The Efficiency Unit

Review of the Organisation and Staffing Structure of the Government Records Service

Final Report

22 December 2015

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Table of Contents

1. Introduction

1.1. Project Background

A transformation is taking place in the way governments operate and in the nature, volume and complexity of the information and records created, shared and managed across governments. The introduction of office automation and electronic mail ('email') has greatly increased the volume of information and records being dealt with by the Bureaux and Departments (B/Ds) of the Government of the Hong Kong Special Administrative Region (Government), making the task of records management more complex. Computerisation has also increased the responsibilities placed on individual front-line officers across Government for information and records management, while their daily workload has also increased markedly.

These changes in the volume and complexity of information, along with increased demand for access to the evidence of business decisions and a growing aspiration from the public for improvements in the management of Government records and information have prompted the Government to assess the current status of the Government Records Service (GRS). This assessment is intended to consider GRS' capacity and skills for managing all areas of its business, which include providing guidance on records management standards, support services such as records centre service and microfilming service, and overseeing compliance; supporting Government-wide implementation of electronic records management (ERM) and electronic recordkeeping systems (ERKS); appraising records for destruction or archival retention; acquiring and preserving archival holdings; and arranging, describing and making archives available for research use or for public presentations or displays.

Against this background, the Efficiency Unit (EU) of the Government has commissioned PricewaterhouseCoopers Advisory Services Limited (PwC) to conduct a consultancy study (Study) to review the organisation and staffing structure of GRS. The goal of the project is to assess and develop recommendations around GRS' leadership and management structure, including workforce skills, grade level/rank mix and mode of operation (or modus operandi) in order for GRS to discharge its duties appropriately in the future. The assessment and analysis focus on organisational structure and staffing requirements.

The resulting recommendations are intended to be forward looking, focusing on both short- and long-term strategies to help 'future proof' GRS as it addresses the challenges and opportunities brought by changing information and records

technologies and practices. The aim is to support GRS' vision to be "the leading, most insightful and resourceful public archives in Hong Kong that excels in preserving and promoting the documentary heritage of our city in the digital era"[1]. Recommendations will be drawn in large part from an analysis of comparable archival institutions in four other international jurisdictions, contextualised for Hong Kong.

1.2. Objectives and Scope of Study

The scope of the Study involves:

- Conducting benchmarking research on the national archival bodies in four international jurisdictions[2] that are well-established and effectively operated, and evaluate the lessons that GRS could learn from these jurisdictions with regard to their modus operandi, organisational and management structure, manpower composition as well as performance;

- Recommending the optimal organisation structure and staffing provision, which may include institutional changes in the grade and rank of GRS Director, internal governance, skillsets and capability requirements; and

- Developing an implementation plan with a practical timeline, having identified and evaluated the potential issues of implementation and the implications in terms of costs and benefits (qualitatively); the readiness of stakeholders; and impact.

The Consultancy Study started in October 2014, and the report was finalised in December 2015.

1.3. Structure of Final Report

This Final Report sets out our recommendations, plan for implementation and assessment of impact under the following headings:

- **Section 2** – The Paradigm Shift – Digital Technologies;

- **Section 3** – International Responses to the Paradigm Shift;

- **Section 4** – Recommendations;

- **Section 5** – Implementation Plan; and

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[1] GRS Vision and Mission Statement promulgated in first quarter of 2015 (Source: pages 4 to 5, http://www.grs.gov.hk/ws/english/engimages/GRS_Annual_Report_2014_(Eng).pdf)
[2] The four overseas comparator archival organisations are (1) National Archives of Australia; (2) Library and Archives Canada; (3) Nationaal Archief, Netherlands; and (4) The National Archives, UK.

- **Section 6 –** Cost Analysis.

1.4. Acknowledgements

To conduct this consultancy study, we received invaluable inputs from a team of international subject matter experts (see below). They offered their insights into the latest records management practices and challenges, relevant practices and experiences of other comparator archival institutions we examined in this Study[3], and contributed to the findings and recommendations in this report.

- **Dr Laura Millar**, Lead Subject Matter Expert, International Records Management Consultant, Canada

- **Ms Judith Ellis,** International Records Management Consultant, Australia

- **Mr Ian Wilson**, former Librarian and Archivist of Canada, Canada

- **Mr Hans Hofman**, former Senior Advisor to the Nationaal Archief and Head of delegation of the Netherlands to ISO TC46/SC11 Records and Archives Management

- **Mr David Thomas**, former Director of Technology of the National Archives, United Kingdom

We would also like to sincerely thank the EU, GRS staff, and Director of Administration for all their support, cooperation and assistance during this Project.

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[3] The four overseas comparator archival organisations are (1) National Archives of Australia; (2) Library and Archives Canada; (3) Nationaal Archief, Netherlands; and (4) The National Archives, UK.

2. The Paradigm Shift – Digital Technologies

Based on our review, the greatest challenge facing all archival institutions in the 21st century – and GRS is no exception – is the need to transform records and archives management practices and systems significantly in order to address the fundamental paradigm shift brought about by the widespread use of digital information technologies.

In this section, we first clarify the definitions of information, records and archives, and highlight the differences between the roles that information management and information technology specialists play in the field of records and archives management.

We then outline the importance of records and information to public administration and cultural heritage; the transformation in the way in which records and information are managed in the digital age and the impact of that transformation on the roles and responsibilities of records creators and records managers. We also examine the need to reassess the orientation and duties of national archives as a consequence of changes in the approach to managing records and information; and finally, discuss the importance of international standards in providing a best practice framework for this transformation.

2.1. Difference Between Information Management and Information Technology

In order to place records and archives management in context, we begin by setting out the definitions of information, documents, records and archives, followed by the definitions of information managers, records managers, archives managers and information technology managers. One thing we would like to highlight is the difference between Information Management (IM) specialists and Information Technology (IT) specialists in the digital age.

As shown in Figure 1, archives are that small subset of information worth preserving for their enduring value.

Information is knowledge that is communicated

Information

A portion of that information may be captured in some medium, such as paper, film or digital bits and bytes, in order to serve as a **document**

Document

If that document contains evidence that should be kept for reference or as proof, it is considered a **record**

Record

A portion of those records that contain evidence with long-term value are identified as **archives**

Archives

Archives must be protected as authentic and reliable evidence, so they can be available both for immediate use and for as long as possible in the future

Figure 1 – The progression from information to archives

In the digital age, the management of information, records (including documents) and archives is undertaken by people with different specialities. Another specialist is responsible for managing the information technology needed to create, use, share and store information, records and archives. The different specialties are described below:[4]

Specialties	Roles and responsibilities under this specialty
Information management (IM)	The task of controlling and supporting the creation, use, storage, and distribution of information – such as data from databases, content in websites, statistics, news items, intelligence reports or information from publications – so that this information is available to managers and staff across the organisation whenever they need it. An IM specialist will have strong knowledge of how to establish policies and procedures to support the effective use of information across the organisation.
Records	The task of controlling and governing the creation, use, storage

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[4] These descriptions are drawn from a range of key resources, including guidance from the Association for Information and Image Management, the Association for Records Managers and Administrators, the International Council on Archives, and the International Organization for Standardization.

Specialties	Roles and responsibilities under this specialty
management (RM)	and distribution of documents and records, to support accountability, transparency, efficiency and effectiveness, from the time records are created through to their eventual disposal – as archives if they have enduring value or as obsolete once their value has ceased. Records hold evidence – they exist to document actions, transactions and decisions – and the records management specialist is responsible for managing those records so that they remain authentic and reliable evidence. A records management specialist will have strong knowledge of how to establish policies and procedures to support the care of documents and records throughout their life, from the point of creation to the point that they are kept as archives or destroyed because they are obsolete. The key distinction between information management and records management is that the records manager is concerned primarily with protecting evidence and therefore actively works to ensure that all sources of documentary evidence (not necessarily paper record) are protected and made available for use.
Archives management (AM)	The task of overseeing the identification and preservation of archives and ensuring those materials are made available for public use, while ensuring compliance with any necessary conditions on access or use. Archives are that small portion of records worth retaining for their permanent value to the organisation or to society. The key distinction between records management and archives management is that the archives manager focuses particularly on protecting the portion of records with enduring value not just to the organisation but also to society as a whole, now and into the future.
Information technology management (IT)	The task of overseeing the acquisition, installation, maintenance and use of the tools and systems – such as computers, servers and software – required to create, use, store and share information, records and archives. Information technology management is necessary to support information, records and archives management, but the tasks required are not the same. Information technology specialists

Specialties	Roles and responsibilities under this specialty
	work with information managers, records managers and archives managers to ensure that all the information, records and archives needs of the organisation are met.

In the past, these different specialties – IM, records and archives (R&A) management and IT management – often worked independently of each other. Now, however, they must all work much more closely together, as a team, in order to support the overall goals of the organisation and ensure that information and evidence are protected and useable in a digital environment.

2.2. The Importance of Records and Archives as Information Assets

Records and archives are a subset within the wider framework of information management. Records and archives are strategically important information assets, and the effective management and protection of records and archives have been defining elements in the public service for more than 5,000 years.

Records and archives:

- are sources of information and evidence that are critical to supporting government operations;

- document and verify actions, transactions and decisions;

- support an open and accountable government;

- are essential to supporting the rule of law and providing evidence for decision making;

- provide a documentary basis for understanding and protecting the rights and obligations of institutions, corporations and individuals within society; and

- preserve the documentary heritage of the society.

