of complying with legal and regulatory requirements in the following areas -

[Note: *Please summarise the issues, e.g.*

- (a) *failure to support provision of speedy and quality public services;*
- (b) *creating significant barriers to improve the overall operational efficiency of the department;*
- (c) *inability to produce evidence in a court of law to protect the Government's interest in [number] court cases in the past three years;*
- (d) *inability to support speedy and efficient delivery of services to the public;*
- (e) *considerable amount of time was spent by officers to search, locate and retrieve records to conduct business;*
- (f) *failure to comply with the Data Protection Principle 2 of the Personal Data (Privacy) Ordinance by keeping personal data of [number] former non-civil service contract staff longer than is necessary;*
- (g) *failure to comply with mandatory RM requirement to transfer [number] time-expired files with archival value to the Government Records Service;*

- (h) *considerable efforts have been spent to locate and retrieve relevant files to answer requests for access to information and media enquiries;*
- (i) *misfiling of records has occurred frequently in different registries;*
- (j) *failure to locate and retrieve relevant files to answer **[number]** public and media enquiries in the past three years;*
- (k) *acute records storage problem has occurred in the headquarters; and*
- (l) *unauthorised access to classified records was reported.]*

4 Proposed way forward

- 4.1 To address the inadequacies, problems and limitations stated in section 3 above, it is recommended that the departmental RM policy and programme should be reviewed and strengthened to ensure proper management of records. A list of recommended improvement work with priorities has been drawn up separately. They are critical to implementing an ERKS. We will complete the recommended work within six months.
- 4.2 To improve the overall effectiveness and efficiency in managing records and enhance security and access control to classified records, particularly electronic records, it is also recommended that an ERKS should be developed. An ERKS is an information/computer system with the necessary RM capabilities designed to electronically collect, organise, classify and control the creation, storage, retrieval, distribution, maintenance and use, disposal and preservation of records. It is a proven solution for managing records in an effective and efficient manner.
- 4.3 The use of an ERKS should be underpinned by new RM practices, procedures, as well as re-defined roles and responsibilities to progressively replace the existing departmental paper-based recordkeeping system in order to manage both electronic and non-electronic records in an integrated and consistent manner.
- 4.4 Once the proposed development and implementation of an ERKS is approved, it will be suitably incorporated into the departmental RM policy and programme.
- 4.5 The details of the ERKS Implementation Project are set out in the ensuing paragraphs for consideration.

5 Project objectives

5.1 The ERKS Implementation Project is a direct result of the development of organisational EIM strategies to address inadequacies, problems and limitations of the existing RM programme, practices and procedures and to drive ERM in our department.

5.2 The ERKS Implementation Project will contribute to **[description of the policy area(s)/programme area(s)]** set out in the Controlling Officer's Report and complies with the departmental RM policy to ensure the creation and management of authentic, reliable, complete and usable records for as long as they are required.

5.3 The implementation of an ERKS aims to -

[Note: Please summarise the objectives, e.g.

- (a) *enhance operational efficiency and improve public services by enabling more accurate and faster retrieval of records and sharing of information across different work groups in **[name of the B/D]**;*
- (b) *meet the performance pledge to provide speedy and accurate information to the general public or the media within **[a period of time]** upon receipt of an enquiry;*
- (c) *enhance better governance and greater accountability of **[name of the B/D]** by supporting evidence-based and faster decision making on the basis of reliable and authentic electronic records for the evaluation of past actions and decisions;*
- (d) *improve organisational compliance with legal and regulatory requirements and government directives, including mandatory RM requirements as specified in General Circular No 2/2009 entitled "Mandatory Records Management Requirements";*
- (e) *improve the overall effectiveness and efficiency in managing records;*
- (f) *reduce costs for managing and storing records by obviating the need to "print-and-file" electronic records for management and storage;*
- (g) *ensure authorised access to and proper security of records; and*
- (h) *comply with the Government policy to better preserve corporate and community memory.]*

6 Expected outcomes

- 6.1 An evaluation to assess the realised benefits of using an ERKS will be conducted after the full rollout of the ERKS to all users in the department. The desired outcomes include the following tangible and intangible benefits

[Note: Please summarise the expected outcomes, e.g.