2.2.1. Before: 'After the fact' management of records and archives for historical value

In many parts of the world over the last hundred years or more, the administration of records and archives became separated. Government offices managed records, and when the offices no longer needed the records for day-to-day purposes, they sent some of them into the care of archival repositories, such as a government archives, and they destroyed other records if they believed they had no further value. Often the

archivist would advise the government on which records to keep and which to destroy, but just as often the archivist would wait for a government department to transfer boxes of archives, and then archival staff would review and appraise the contents of the boxes to decide which records to keep and which could be disposed of as obsolete.

As a result of this separation between the daily management of records and the long-term custodial responsibilities of archival institutions, archival repositories became associated more with their cultural and heritage responsibilities – to preserve documentary evidence for its historical value – than with their judicial and legal responsibilities – to manage the creation, use, storage and preservation of government records in order to support accountability.

2.2.2. Today: 'Before the fact' integrated management of records and archives

Today, digital technologies are transforming how governments and organisations create, manage, use, share and preserve their information and records. As a result, the concept of archives management is changing again, back to where it should be: as part of an integrated records and archives management responsibility to protect records from the time of creation, so that valuable records are protected for both immediate and long-term use, while records that do not have long-term value are destroyed safely and securely as soon as they are no longer needed.

This new understanding of the importance of recordkeeping in the digital age does not diminish the cultural and heritage value of archives. However, it is recognised that, in the digital age, the first responsibility of the records and archives specialist is to ensure that digital records and information are created, captured, used and preserved with their authenticity, integrity and reliability intact. From there, the specialist can then provide wide access to archives, which may be used for any purpose: as source material for historical analysis; as information for genealogical or family research; or as critical evidence for legal, judicial or administrative requirements.

2.3. Changing Roles and Responsibilities

As part of this continuing transformation in the nature of records and information, and in the roles and responsibilities of recordkeeping specialists, the very language used to discuss records, information and archives management is changing. As more and more information with archival value is found in structured data – such as data in databases – the distinction between information, records and archives is blurred.

Information may be captured in documents or in databases; some of that information may contain evidence and so be considered a record; and some of those records hold long-term value and so are deemed to be archives.

2.3.1. Collaboration is essential

Today, the boundaries between the roles of IM, R&A, and IT specialists are breaking down. If information management does not take into account the importance of protecting records, and if records management does not take into account the importance of protecting archives, the result is not just that archives may be lost. More importantly, the organisation itself will not function as efficiently and effectively as it could.

In order to protect archives and support broader information and records management goals in today's digital society, no one player (i.e. the IM, R&A or IT specialist) can succeed alone. Everyone needs to work together as a team, bringing their particular specialities to the overall task of managing all information resources effectively and efficiently, in support of accountability and transparency.

The duties of the IT specialist are considered quite separate from the other three. However, it is not uncommon for one person to develop competencies in both records management and archives management and so become capable of addressing both areas of expertise, which are increasingly closely aligned in the digital age. Records and archives managers can also work as information managers, although the critical duties of the records and archives manager are to ensure that records are protected both for their immediate use and long-term value as documentary evidence.

In summary, we see the changing roles of the records and archives specialists as follows:

- **The archivist** must play a much more proactive role in managing information and records from the time they are created, to ensure that evidence is protected.

- **The records manager** must understand not only the day-to-day requirements of records creation and use but also the importance of protecting records as evidence, for the present and the future.

- **The information manager** must appreciate not just the requirements of collecting, controlling and distributing information but also the importance of protecting the evidential quality of information.

- **The information technology specialist** must understand that information systems exist to support the creation, management and protection of information – and evidence – and must build those systems so that they support accountability, efficiency and effectiveness.

Another key player in the effective management of records, information and archives is the line officer in government, who creates and uses information and records on a day-to-day basis. This person must understand the value of those information resources, which are part of the organisation's assets, and must manage those assets as effectively as possible, so that they retain their value as evidence for as long as needed.

This reorientation in the concept of information, records and archives management shifts the focus away from the preservation of 'old' archives in traditional physical repositories to the oversight of current records in creating departments and in digital repositories. As a result, archival institutions, archivists, records managers and other officers involved with records and archives care in governments and organisations around the world have been reconceptualising their roles and responsibilities in the management and protection of records and archives.

In the 21st century, archival institutions are playing more of a leadership role in records and information management, in order to ensure records retain their authenticity and integrity. Staff working with records and information in government departments need to know how to create and manage records as part of their daily responsibilities. Increasingly, records specialists are playing a central role in supporting records and information management in their departments and across their organisations.

2.3.2. Training is required – for both the records and archives specialists and for the creator of records

Archivists today see themselves not just as historical archives specialists but as records specialists. Around the world, archival education and training programmes are being transformed into more holistic information, records and archives management programmes, with the goal of creating a group of skilled practitioners who can provide expert support across the inter-related disciplines of information, records and archives management.

In countries around the world, there has been dramatic growth in the number and diversity of training opportunities for those working with records and information as part of their daily duties. Those opportunities are offered within governments and through professional associations, universities and the private sector (e.g. compliance roles), with the goal of enhancing the capacity of staff to perform information- and

records-oriented tasks more effectively. The concept of 'recordkeeping' is recognised as representing a broader and more integrated responsibility for managing and protecting records as documentary evidence.

Redefining the archival role away from the traditional, history-oriented, custodial environment, increasing the capacity of records creators across government to participate in effective and accountable recordkeeping, and creating an integrated, collaborative approach to the management of all government records, increases the likelihood that documentary evidence, regardless of its form, is protected and accessible for the short- and the long term.

Training and education play a key role in helping to deliver this shift in the mindset and in enhancing the capacity of industry professionals as well as record-creating Government departments to manage records effectively in the digital age as documentary evidence, not just for historical and cultural purposes.

2.4. Placement of the Archival Institution based on its Roles and Functions

A government archival agency performs two distinct but related roles. Its first and most important role is as a central agency of Government focused on ensuring effective recordkeeping and guaranteeing the integrity of the official record. As outlined above, this is an asset management function, since information, records and archives are key assets that must be managed just as effectively as other assets, such as finance, staff and facilities. The best placement of an archival institution to support this role is one that ensures the organisation has decision-making authority, enabling records with archival value to be preserved and brought into the custody or control of the archival agency, as documentary evidence for the present and the future.

The other archival role is as an active research, cultural and heritage institution. In this role, the archival institution promotes and facilitates the widest possible use of archives: for research, for education and for cultural self-awareness and the sustenance of collective identity. This is a cultural and social function, which is supported when the archival institution is able to create a dynamic and welcoming public profile, fostering public engagement with and use of the holdings in its care.

Archival institutions must balance these roles and must actively demonstrate the link between them. While the actual placement of any archival institution in its government needs to reflect the administrative traditions and practices of that jurisdiction, a balance must be struck between the government's legal obligations and its cultural and heritage responsibilities. To support the role of the archival

institution as a central agency of government, one that directs and encourages all departments and public entities to maintain good recordkeeping practices, the institution should be positioned with other central agencies responsible for asset management, such as treasury or justice, or with those directly responsible for effective government management and programme delivery. To support its research and cultural role, the archival institution needs to have reasonable political independence, along with the ability to publish, interpret and exhibit information from and about its holdings and the independence necessary to enter into contracts and receive payment for services.

The real success of an archival institution, therefore, is not based solely on its placement in government but is dependent on the government's commitment to modern management and its sustained backing for the work of the institution and its staff. This support is critical: it allows the archival institution to develop its reputation for excellence in service; it supports the head of the institution in his or her effort to develop and deliver both short- and long-term strategic initiatives; and it helps the head and his team develop relationships with other areas of government, in order to foster support and promote success.

2.5. *The Importance of International Standards*

Ultimately, without reliable and accessible archives, there can be no audit and no accountability by the public service, which is essential to allowing Government to demonstrate how it has fulfilled its responsibilities for both government and governance.

To support the goal of protecting archives as evidence, national, regional and international organisations such as the International Council on Archives (ICA) have lobbied vigorously for the adoption of standards, principles and guidelines for records and archives management. The ICA's *Universal Declaration on Archives,* adopted by the 36th Session of the General Conference of UNESCO in 2011, emphasises the 'vital necessity of archives for supporting business efficiency, accountability and transparency, for protecting citizens' rights, for establishing individual and collective memory, for understanding the past, and for documenting the present to guide future actions.'[5]

Well before this ICA declaration was issued, however, the International Organization for Standardization (ISO) acknowledged the importance of a 'systematic approach' to records management in order to 'protect and preserve records as evidence.'[6] In

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[5] International Council on Archives, *Universal Declaration on Archives,* 2011. Available online at http://www.ica.org/13343/universal-declaration-on-archives/universal-declaration-on-archives.html.
[6] ISO 15489-1:2001: *Information and Documentation – Records Management, Part 1: General,* pp. 1, 4.

publishing the first iteration of the international records management standard (ISO 15489) in 2001, the ISO confirmed the importance not just of keeping historical archives but also of ensuring the accountable, effective and efficient management of all records, in all formats, from their creation to their ultimate disposition: as archives if they hold enduring value; or as obsolete records if they are no longer needed as evidence.[7]

- The ISO 15489 records management standard is supported by other standards that specifically address critical aspects of electronic records management.

- ISO 16175, for instance, establishes a sound framework for improved electronic records management, which is critical to supporting increased organisational effectiveness and efficiency and to helping governments and agencies comply with statutory mandates for digital information management.[8]

- The ISO 23081 metadata standard (which is one of the sources for GRS' own metadata standard[9]) identifies core requirements for capturing and managing metadata – data about data – in order to protect the integrity of electronic records.[10]

Drawing on best practice standards and guidelines to support records and archives management allows archival institutions to ensure that their efforts remain effective and up to date.