- (a) *developing a reliable, efficient and secure ERKS to manage both electronic and non-electronic records;*
- (b) *improving the effectiveness and efficiency in managing records (e.g. by minimising loss/misfiling of records, taking timely disposal action of time-expired files and effectively tracking the location of files);*
- (c) *reducing officers' efforts in locating and retrieving records to conduct business, answer public and media enquiries, etc. It is estimated that a total of **[man-days]** will be saved each year;*
- (d) *streamlining and standardising RM processes across different divisions to enhance overall operational efficiency **[e.g. minimising the need to dispatch files from one division to another division];***
- (e) *reducing the workload of registry staff in managing records. There is potential to re-deploy clerical staff to assume other clerical duties;*
- (f) *relieving the acute records storage problem in headquarters and resulting in records storage avoidance costs by an estimated amount of **[\$HK dollars]** in the coming 2-3 years;*
- (g) *meeting the performance pledge to provide speedy and accurate information to the general public within **[a period of time]** upon receipt of an enquiry. The plan is to have **[percentage]** of all cases meeting the target upon the rollout of the ERKS and then progressively reach **[percentage]** in three years' time;*
- (h) *improving corporate image by responding quicker to public and media enquiries;*
- (i) *providing a sound foundation to develop knowledge management on the basis of reliable and authentic records and speedy sharing of information;*

- (j) *enhancing our capability of complying with legal and regulatory requirements by [e.g. providing authentic and reliable records to serve as evidence in a court of law and take timely action to dispose of personal data];*
 - (k) *enhancing the security of records and preventing unauthorised access to and loss of records;*
 - (l) *complying with the Government's mandatory RM requirements and preserving community memory; and*
 - (m) *supporting green management by reducing the consumption of paper and stationery, e.g. file jackets;*
- 6.2 It is expected that all officers in the department will benefit from the implementation of an ERKS.
- 6.3 In total, it is estimated that the implementation of an ERKS will bring tangible benefits (including savings) of around **[\$HK dollars]** over **[a period of time]**. The estimated tangible benefits are set out below -

Item	Estimated benefits (\$M)
[e.g.	
• savings in paper consumption	
• staff savings]	

- 6.4 The total net tangible benefits discounting the estimated total implementation cost of an ERKS at about **[\$HK dollars]** is estimated to be around **[\$HK dollars]**²⁴.
- 6.5 The estimated budget for implementing an ERKS including staff training is provided at section 12 below.
- 6.6 Though it is difficult to measure the intangible benefits of implementing an ERKS in terms of financial gains, specific metrics²⁵ will be developed in

²⁴ B/Ds may consider showing the net tangible benefits and/or savings by year.

²⁵ For example, B/Ds may compare the average time for a records user to locate and retrieve a record before and after implementing an ERKS and gauge users' satisfaction of using an ERKS vs a paper-based recordkeeping system.

consultation with division heads to assess the realisation of these benefits separately.

- 6.7 The delivery of the expected outcomes will be closely monitored by the project steering committee as proposed in section 9 below to ensure that the estimated benefits can be realised as far as practicable.

7 Project Scope

- 7.1 The ERKS to be implemented will be -
- (a) used to progressively replace the existing departmental paper-based recordkeeping system to manage both electronic records and non-electronic records created and received under an unstructured computing environment;
 - (b) integrated with the departmental Lotus Notes e-mail system and **[titles of business systems]** to facilitate capturing of records; and
 - (c) able to manage and store classified records up to CONFIDENTIAL level.
- 7.2 To ensure the minimisation of manual efforts spent on capturing and managing records, a business process re-engineering study is recommended to be conducted prior to system development of an ERKS to integrate RM processes with day-to-day business processes.
- 7.3 To underpin the use of an ERKS, new RM practices and guidelines to suit the electronic mode of operation will be developed; and RM roles and responsibilities have to be re-defined to recognise the shared responsibility for creating, capturing and managing records.
- 7.4 The departmental records classification scheme for both administrative and programme records will be reviewed and refined to fit the operation of an ERKS environment.