These and other key records and archives management standards confirm the importance of active and effective records management and recordkeeping, not just custodial archival management, in order to ensure that records creators accept and meet their responsibilities to the public not only to *keep* quality records as evidence but also to *make* quality records in the first place.

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[7] We are basing our analysis of ISO 15489 on the version currently in public use. We note, however, that the standard is currently being revised, with inputs from records professionals – including participants in this research project. The new standard will adopt an even more proactive approach to records management, emphasising the central role of records professionals not just in managing records outputs but also in designing and evaluating business activities and work processes, in order to determine which records need to be created and captured and how long those records need to be kept.
[8]
ISO 16175-1:2010: *Information and documentation -- Principles and functional requirements for records in electronic office environments -- Part 1: Overview and statement of principles;*
ISO 16175-2:2011: *Information and documentation -- Principles and functional requirements for records in electronic office environments -- Part 2: Guidelines and functional requirements for digital records management systems;* and
ISO 16175-3:2010: *Information and documentation -- Principles and functional requirements for records in electronic office environments -- Part 3: Guidelines and functional requirements for records in business systems*
[9] *RecordKeeping Metadata Standard for the Government of Hong Kong Special Administrative Region,* GRS, May 2012.
[10] ISO 23081-1:2006: *Information and documentation -- Records management processes -- Metadata for records -- Part 1: Principles;*
ISO 23081-2:2009: *Information and documentation -- Managing metadata for records -- Part 2: Conceptual and implementation issues*; and
ISO/TR 23081-3:2011: *Information and documentation -- Managing metadata for records -- Part 3: Self-assessment method*

Digital technologies have fundamentally altered how information and records are being managed and the way in which records and archival institutions position themselves and orient their services. The international standards authorities actively develop guidelines in response to this paradigm shift, which the four overseas comparator institutions examined for this Study are adapting for their own particular conditions.

In the next section, we will look in greater detail at how these four comparator institutions are responding to the paradigm shift.

3. International Responses to the Paradigm Shift

Against this background of a paradigm shift in information, records and archives management brought by digital technologies, archival institutions around the world have been making strong efforts to transform their operations in order to remain as effective and supportive as possible. This section highlights some of the actions taken by the four comparator organisations: (1) National Archives of Australia (NAA); (2) Library and Archives Canada (LAC); (3) Nationaal Archief, Netherlands (NAN); and (4) The National Archives, UK (TNA), as well as an analysis of current trends in records and information management within their respective jurisdictions, in order to demonstrate potential directions for the future records and information management strategy of the Government of Hong Kong and the role of GRS in supporting the Government to achieve success in the management of its records and archives assets.

We begin by presenting the overall response of the comparator organisations to the challenges brought by digital technologies, which offers insights into the overall strategy taken by the institution or, sometimes, by its government. We then discuss the authority given to the Heads of Institutions in the archival institutions studied. The seniority of the Heads of Institution, and the experience and knowledge they have brought to their duties, have served as enablers of change within the comparator institutions and their governments. To support the change promoted and fostered by the Head of Institution, we note that all comparator institutions have devoted resources specifically to the tasks of performing regular strategy planning and review.

As identified through our research, the comparator organisations do not consider the task of addressing the paradigm shift as a one off requirement. Continuous and dynamic change and growth are essential to ensure the archival institutions remain leaders in information, records and archives management in their jurisdictions now and in the future.

In this section, we will look in greater detail at how these four comparator institutions are responding to the paradigm shift. We set out the findings as follows:[11]

- Overall Response to Change – Establishing Strategic Priorities; and
- Change Enablers – Staff Capacity Across the Organisation.

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[11] As part of this Study, a more detailed research into the four international comparator jurisdictions was conducted. A research framework that was prepared in inception stage of this Study and agreed with the Efficiency Unit is included in Appendix B. The detail of the research findings can be found in Appendix C.

3.1. Overall Response to Change – Establishing Strategic Priorities

The change in records and information management brought by digital technologies has had a significant impact on all the comparator organisations we examined. All of the organisations identified strategic priorities for action and initiated and encouraged change – within their organisations or across their governments – to address the impact of digital technologies on records and recordkeeping.

> **Key Messages:**
>
> All comparator organisations are actively transforming their operations, based on clearly articulated strategic priorities, in order to respond as effectively as possible to the paradigm shift brought by digital technologies.

3.1.1. Australia: Prioritising digital records management

In Australia, recent legislative changes are anticipated to formalise the role and increase the responsibility of the NAA for digital records and archives management.[12] It is anticipated that that the *Archives Act* may also be changed, incorporating digital records and archives management more fully into the scope of NAA duties. NAA has also emphasised digital records and archives management as a priority in its 20-year strategic outlook.

As part of this new strategic orientation, NAA plans to incorporate new approaches to records and archives management, including: increasing NAA's advisory role; increasing collaboration between the Archives and other Commonwealth agencies and archival organisations; fostering greater alignment with key Australian Government agencies and industry to promote better information and records management; and leading the implementation of a Digital Transition Policy to improve digital information and records management operations across government and, as a result, increasing efficiency.

3.1.2. Canada: Strengthening digital infrastructures

In Canada, the LAC has outlined in its 2013-2016 business plan a number of key strategic initiatives that specifically address new digital realities. These initiatives are designed to allow LAC to take advantage of digital information infrastructures and to

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[12] Recent legislative changes include the introduction of the *Public Governance, Performance and Accountability Act 2013* (*PGPA Act*), which replaces the *Financial Management and Accountability Act 1997* (*FMA Act*), and the *Commonwealth Authorities and Companies Act 1997* (*CAC Act*), effective 1 July 2014, which aims to ensure the efficient, effective, economical and ethical use and management of public resources, including Commonwealth records as defined by the *Archives Act 1983*.

support the government's broader digital information strategies, with the goal of serving the needs of the Canadian public more efficiency and effectively. Priorities for action include: improving disposition authorities and records management tools to strengthen information management across government and ensure LAC can acquire government information of enduring value; improving the ability of Canadians to access and use LAC's information resources; and collaborating with stakeholders to exchange information, discuss common challenges and establish collaborative projects.

LAC also established a 'digital office initiative' (DOI) in 2010 to support internal modernisation efforts. This initiative is seen not only as an opportunity to improve internal practice but also as a way to establish new and collaborative solutions for digital records creation and management that might be shared across government.

3.1.3. The Netherlands: Transforming government operations

In 2013, the Dutch government decided to transform government operations entirely from analogue to digital workflows by 2017. In developing its vision, the government recognised the need to reorient the NAN away from a traditional, custodial framework towards a more proactive position as a key player in information and records management. The government articulated a goal of creating 'a well-equipped NAN, functioning as a centre of expertise and advice not only for the creators but also the users of (State) archives.' Consequently, the government developed a strategic plan for the development of a digital infrastructure to enable the management of digital government records; the establishment of requirements with respect to digital preservation and information management in government agencies; and the formulation of mechanisms for enabling open access to digital archival material.

Over 30 million Euros have been allocated to this initiative, to be spent by 2017, with the goal of developing a digital infrastructure to support the management and preservation of digital records and archives. Also, the responsibilities of NAN have been broadened to enhance its ability to support and facilitate the development of this new digital infrastructure. The strategic plan also calls for the digitisation of paper-based archives and the development of guidelines for managing digital records and ensuring their sustainability. To support these strategic efforts, NAN was reorganised as of 1 January 2014, to position it more effectively as a key participant in the transition to digital records management.

3.1.4. UK: Streamlining operations

In 2012, TNA developed a digital strategy that focuses on developing streamlined and effective operations in TNA's three core areas of archival responsibility: collection, preservation and access. TNA has also produced a range of other business and

strategic plans to improve both digital and physical preservation facilities, increase funding, improve access to records and identify gaps in the representation of documentary heritage of England and Wales.

To support strategic changes, TNA plans to: develop stronger frameworks for the management of retention schedules, the appraisal of government records and the protection of digital records; build a simple, scalable digital repository; and develop access systems that provide research tools as well as search capacities and enable users to contribute metadata and add moderated content.

3.2. Change Enablers – Staff Capacity Across the Organisation

3.2.1. Authority of the Head of Institution

The ability of these national archives to develop strategic plans and obtain government support for their proposals for change is driven by the senior position of the Head of Institution and by his or her records and management experience. As shown by our research into the background of recent incumbents, we believe that seniority and experience have given these leaders not only the responsibility to address recordkeeping requirements across government but also the authority to press government to provide the support necessary to foster change and enforce compliance.

> **Key Messages:**
>
> The Head of Institution in all comparator organisations has the authority necessary to achieve the significant responsibilities associated with managing government records and archives as critical information assets. They all possess relevant experience in records management and are experienced public administrators.

In each institution examined, the Head of Institution holds a very senior level in government, and is not subject to rotation within government. In three of the four institutions, the Head is not required to have formal qualifications in archives management, apart from the Netherlands, where the General State Archivist must have formal archival qualifications. It should be noted, however, that the General Director of the National Archives, who is responsible for leading NAN as an institution, is not required to have similar qualifications. There is no reason why both roles/positions cannot be performed by the same person with one incumbent responsible for both roles. In all comparator organisations, the incumbent and recent predecessors all brought extensive related experience in disciplines such as archives,

history and information management, as well as extensive experience in government management.

The positions of each of the Heads, and education and qualifications of recent incumbents, are shown in the table below.