8 Implementation approach and rollout strategy

- 8.1 It is recommended that a commercial off-the-shelf ERKS solution with a certain degree of customisation should be procured to meet the **Functional Requirements of an Electronic Recordkeeping System** developed by the Government Records Service and the specific RM requirements of our department.

- 8.2 A set of high-level functional requirements of an ERKS and the requirements for upgrading/replacement of information technology (IT) infrastructure, hardware and software have been developed and specified for the purpose of working out a high-level cost estimate for ERKS implementation.
- 8.3 It is recommended that the ERKS should be progressively rolled out to a total of **[number]** records users of the department within **[e.g. 12 months' time]** with effect from **[date]** to ensure that the project is manageable and manpower resources will not be overstretched. To this end, it is proposed that a two-phased implementation approach should be adopted²⁶.
- 8.4 In Phase 1, the ERKS will be rolled out to **[number]** users stationed in headquarters. The Phase 1 rollout is scheduled for completion by **[date]**.
- 8.5 In Phase 2, the ERKS will be rolled out to the remaining **[number]** users in districts. The Phase 2 rollout is scheduled for completion by **[date]**.
- 8.6 A detailed rollout plan will be worked out in due course.
- 8.7 At this stage, it is envisaged that large-scale data conversion will not be required. Data conversion of existing non-electronic records will be conducted on a need basis.

9 Governance and roles and responsibilities

- 9.1 It is recommended that a project steering committee chaired by **[post title of the officer]**²⁷ with division heads as members is to steer the project, allocate resources and monitor the project expenditures and cash flow.
- 9.2 The project steering committee will be underpinned by a project assurance team led by **[e.g. the Departmental Records Manager or Head of Information Technology Management Unit (ITMU)]** with division representatives as members to ensure that the project is delivered according to the prescribed project management methodology, standard and outcomes.
- 9.3 Once the implementation plan is endorsed, the project steering committee and the project assurance team will be established to carry out the tasks

²⁶ There are different implementation approaches. B/Ds should develop a suitable implementation approach having regard to factors specified in section VII - Implementation approach and rollout strategy of an ERKS at Appendix 2.

²⁷ It is recommended that a directorate officer should chair the committee.

and activities specified in the implementation plan and specify the responsibilities for each role, such as the project manager (departmental support).

- 9.4 Like government IT projects, project management methodology will be adopted to manage the implementation of an ERKS in the department.
- 9.5 A project team with a suitable mix of officers possessing good knowledge and experience in RM, IT and project management as well as good communication and consultation skills will be set up to co-ordinate and conduct the project. The project team will be responsible to the project steering committee/project assurance team.
- 9.6 Throughout the implementation of an ERKS, the project steering committee/project assurance team will regularly consult key stakeholders in order to receive feedback on the progress and outcome of the project. Such consultation is vital to ensuring effective participation and ownership across the department.

10 Engagement of key stakeholders

- 10.1 Key stakeholders of the ERKS Implementation Project have been identified. They are the senior management, records users, Departmental Records Manager, records managers, RM staff and IT staff.
- 10.2 The ERKS Implementation Project will likely bring substantial changes to the business and RM processes of our department, senior management's support to and commitment for the project is a prerequisite for success.
- 10.3 RM staff and IT staff will have a particular interest in the project as their roles and responsibilities will experience tremendous changes after the implementation of an ERKS. Their participation is important to the success of the ERKS Implementation Project.
- 10.4 All records users in the department will be involved in the ERKS Implementation Project as they need to use a new RM system, i.e. an ERKS with revised RM practices and guidelines. Their support and buy-in are of critical importance to the success of the project.
- 10.5 The initial plan is to engage all key stakeholders throughout the implementation of the ERKS as far as practicable by organising user focus groups, forums, briefings and enhancing internal communications through

various channels. A detailed change management and communication plan will be developed to build rapport, seek buy-in and ask for feedback from all key stakeholders.