Table 1 - Rank of Head of Institution

Australia	Canada	The Netherlands	UK
Rank: DG The Director-General is the most senior civil service position in a government department, reporting directly to the minister responsible for that department.	Rank: GC-8 Directors are ranked GC-1 to GC-10 with GC-10 being the highest.	Rank: S17 Senior civil servant positions rank from S1 to S18; above this rank are government ministers and senior managers of major government agencies such as the Dutch National Bank.	Rank: Senior Civil Servant 2 (SCS2) Directors are ranked SCS1, SCS1A, SCS2, and SCS3, with SCS3 as the highest.
Education and qualifications: Five out of the 10 previous heads have prior archival management experience. The current head of NAA has a background in computer science and was the Chief Information Officer for the Australian Security Intelligence Organisation. As of 2014, the current incumbent is also the President of the International Council on Archives.	*Education and qualifications:* The current and previous two heads all hold post-graduate degrees in History or Applied Human Science, and have archives-related senior management experience. A previous head of LAC served in several senior positions with the International Council on Archives and is a member of the Order of Canada and of France's *l'Ordre des Arts et des Lettres*.	*Education and qualifications:* The current head has a Master's Degree in Archival Science and has prior archival management experience. The previous head has a degree in law and held several senior positions in the Ministry of Education, Culture and Science before his appointment as Director of The National Archives of The Netherlands in 2007. He completed the archival training required by law in order to take up the position of General State Archivist in May 2009.	*Education and qualifications:* The current and previous two out of the four heads hold a Master's Degree. The current head of TNA has a Masters' Degree in history and had extensive experience of archives and libraries. The current head and two of his recent predecessors worked at the British Library before joining TNA. Recent Chief Executives have had strong management focus, one of whom had an MBA and another of whom who had previously worked at a major

Australia	Canada	The Netherlands	UK
			consultancy.

Our research suggests that the seniority of the Head of institution, coupled with their knowledge of the discipline, their experience within the country and internationally and their general leadership capabilities are all major factors in the ability of these Heads to establish strategic directions and facilitate major change in their governments.

For instance, if the Head of Institution is in a senior position in Government, he or she will be in a better position to plan staff capacity requirements on a strategic basis (subject to Government-wide constraint such as a recruitment freeze across Government, if any), and then he or she will also be able to secure the resources necessary to: engage new staff; deploy staff into different units as needed to meet immediate requirements; send existing staff for training or education opportunities; and ultimately support continuous capacity building across the organisation.

3.2.2. Ensuring stability and capability retention

The successful running of an archival institution is driven by the positioning of the Head so that he has both the responsibility for and the authority to make long-term decisions. It also depends on the availability within the organisation of a dedicated staff complement, who can grow and develop within the organisation in order to achieve strategic outcomes for the management and protection of records, information and archives to support accountability, identity and memory.

Our research shows the following:

- **Records and archives management is recognised as a professional career:** Records and archives management is recognised as a distinct specialty within the governments of the four comparator organisations. Further, records and archives management is recognised as a professional career, and the four jurisdictions studied support an upwardly mobile career path for records and archives staff, allowing them to grow within and outside of the archival institution itself.

- **Local education programmes are available:** All the jurisdictions studied have mature training and education programmes for records and archives management, providing a pool of new graduates to move into junior positions within the institution without requiring intensive training before they can commence their duties.

- **Formal qualifications not necessary for archives specialists:** Given the availability of local education programmes, an increasing majority of new records and archives specialist staff in the comparator organisations will bring formal qualifications to their work. However, the governments have not restricted the organisations' ability to hire strong candidates with other credentials, as long as the candidates can demonstrate their strengths adequately in competition with other candidates for new posts.

- **No strict requirement on certifications:** While formal qualifications are preferred, no comparator organisation insists that its records and archives staff require a specific degree, diploma, certificate or educational credential. The normal academic requirements for a new hire are that they hold a degree or diploma in the field of records and archives management from a recognised tertiary educational institution, or that they are able to demonstrate suitable equivalent education and/or experience for the post in question.

- **High proportion of full-time equivalent (FTE):** All four jurisdictions studied have a staffing complement that includes a high proportion of full-time equivalent (FTE) positions and a smaller number of part-time equivalent (PTE) positions. The emphasis on FTE positions recognises the need for staff continuity in order to accomplish the complex duties involved with records and archives management in the digital age.

- **Internal rotation to diversify staff experience:** Staff within the organisations may rotate through different units, as planned by their Head. This internal rotation allows the organisation to increase staff numbers on one or more initiatives to achieve strategic priorities, and the rotation also allows staff members to diversify their experience, share their knowledge with their colleagues, and develop a strong team-based approach to the organisation's work.

Key Messages:

All comparator organisations have a dedicated staff complement, who can grow and develop within the organisation in order to achieve strategic outcomes.

3.3. Embedding a Strategic Function

All four institutions we reviewed have established formal offices dedicated to strategic planning and management:

- NAA – Strategic Planning and Governance

- LAC – Strategic Planning and Infrastructure Management

- NAN – Strategic Policies and Research

- TNA – Business Co-ordination.

While we did not obtain information about the dates when these strategic planning offices were first created, we were able to establish that all the units now play a central role in developing and supporting the strategic initiatives underway to support the transition to digital records and archives management in all the comparator organisations. We were also able to ascertain that strategic decisions, even those requiring significant change in the operations of the institution, were made in a planned and structured manner, rather than ad hoc. Not only have these institutions developed strategic plans to support change, but they have also redesigned the organisational frameworks and secured the resources necessary to turn the vision of change into reality in a planned, sustainable manner. Furthermore, we were also able to determine that other jurisdictions have, in the past, issued moratoria on different practices and parts of their operations. Although we did not obtain specific data on the dates at which such moratoria were issued, we confirmed that in some instances, decisions to change direction have resulted in the temporary or permanent cessation of current operations while new strategies and practices were being developed. For example, in Canada there is evidence that LAC issued a temporary moratorium[13] on all purchased acquisitions with the aim of reviewing its acquisition policies and strategies and, as a result, better improving its stakeholder management strategy.

3.3.1. Collaborating internally and externally

Active collaboration within an archival institution, and between an archival institution and external stakeholders (e.g. external specialists and users), are critical to ensuring success with any effort to transform operations as a result of the changes brought by digital technologies. Our research has revealed that the four organisations also draw on the expertise of their management staff to support planning and oversight, including creating internal leadership teams and, in some cases, by seeking

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[13] The moratorium was originally imposed for a timeframe of nine months in 2009 and there is evidence it was lifted as of 2013. (Source: http://anglo-celtic-connections.blogspot.ca/2009/06/lacs-monograph-moratorium.html, http://www.thestar.com/news/insight/2013/03/10/historical_letters_not_wanted_at_library_and_archives_canada_critics_say.html). In 2015, it was announced that LAC just acquired two fairly significant private acquisitions, although we did not have documented evidence that LAC paid for these (http://www.bac-lac.gc.ca/eng/about-us/about-collection/Pages/gifts-archives-published-materials.aspx). We understood that subsequent to the moratorium and review of strategy / policies, the LAC's budget for purchased acquisition is considerably lowered and selection of purchase is now more strict.

input from external advisory councils. (The organisations also consult with stakeholders and the public, particularly during the process of developing appraisal strategies and records retention and disposal schedules.)

Australia

NAA draws on the support of its Leadership Team to provide guidance to the organisation and its staff and to support collaboration and consultations across the organisation. Each Assistant Director-General responsible for one of the five departments of NAA serves with the Director-General on this Leadership Team. Additional oversight and support is provided by an Advisory Council, established under sub-section 10-1 of the Archives Act 1983, which exists to 'advise the Minister and the Director-General on matters relevant to the Archives' functions.'

Canada

LAC has integrated a 'horizontal management' structure into its organisation, in addition to the traditional 'vertical' organisational structure, in order to foster communications and collaboration across the organisation. The Operations Integration unit supports this horizontal integration by ensuring that services and activities across the organisation are linked and that specific projects are coordinated. The approach is also intended to improve decision making and to allow LAC to ensure its programmes and activities remain relevant for the government as a whole.

Netherlands

In the Netherlands, leadership for NAN lies with the board of directors, which comprises the National Archivist and his two directors (one for Infrastructure and Advice and one for Collection and Public Services).

UK

In the UK, TNA brings its executive team together on a Management Board that advises the Chief Executive and Keeper on the plans and strategic direction of TNA and provides regular reviews of performance and risks. The Management Board is composed of the Chief Executive and Keeper (as chair), as well as five executive directors and up to four non-executive directors. TNA is also guided by the Advisory Council on National Records and Archives, which advises the Lord Chancellor on major objectives, programmes and policy changes; on any proposed legislation affecting TNA; on the implications for records and public services of any proposed change to the status of TNA; and on any other subjects brought to its attention by the Lord Chancellor.

Key Messages:

All comparator organisations have devised management frameworks that support communications and coordinated decision making across the institution, improving collaboration, supporting integration and enhancing effectiveness.

Digital technologies have resulted in a paradigm shift in the international archival community, changing how records and information are created, managed and used. This shift has forced the four comparator archival institutions we examined to reassess their strategies, so that they can continue to remain relevant and effective in supporting accountable records and archives management in this digital age.

GRS, like all other archival institutions we examined, is facing similar challenges and, we believe, will benefit from reviewing international experiences to assess what lessons and measures are applicable to Hong Kong.

To consider what changes are required to assist GRS, we also take into account the wider vision the Governments in each jurisdiction with regard to records management. This analysis will ensure that GRS will be positioned at the forefront of Hong Kong's efforts to address these challenges.