- 10.6 To champion changes associated with the implementation and use of an ERKS, we need to develop in-house knowledge and expertise in ERM. Departmental Records Manager, Assistant Departmental Records Managers in divisions and RM staff need to be trained in this regard. A training plan will be drawn up separately.
- 10.7 For IT staff, we need to develop their knowledge and expertise in undertaking system management of the ERKS.
- 10.8 Prior to system roll-out, basic ERM and ERKS training will be provided to all records users.

11 Project risks

- 11.1 The anticipated major risks to the ERKS Implementation Project mainly lie in the following areas²⁸:

Risk	Impact	Possibility	Recommended mitigation measures
<i>(e.g. lack of stakeholder engagement and communication, technology, project management, lack of expertise)</i>	<i>(very high, high, medium, low, very low)</i>	<i>(Highly likely, likely, increasingly likely, unlikely, very unlikely)</i>	<i>(e.g. establishing a liaison group to reach out to records users seeking their views and comments; engaging external consultants to bridge the gap of expertise, etc.)</i>

- 11.2 Potential risks to successful implementation of an ERKS and realisation of the anticipated benefits stated in section 6 above will be managed and monitored through the project steering committee/project assurance team.

²⁸ B/Ds may consider making reference to the Risk Identification Form attached to the Funding Application Form (FAF) of Administrative Computer Projects Committee (ACPC) for a list of common project risks if deemed useful. Please contact your departmental ITMU for the form.

12 Estimated budget and resource requirements

- 12.1 The overall project estimate including non-recurrent and recurrent costs amounts to **[\$HK dollars]**, a breakdown is as follows -

Item	Estimated Expenditure (\$M)
Non-recurrent costs	
[e.g.	
• procurement of hardware and software	
• upgrading of IT infrastructure	
• procurement of system development, customisation and implementation services	
• provision of user training and support services	
• procurement of security risk assessment and audit service]	
Sub-total:	
Recurrent costs (on annual basis)	
[e.g.	
• on-going system maintenance services	
• training for new recruits and officers new to the department	
Sub-total:	
Total:	

- 12.2 Subject to the endorsement of the ERKS Implementation Project, funding of the Project will be sought from **[proper funding authority]**.
- 12.3 During the implementation of an ERKS, we envisage that additional work e.g. digitisation of paper records will be generated. Therefore, there may be a need to re-deploy manpower resources to take up the additional work.
- 12.4 A detailed resource and manpower plan for initiating, planning and implementing an ERKS will be drawn up separately.

- 12.5 To ensure smooth implementation of an ERKS, officers with good knowledge and experience in RM, project management, IT as well as good communication and consultation skills are required to join the project team.

13 Implementation schedule

- 13.1 The implementation of an ERKS consists of four main stages and is estimated to commence on **[date]** to take **[e.g. 33 months]** for completion by **[date]**:

- (a) project initiation and planning;
- (b) system design and development;
- (c) system rollout and live run; and
- (d) post-implementation review.

- 13.2 Each stage is divided into a number of tasks. Suggested deliverables to demonstrate completion of such tasks are included. Although the tasks described below are presented in sequence, some will take place simultaneously unless specified otherwise.

- 13.3 Key project milestones with associated deliverables are set out in the following table for consideration. The project schedule has been mapped out for planning purpose and may be refined during the project implementation:

S/N	Major Task	Duration (Planned)	Deliverable
Stage 1 - Project initiation and planning			
<i>Preparatory tasks</i>			
1.	Seek senior management's agreement to the implementation plan and resource commitment	e.g. two months	
2.	Establish project governance (e.g. project steering committee/project assurance team)		[e.g. terms of reference of the committee]
3.	Secure funding (e.g. to seek funding from		[e.g. a funding