In the following section, we set out the short term and longer term recommendations to enable GRS to make the transition in the digital age.

4. Recommendations

4.1. Introduction

As discussed in the previous sections, archival institutions around the world are actively addressing the changes to information management and recordkeeping brought by the development of digital technologies. We have seen evidence of how these archival institutions are responding to this fundamental paradigm shift – from the process of planning and executing new initiatives to the very structure of the organisation itself (e.g. establishing a strategic unit within the organisation to address this 'shift').

In order for GRS to become a leader in supporting the management of records, information and archives for the Government in the digital age, the change that GRS will undergo will be transformational, and the changes will not be limited to GRS but will ultimately involve new strategic actions across the whole of Government. However, given that the scope of this Study is to consider the future of GRS, our recommendations have focused primarily on the actions that GRS can take in order to ensure it is a leader in the management of recorded information for the Government.

Based on learnings from the experience of the other comparator institutions we studied and taking into account GRS' vision and the Hong Kong context, our recommendations include specific changes to its organisation structure, modus operandi and staffing requirements to manage digital records and archives in the 21st century.

4.1.1. Intended outcome of our recommendations

The intended outcome of our recommendations is to reposition and transform GRS to serve a new and more strategic role in Government. The 'transformed' GRS will fulfil the dual responsibilities of a government archival institution:

- To ensure that all of the Government's records, whether digital or analogue, are created, captured, used and preserved with their authenticity, integrity and reliability and usability intact; and

- To provide the widest possible public access to the Government's archives, so that those materials may be used for any purpose, from legal, judicial or administrative purposes to historical analysis to genealogical or family research and beyond.

4.1.2. Underlying principles behind our recommendations

Based on our analysis of the four comparable archival institutions, we have identified two underlying principles that drive our recommendations for the GRS to achieve its intended outcome against the Hong Kong context:

- The need for GRS to have a stronger leadership role; and

- The need for GRS to reposition itself in order to play a more strategic role within the Government – to shift its focus away from a traditional, custodial role to a more strategic orientation with an emphasis on managing digital information, records and archives as assets.

Based on these two principles, we have developed two categories of recommendations, which are:

1) Short-term recommendations – these recommendations are intended to be implemented in the short term (i.e. two to three years); we have included illustrative time frames and action items to support these recommendations; and

2) Longer-term recommendations – these recommendations are intended to be implemented in the longer term (i.e. after the second/third year). These recommendations are contingent on the completion of the short-term recommendations and are therefore subject to refinement and confirmation after the short-term recommendations have been successfully implemented. We have provided guidance on the implementation requirements of these longer-term recommendations.

A total of four short-term recommendations and four longer-term recommendations are summarised below:

Short-term recommendations (Year 0 to Year 3):
1. Elevate the rank of the GRS Director
2. Establish a Strategic Transition Office (STO) within GRS
3. Recruit new local staff to support existing operations
4. Reorganise GRS to support the transition process

Longer-term recommendations (Year 4 onwards):
1. Create a post of Deputy GRS Director
2. Reorganise GRS for the future
3. Streamline GRS operations
4. Strengthen staff capacity and retention

We detail each of these recommendations in turn below.

4.2. Short-term Recommendations

4.2.1. Elevate the rank of the GRS Director

> **Short-Term Recommendation 1:**
>
> **We recommend that the rank of the GRS Director be elevated to:**
> - **D4 to D5 level if GRS is under the Administration Wing of the Chief Secretary for Administration's Office (CSO); or**
> - **D6 if the Government decides that GRS should be a standalone department, in order to support the leading role GRS will play in guiding effective records, information and archives management for the Government.**

As mentioned in this report (Sections 3.2, 3.3 and 4.1 and Appendix D.3.2), in the future, GRS should play an increasingly important leadership role in records and archives management for the whole of the Government. This responsibility includes communicating and liaising with, and building strong and sustainable relationships with, peers in other B/Ds. By repositioning the GRS Director at a D4 to D6 level (depending on where GRS is positioned within Government), he or she would be granted greater authority in the Government. This increased authority will allow the GRS Director to:

- Advise the HKSAR Government on records and archives management strategies, policies and best practice principles, particularly to help the government address the paradigm shift brought by digital technologies

- Lead GRS as well as Bureaux/Departments of HKSAR Government in the implementation of records and archives initiatives derived from and intended to support records and archives management strategies, policies and best practice principles

- Steer and oversee the preservation of documentary evidence of the HKSAR Government and people of Hong Kong

- Steer and oversee the promotion of access to, and the dissemination of, documentary evidence and related information from and about the HKSAR Government and people of Hong Kong

- Oversee the formulation of the Strategic Transition Office and to monitor and support its development and implementation of a Transition Plan for GRS

In the longer term, as the Government increases its capacity in electronic records management, we believe that the responsibilities and duties of the GRS Director will only increase. Repositioning the Director at a more senior level will help support that change, which will be an inevitable and positive result of the transition process articulated in this Study.

From the findings of our research into the four comparator organisations, it was noted that all of the Head of Institutions hold very senior positions within their governments. This senior placement reflects the importance of the role; and the authority and responsibility associated with managing government records and archives as critical information assets.

4.2.1.1. Qualification/experience requirement for the incumbent of the GRS Director

We believe that the future incumbent of the GRS Director post should possess both professional records management knowledge as well as public administration and management experience. The leadership of GRS should have sufficient appreciation of records management requirements and its future development as well as the ability to manage GRS as a governmental organisation and to advise the Government on records management issues.

We understand that the current post of the GRS Director is a supernumerary Principal Executive Office (PEO) post that is held against the Principal Archivist post. As such, the post is filled by a PEO if there is no suitable professional candidate identified within GRS. The applicability of this supernumerary PEO post is subject to review every twelve months. We believe that the post should be filled by a professional archivist with deep public administration experience, or a senior official with extensive experience and knowledge of records, information and archives management.

This aligns with our research into the four comparator organisations. The Heads of these institutions all possess relevant experience in records management and are experienced public administrators.

4.2.1.2. The GRS Director should be a permanent role

We believe that the position of GRS Director should not rotate. Accordingly, we recommend that Government prioritise making the GRS Director post a permanent and professional position. This recommendation aligns with our research into the four comparator organisations where all the Heads of Institutions are positioned as permanent posts and are not subject to job rotation.

4.2.1.3. Tackling the challenge in finding and recruiting a permanent and specialised GRS Director with the required public administration experience and level of seniority (i.e. D4/5 rank)

Given that it may be a challenge for the Government to find an appropriately senior professional (at D4/5 level) with both specialised records / archives management and public administration experiences in the short term (i.e. within 6 to 9 months after the recommendations in this Report are accepted), we recommend that an experienced 'public administrator' with the appropriate seniority level (D4/5) be brought in as the 'interim' new GRS Director, who will assume the responsibilities of dealing with other B/Ds in the wider Government on records management/archives-related issues, while being closely supported and guided by the Head of the Strategic Transition Office (STO, to be discussed in detail in the next section), on technical and specialist subject matter issues in relation to records and archives management.

This new GRS Director candidate may not have specialised training or background in records and archives management, but he/she will be equipped with the experience and skills to navigate across different B/Ds within the Government as well as the authority to implement and drive changes related to records/archives management across the Government, based on initiatives and strategies developed by the STO (to be discussed in next section).

It should be noted that this 'interim' GRS Director is expected to eventually rotate out of the GRS organisation. During the transition period, as mentioned in the first paragraph, he/she will be assisted by the Head of STO on subject matter issues in relation to records and archives management. After the transition period, we recommend GRS to create a 'Deputy GRS Director' to support the GRS Director. This will be further described in the Longer-term Recommendations (Section 4.3.1 and 4.3.2).

4.2.2. Establish a Strategic Transition Office (STO) within GRS

Short-Term Recommendation 2:

We recommend that GRS establish a Strategic Transition Office (STO) who will be responsible for developing and implementing a transition plan for GRS.

In parallel with implementing Recommendation 1 (i.e. Elevate the rank of the GRS Director), we recommend that a Strategic Transition Office (STO) be established. The change that GRS needs to undergo will be transformational in order to reposition itself and to respond to the paradigm shift brought by digital technology. This transformation process requires, as aligned with our experience from other organisations' transformation, a dedicated team (i.e. the STO), to act as the change agent that is required to:

(i)   vigorously examine the organisation's business plans and operations;

(ii)   identify the necessary change; and

(iii)   manage the process to achieve success.

Subject to approval of the elevated GRS Director, the STO should have the authority to carry out all the reviews and change directives that include:

(i)   the re-orientation of GRS;

(ii)   the streamlining of GRS' operations;

(iii)   the increase in GRS' staff capacity (including skills, authority level, staffing level etc.);

(iv)   the development of a formal team-based approach to archives, records and information management; and

(v)   the design and implementation of a new organisation structure for GRS in the long term.

The STO should have a clear focus on GRS' transformation and a clear structure of deliverables to the GRS Director, which should include the following:

(i)   A Project Plan that outlines the work STO will undertake during the transition period;

(ii)   An interim assessment of GRS' operations and the corresponding advice on how current GRS work should continue and whether process re-engineering is required with reference to international experience;

(iii)   Research and investigation into transition requirements for GRS to achieve repositioning and its vision;

(iv)   A Strategic Plan that facilitates the design, development, implementation and assessment of all aspects of the transition period. This includes the adaption or adoption of international standards and best practice requirements; staff planning; education and training requirements; a holistic plan on records management of electronic, paper-based and hybrid systems, including a Trusted Digital Repository (TDR) Plan (detailed in point (v) below); and resource and facilities requirements;

(v)   A TDR Plan that forms part of the Strategic Plan, and include the identification and assessment of resources, wider electronic records and information management needs for GRS and the Government, and also the priorities and actions to support the change management in information management and information technology;

(vi)   A Transition Plan that guides GRS to reposition itself and achieve success in transformation; and

(vii)   Education and Training Plan for both GRS staff and the wider Government civil service team.

In the next few sections, we set out in further detail the specific scope of work requirement for the STO (Section 4.2.2.1), the STO organisation structure, and the composition of staff and new staffing requirements (Section 4.2.2.2), as they relate to this recommendation.

4.2.2.1. Scope of work of the STO

We recommend that the STO should, as a first priority, develop a strategic and operational plan and work programme as soon as they are on board, in order to specify key deliverables and time frames to ensure the STO remains focused on strategic outcomes. This also facilitates GRS and the Government to measure and monitor the work STO undertakes to ensure it is relevant to GRS' vision and is effective. Such strategic and operational plan and work programme will be elaborated in point 3a below.

The following sets out our preliminary recommended guidance on the key components of STO's scope of work and work programme. This illustrative work

programme should be reviewed and supplemented by STO once they are on board, to reflect the strategic and project plans of GRS. This formal work programme should then be approved and endorsed by the GRS Director and be used as a tool for measuring and monitoring STO's work progress and performance.

Key components of STO's scope of work and deliverables

1. **Formal Project Plan or Work Programme** – To develop a project plan for the work of the transition team (i.e. STO), outlining duties, responsibilities, reporting relationships, deliverables, time frames and resource implications. The project plan is an important project management tool, which lays out the key tasks STO will undertake during the transition phase.

2. **Advice/recommendation to GRS on interim duties and continuity of GRS operations during the transition period** – Given the changes anticipated in GRS' operations as a result of the transition process, the STO will assess whether and how current GRS work should continue and will advise GRS staff accordingly, in consultation with the GRS Director .

3. **Transition Plan** – To develop a Transition Plan that guides GRS on its transformation and is the key deliverable of STO. This plan should consist of several related deliverables:

   a. **Strategic Plan** – This provides the overarching strategy for GRS to achieve its vision and mission in terms of: its positioning within the Government and the wider records management community in Hong Kong and the region; the strategic priorities of GRS' development and operation (these include but are not limited to the overall collection strategy, records holdings and transfer strategies, storage and preservation directions (e.g. the development of a TDR); access policies; workforce and staffing requirements; and funding requirements); policies and planning which includes the adaption of best practice standards; and the streamlining (or re-engineering) of GRS' operations.

   This strategic plan should be complemented by the following three plans to ensure that goals set in the strategic plan are reflected in all areas of GRS' operations:

   i. *Operational plan* – This provides the operational requirements of the actual implementation of the strategic objectives laid out in the Strategic Plan. The Operational Plans should be specific to each of the offices within GRS to ensure work and performance aligns with the strategies. Performance of staff and each of the GRS offices

should be appraised in accordance with the level of achievement of the goals set out in the operational plans.

ii. *Staffing plan* – Specifies the new skill sets GRS will need to acquire in order to respond to the changes brought by digital technology; also details the capability requirements and the corresponding recruitment strategy[14].

iii. *Training plan* – Specifies the training requirements for GRS staff and also civil servants in the wider Government. Apart from acquiring new skill sets through external hire, we recommend that GRS also look into developing the existing staff to broaden their skill sets especially in the light of the new shift in strategic focus and the recent changes in the archival community. The plan for existing staff may include the identification of alternative training courses, in-house 'on the job training' or apprenticeships, and the promotion of a team-based approach working environment.

Having in place a training plan for civil servants in the wider Government could facilitate the Government with its response to the paradigm shift brought by digital technologies and to help drive GRS' vision and mission. We have emphasised that the shift requires a re-assessment of records management strategy and practice for the Government. Training the front line civil servants (who are records creators and some are also records managers) can help align the records management policies promulgated by GRS.

b. **Implementation roadmap and change management strategies and priorities of the Transition Plan** – This lays out the implementation roadmap for GRS and the related guidance and resources to support the transition process as documented in the Transition Plan developed by the STO. This includes the steps to be taken towards change, the budget and resource requirements, priorities and timeline, the responsible parties driving the change and the results of change. The change management strategies typically include communication plans within and outside the GRS, how change is to be managed by the different grades and ranks of staff within the GRS.

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[14] Note: Based on the result of our Study, we have provided our recommendations in terms of staffing requirements within the STO and the wider GRS in Section 4.2.2.2: STO structure and staffing requirements, as well as in Section 5: Implementation Plan, however, the STO, in consultation with the GRS Director, should determine the final structure and staffing plan to be implemented.

c. **New organisational structure** – The Transition Plan should include the new GRS organisation structure based on the future strategy of GRS and the associated operational requirements. As part of this Study, we have recommended an illustrative interim and long term organisation structure requirements for GRS. The STO should, with the GRS Director, review and validate the applicability of these illustrative structures as it develops the strategic plan and reviews the operations of GRS.

4. **Implementation of the Transition Plan** – The STO should provide overall oversight and support to the execution of the transition and to ensure that all the activities are carried out in accordance with the plan and timeline. The STO should, in the process of implementation, re-assess the goals achieved and consider the need to re-visit any components of the Transition Plan.

5. **Re-establish STO as a Strategic Planning Unit within GRS** – While the STO is an interim structure within GRS, which should be established for a specific time period to facilitate the transition, we believe that, in the longer term, GRS should have a permanent office which is dedicated to the provision of strategic guidance and support to GRS. This permanent office, i.e. the Strategic Planning Office, should have a focus on strategic and operational planning, integration of services, and maintenance of the highest standards of practice in records and archives management in GRS and the wider Government.

Having considered the need for the STO and its associated responsibilities, we now look into the structure and staffing requirements for the STO.

4.2.2.2. STO structure and staffing requirements

We recommend that the STO should consist of the following units and positions:

- Head of the STO;

- Planning and Best Practices Unit;

- Training and Staff Development Unit; and

- Digital Transition Planning Unit.

We envisage that the STO will be at the forefront representing the GRS Director to drive change and to coordinate the necessary resources. STO will have the necessary authority to review and assess the operations of GRS and the records and information management policies for the Government. As such, we believe that STO should be made up of a team that is appropriately experienced in records management and is

relatively senior within the Government structure. We therefore recommend that the team should be led by the following rank of officials with the corresponding duties and responsibilities:

Table 1 – STO Structure: Roles & Responsibilities, Reporting and Ranking

Position	Rank of Unit Head and Reporting Relationship	Duties and Responsibilities
Head of STO	Reports to: GRS Director (recommended to be re-ranked to D4/5 level) Proposed rank: D2/D3 level	Responsible for overseeing the entire transition process, including directing tasks such as: organisational change management; strategic planning; transition planning; operational planning; staff and resource planning (including analysis of staffing and resource needs and gaps); and supporting sustainable change while reducing unnecessary disruption to GRS and the Government. Working with the GRS Director to drive change in the wider Government records and information management policies. Communicating with GRS staff the change initiatives and the expected end results.
Head of Planning and Best Practices	Reports to: Head of STO Proposed rank: MPS Pt 45 - 49	Responsibilities to design, develop, implement, support and assess all aspects of the transition process, including researching and incorporating the following into transition plans: international standards and best practice requirements; staff planning, education and training requirements (in consultation with the Head of Training and Staff Development); TDR requirements (in consultation with the Head of Digital Transition Planning); resource and facilities requirements; and any other considerations that must be included in the transition plans and processes.
Head of Digital Transition Planning	Reports to: Head of STO Proposed rank: MPS Pt 45 - 49	Responsible for working with the Planning and Best Practices Unit, researching options for a trusted digital repository for GRS; developing a holistic and comprehensive strategic plan on records management of electronic, paper-based

Position	Rank of Unit Head and Reporting Relationship	Duties and Responsibilities
		and hybrid systems in the Government-wide context; developing TDR implementation plans and incorporating them into the transition planning process; identifying and assessing wider electronic records and information management needs for GRS and for the Government; identifying resource requirements; and identifying and recommending priorities and actions to support change management with respect to IM and IT.
Head of Training and Staff Development	Reports to: Head of STO Proposed rank: MPS Pt 45 - 49	Responsible for working with the Planning and Best Practices Unit, to identify educational and training opportunities; develop staff education and training plans; develop internal training resources for GRS staff and, as appropriate, for the Government as a whole; conduct staff training, particularly train-the-trainer and knowledge transfer sessions; and identify other priorities and actions to support increased staff capacity and effectiveness within GRS and, as appropriate, across the Government.

The composition of STO should have a balanced mix of veterans of records and archival management both at the strategic as well as operational level, and specialists who understands the Hong Kong context. Where the relevant personnel cannot be identified within the Government or even Hong Kong, we recommend that GRS should consider recruiting these personnel from abroad. The veterans of records and archival management will bring in relevant specialist knowledge and help drive the direction of change. They will also be able to transfer knowledge to GRS staff during the transition period. It is appreciated that any changes should take into account the local context and culture and therefore a team of specialists who understands the Hong Kong environment will help ensure that all change directions are applicable to Hong Kong and are feasible.