S/N	Major Task	Duration (Planned)	Deliverable
	the Administrative Computer Projects Committee of OGCI) to implement an ERKS		paper]
<i>(Note: Tasks 1-3 must be completed before other tasks are conducted.)</i>			
4.	Define project scope in detail (e.g. to consider whether integration with existing business applications is required) and system requirements		[e.g. system requirement specifications]
5.	Seek professional assistance and input where appropriate (e.g. procurement of consultancy service to conduct RM studies)		[e.g. consultancy brief/tender specification]
6.	Review and revise records classification scheme(s) and records retention and disposal schedules where appropriate		[e.g. a new departmental records classification scheme]
7.	Review current IT infrastructure, IT security etc. and recommend changes if necessary		[e.g. study report(s) and recommendations]
8.	Conduct a business process re-engineering exercise and recommend changes to existing business processes if appropriate to enable close integration of business processes and RM processes in the ERKS operating environment		[e.g. study report(s) and recommendations on business process re-engineering]
9.	Draw up a communication and change management plan to assist staff members in adapting to changes brought about by the use of an ERKS		[e.g. a communication and change management plan]
10.	Draw up a migration plan, including a data		[e.g. a migration

S/N	Major Task	Duration (Planned)	Deliverable
	conversion plan where appropriate, to facilitate the transition from paper-based recordkeeping environment to ERKS environment		plan]
Procurement of an ERKS solution <i>(Note: Tasks 4 and 7 should normally be completed before the tendering exercise is conducted.)</i>			
11.	Conduct market research to identify suitable ERKS solutions where appropriate		[e.g. research findings]
12.	Prepare tendering exercise including preparation of tender specifications		[e.g. tender specifications]
13.	Issue tender and conduct tender evaluation		[e.g. a tender evaluation report]
Stage 2 - System design and development <i>(Note: Tasks 6 and 8 are recommended to be completed before task 14 starts)</i>			
14.	Perform system design and development taking into account the results of business process re-engineering exercise, changes in RM procedures and records classification scheme(s), etc.		[e.g. a system analysis and design report]
15.	Develop new RM practices, procedures and guidelines for an ERKS		[e.g. new RM practices and guidelines]
16.	Examine and approve system documentation prepared by the contractor		
17.	Implement recommendations of the business process re-engineering exercise		
18.	Develop a business continuity plan and a disaster recovery plan		[e.g. a business continuity plan]

S/N	Major Task	Duration (Planned)	Deliverable
19.	Plan and conduct User Acceptance Tests		[e.g. test plans and test cases]
20.	Configure system settings, including the construction of the records classification scheme, assignment of security and access control, establishment of records retention and disposal schedules and creation of RM roles and user groups, etc.		
21.	Conduct data conversion, if necessary		
22.	Plan and launch client roll-out		[e.g. system rollout plan]
23.	Plan and conduct user training, including preparation of training materials for RM and application training.		[e.g. training agenda and training materials]
24.	Conduct IT security risk assessment and audit exercise		[e.g. security risk assessment and audit report]
Stage 3 - System rollout and live-run			
25.	Phase 1 rollout		
26.	Phase 2 rollout		
27.	Provide user support services (e.g. provision of on-site technical support by contractor and helpdesk services)		
28.	Seek approval from GRS to discard print-and-file practice for managing printed e-mail records ²⁹		

²⁹ Please make reference to the *Manual on Evaluation of an Electronic Recordkeeping System* (<http://grs.host.ccgo.hksarg/erm/s04/4232.html>).

S/N	Major Task	Duration (Planned)	Deliverable
Stage 4 - Post-implementation review³⁰ <i>[Note: Task 28 must only be conducted after the completion of Stages 1- 3.]</i>			
29.	Conduct a post-implementation review, consolidate findings, and recommend improvements where appropriate		[e.g. a post-implementation review report]

14 Monitoring and review

- 14.1 Monitoring and review is a key activity of the ERKS Implementation Project to ensure that the expected outcomes and project deliverables are delivered on time and up to expectations.
- 14.2 Senior management will be updated from time to time on the progress of the project.
- 14.3 Regular project progress reports will be prepared and forums will be conducted to update staff members on the progress of the project and seek their feedback.
- 14.4 A post-implementation review will be conducted by the project team in consultation with key stakeholders to consolidate lessons learnt and assess whether the expected outcomes of the project are delivered.

- end -

³⁰ B/Ds may conduct a review after the completion of each phase if a phased roll-out strategy is adopted.