In total, we believe that the STO should have at least 8 staff members, including four new hires (whether from locally or abroad) and four existing GRS staff (including one support staff), subject to availability of suitable candidates. These include:

(i)   Head of STO;

(ii)   Head of Planning and Best Practices;

(iii)   A local GRS secondee into the Planning and Best Practice Unit;

(iv)   Head of Training and Staffing Development;

(v)   A local GRS secondee into the Training and Staffing Development Unit;

(vi)   Head of Digital Transition Planning;

(vii)   A local GRS secondee into the Digital Transition Planning Unit; and

(viii)   A support staff (to be seconded from the existing GRS establishment, or to be shared between the existing GRS establishment and the new STO, until such a time when the Head of STO requests a dedicated support staff resource).

We will look into the detailed requirements of these positions below apart from the support staff. The support staff will facilitate the STO to focus on strategic work by providing assistance in daily clerical and logistics requirements.

To discharge the duties and responsibilities set out in Table 1 above, we believe that the Head of STO and his/her direct reports should have broad experience in records, information and archives management. They should all possess specialist knowledge of the subject matter and should have experience in reviewing and developing policies. We recommend that these posts should have the following minimum requirements and desired qualities.

Table 2 – Posts Minimum Requirements and Desirable Qualities

Position	Essential requirements	Desirable qualities
Head of STO	• Board-level experience with developing the strategic direction of a comparable organisation in the public sector, and experience with controlling and being accountable for a significant budget or comparable organisation or business • Experience in leading or serving in a senior management position in a national or state-level archival institution • Strong understanding of and experience with records, information and archives management and operations • Knowledge of electronic records management, digital archives planning and management (including TDRs) and digital continuity issues (such as the migration of electronic records and the sustainability of ERM operations)	• Graduate degree in Records/Archives Management or a demonstrated equivalent educational qualification • Decision making skills, leadership qualities, change management skills, strategic leadership and planning skills to support institutional capacity building • Proven record of leadership and management of a large and diverse team, very strong communications skills
Head of Planning and Best Practices	• Knowledge of and experience with all core records, information and archives management operations • Knowledge and familiarity of industry standards and best practice with records, information and archives management • Strategic planning, decision making, reporting, staff planning and management, including identification of staff duties, responsibilities and key performance indicators, and supervisory experience	• Graduate degree in Records/Archives Management or demonstrated equivalent educational qualification • Experience with public sector institution, ideally at a national or state-level, or similar institution
Head of Digital Transition Planning	• Experience with electronic records management and digital repository planning, development and management in a national or state-	• Graduate degree in Records/Archives Management or demonstrated

Position	Essential requirements	Desirable qualities
	level archival institution • A thorough and up-to-date understanding of digital file formats, electronic records management, and digital persistence practice and theory • Knowledge of electronic records issues, systems analysis, systems development concepts and data storage methods, media, and security • Knowledge of current trends, tools, best practices, policy development, and issues associated with electronic records • Knowledge of or experience with electronic records management and content management systems, collaborative work systems such as Microsoft SharePoint or similar technologies • Excellent knowledge of the technical requirements for digital preservation and experience in planning or developing trusted digital repositories, including hardware, software, metadata schema and file formats • Strong technical skills, such as knowledge of: format validation and conversion methods, data integrity techniques and technologies, long term storage planning, and digital asset management systems	equivalent educational qualification • Experience with or coursework in digital media and born-digital files in archival collections. • Knowledge of business process management and engineering to support ERM systems planning • Ability to articulate highly technical concepts and requirements to a variety of audiences • Familiarity with trends in arrangement, description and management of born-digital materials • Knowledge of copyright, donor restrictions, and permissions issues related to processing digitised and born-digital material • Experience with change management and team planning and management • Experience with public sector institution, ideally at a national or state-level, or similar institution
Head of Training and Staff Development	• Knowledge of and experience with all core records, information and archives management operations • Knowledge of industry standards and	• Graduate degree in Records/Archives Management or demonstrated

Position	Essential requirements	Desirable qualities
	best practice with records, information and archives management • Knowledge of and experience with training, education, and staff development • Experience with change management and team planning and management • Proven experience of developing training programmes for record keeping institutions and the whole of Government	equivalent educational qualification • Experience with public sector institution, ideally at a national or state-level, or a similar institution • Experience with electronic records management and digital repository management or planning

Based on our understanding of the availability of specialised records management tertiary training in Hong Kong and our interviews with GRS staff, we believe it is highly unlikely that suitable candidates for the above leadership positions are available within Hong Kong. Hence, it is very likely that the suitable candidates for these leadership roles of STO will be recruited from abroad. We also believe that bringing in new international external expertise can also help expedite the learning curve of GRS staff while they manage their day-to-day business-as-usual operations during the transition period.

This infusion of international support is a valuable and strategic way of achieving essential transformation in the operations of GRS without hindering the continuity of ongoing work and commitments. Such an approach, while not common internationally, is based on precedent[15], particularly for the involvement of international experts to help redesign and enhance existing records and archives services in jurisdictions around the world.

We recommend that these international staff be acquired through an international recruitment process and contracted for a minimum of 3 years, to ensure they remain

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[15] Precedents of international-local partnerships within archival institutions:
- International participation in strategic planning within Australia helped to reposition the national archival institution and develop archival legislation in the 1970s; international involvement included site visits and participation in the development of strategic plans by the retired Head of Canada's national archives, W. Kaye Lamb.
- Planning for the national archives in New Zealand in the 1970s involved international inputs into the assessment of legislative frameworks, organisational structures and staffing requirements, including a site visit and analysis by the then head of Canada's national archives, Wilfred Smith.
- Canadians and Australian records and archives specialists have developed ongoing relationships with the national archives and the archival community in South Africa to support the transformation of records and archives services in the post-apartheid era, including site visits to the national archives and other institutions by Canadian archivist Terry Cook in 1994 and 1997 the provision of annual internship opportunities for Canadian students to work with archivists in South Africa in order to exchange ideas and knowledge.

throughout the duration of the transition process and beyond as necessary to support and foster sustainable change.

While it is critical and challenging to recruit and retain the right candidates for the STO, we consider that alternatives other than direct recruitment of the STO officials, (e.g. outsourcing of the positions) may not be viable options because they cannot mitigate the risks associated with recruiting and retaining the right candidates for the STO. We recommend GRS to mitigate the challenge by:

- reaching out to our SME network for candidate referrals;

- communicating expectation of this team's work deliverables up-front;

- providing competitive compensation package; and

- lengthening the contractual notice period for early termination of contract.

Nevertheless, if GRS cannot recruit the right candidates for the STO, it should consider engaging a term consultant in lieu of the STO to develop and implement a transition plan for GRS.

In Section 6, we will assess the cost implications of bringing these international specialists into GRS during the transition period.

4.2.2.3. Requirement of local GRS staff to be seconded to STO

While it is valuable to bring international expertise into STO and GRS as discussed above, it is also vital to consider the local context when designing the solution and during implementation. We recommend that the STO work closely with the GRS Director to 1) coordinate the deployment of local GRS staff to the STO to support the transition work, 2) to advise the international team about the Hong Kong context, and 3) to obtain knowledge transfer from the international team.

In consideration of the composition of STO and the relevant staff requirement, we recommend that:

- Local GRS staff (at the level of A/SAA/EOI) should be rotated into the STO and participate actively in the formation of the transition plan. We recommend that at least three local GRS staff should be seconded into the STO (one for each unit). The relevant GRS staff (suggested to be either Archivist Grade or Executive Officer Grade) selected to join the STO team should bring strong knowledge of GRS operations, particularly in electronic records activities, training initiatives and general operations.

- The STO support staff could be seconded from the existing GRS establishment, or be a shared resource (on a part-time or as-needed basis) with the GRS

operation at the earlier stage. If it is decided that the STO requires a full time dedicated support staff, the Head of STO shall then make the request for an additional new local resource.

4.2.2.4. The proposed STO organisation structure

We set out below in Figure 1 an illustrative organisation structure of the STO, which includes the suggested staff complement.

Figure 1 – Team composition of the Strategic Transition Office (STO)
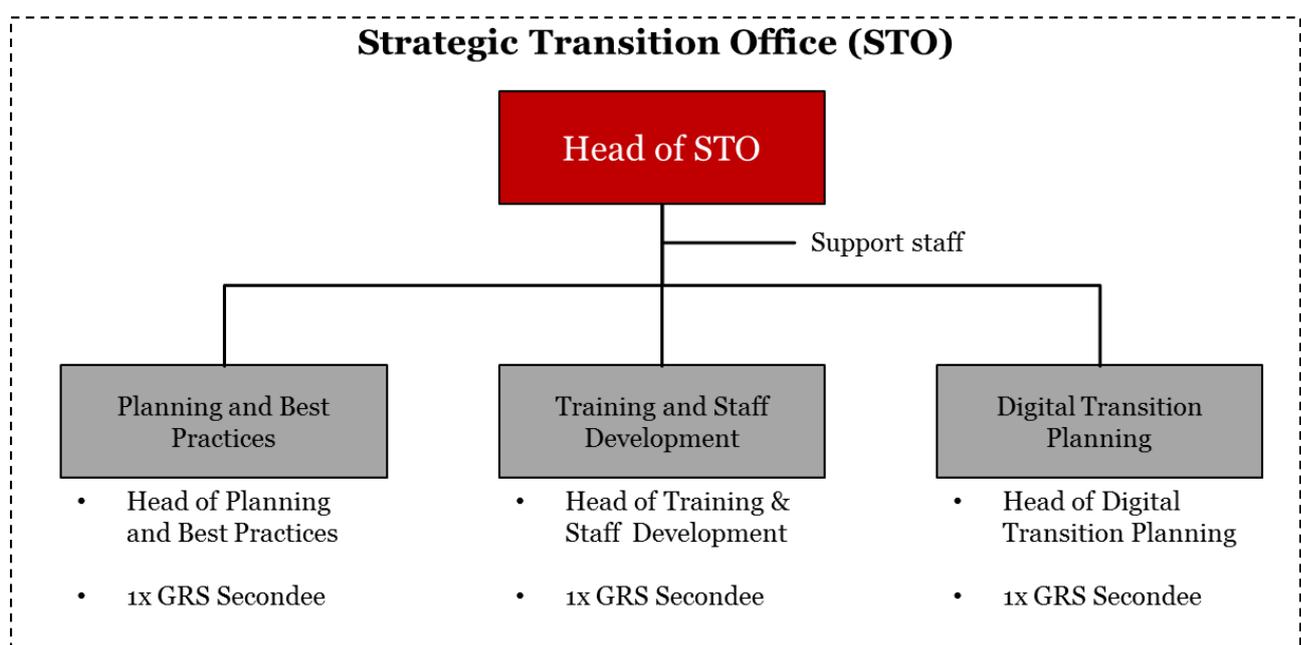
4.2.3. Recruit new local staff to support existing operations

Short-Term Recommendation 3:

We recommend that eight new local staff be recruited: Six of them should be records management specialists who will assist with maintaining GRS' existing operations and two will be GRS' in-house IT specialists who will strengthen GRS' IT capabilities.

In order to minimise the impact that the transformation initiative may bring to the normal operation of GRS, we recommend that eight new local staff be recruited. We believe that the recruitment of new staff is important to facilitate the maintenance of GRS' existing operations (through backfilling) and it will be beneficial and vital for the longer term development of records management capabilities in Hong Kong. We

also see the need to strengthen GRS' capability in information technology (IT) support. These eight new hires will assume the following roles within GRS:

1) Backfill and support the roles of existing GRS staff who have been seconded to STO;

2) Start being trained to be a part of the future GRS organisation and operations, by getting them involved in pilot projects as directed by STO; and

3) Provide necessary technological support for the expansion of digital records and archives management initiatives, including acquisition and preservation of digital records and the development and operation of a trusted digital repository.

We envisage the eight new local recruits will be at the AA levels; six will be hired into each of the four offices of the GRS as follows; while two IT specialists will be recruited to support the IT requirements of GRS and STO:

- Two local recruits should be placed in the PRO

- Two local recruits should be placed in the RSDO

- One local recruit should be placed in the PSO

- One local recruit should be placed in the RMAO

- Two local IT specialists will be recruited, and assume the role of GRS' in-house IT specialists who will support the four offices plus the STO in their IT requirements relating to digital records acquisition, management and preservation (further detail of the role of these IT specialists is included below).

The six new local recruits of AA should be deployed across GRS to support strategic objectives for the transition programme. For instance, some staff may provide backup for staff seconded to the STO, while others may undertake new duties as assigned.

a. Backup support may include participating in appraisal, arrangement and description or reference and outreach, to maintain a core level of service across GRS during the transition.

b. New tasks may include conducting surveys and assessments of current electronic recordkeeping conditions in B/Ds in order to support transition planning; researching and developing a TDR, which is a top priority; or evaluating existing workflows to consider opportunities to streamline operations.

The responsibilities of the two newly recruited IT specialists are not to carry out records or archives management duties (e.g. providing input into ERM responsibilities) but to provide necessary technological support for the operation of the computer systems that will be required to support digital records acquisition, management and preservation.

We recommend that the core responsibilities of the IT specialists be focused on supporting records, information and archives management. Specifically, they should:

- Be responsible for supporting the management of information technology, databases, servers and computer systems.

- Help to ensure that the technology itself is user friendly and equipped with current hardware and software.

- Be responsible for monitoring and maintaining the technology to ensure GRS records can be accessed through electronic means.

The specific job titles, duties and responsibilities of the staff engaged in the transition process should be decided by the Head of STO in consultation with the GRS Director, as part of the development and implementation of the transition and staffing plan.

A key outcome of increasing staff numbers and deploying staff strategically in and out of the STO will be to provide the widest possible staff involvement in the transition process. Another key benefit will be to help increase the capacity of individual staff members in both existing and new duties across the organisation. This expansion of their knowledge and skills will help support individual career growth and will also strengthen GRS as a whole.

We consider these new staff to be brought into the organisation not just as extra positions to carry out existing duties but, more importantly, as the equivalent of 'management trainees' – new staff who can become key players in the work of GRS and can grow and develop their skills as GRS transforms its operations from the current reality to the new strategic directions we see unfolding in the short- and long term.

4.2.3.1. Staff deployment – other considerations

With the new international specialists and new local hires, we believe that GRS will have more capacity to promote staff capability development and to encourage a stronger team-based approach of working environment.

Apart from the above new recruits and the existing GRS staff who are seconded into the STO, active engagement and involvement from all other GRS staff will also be

required to ensure the success of the transformation. We envisage that other GRS staff will be required to support the transition programme by actively providing information to STO and participating in the change and implementation programme.

GRS may consider rotating GRS staff in and out of STO periodically to support the widest possible information sharing and knowledge transfer across GRS. With a better understanding of the transformation initiative through working directly with the STO team, this can also facilitate the implementation of the transition plan.

We understand that it is the nature and career model of the EO grade staff to rotate into different Government departments for specific periods of time depending on various factors. However, in order to support knowledge retention and to facilitate the successful transition and implementation of key changes and processes within GRS, we recommend that the duration of key EO staff within GRS be lengthened to cover the full transition period (i.e. likely to be 4-5 years).

These increased opportunities for rotation within GRS also open up the ability of archivist grade staff and EO grade staff to rotate into other Offices within GRS, which will increase the scope for collaboration, cooperation and information sharing across the organisation. Therefore, we recommend that, during the transition period, any opportunities for greater collaboration across GRS be maximised through the rotation of staff within the institution in a planned and strategic manner.

4.2.4. Reorganise GRS to support the transition process

Short-Term Recommendation 4:

We recommend that GRS should establish STO as part of its organisation structure in the short term (and transition into the 'Strategic Planning Office' in the longer term), while the rest of GRS' existing organisation structure – i.e. the four existing offices (PRO, PSO, RSDO and RMAO) remains unchanged.

This is to minimise disruption to GRS' operations so as to provide a stable environment for the GRS Director and STO to assess the transformation requirements for GRS and, during this process, to provide stability to existing operations. The STO should work closely with the GRS Director throughout the transition.

The recommended organisation structure in the short term is set out in Figure 2 – Short-term GRS Organisation Structure with STO.

Figure 2 – Short-term GRS Organisation Structure with STO
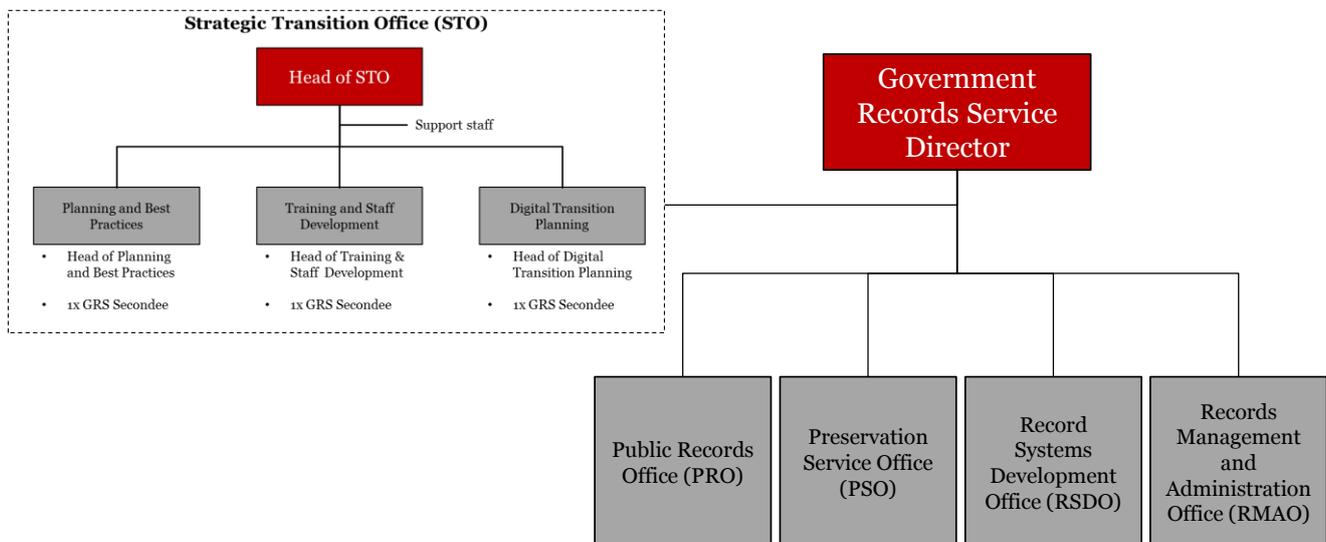
4.2.5. Other immediate actions GRS should consider

While we recommend that the transformation requirements for GRS should be determined by the GRS Director working closely with the STO, we also believe there are other areas that GRS can implement to facilitate the repositioning of the organisation. These include:

- Consider conducting detailed process reviews;

- Consider formalising working groups within GRS to promote collaboration and to help identify areas for change; and

- Ensuring the posting period of key EO grade staff within GRS covers the entire transition process.

We discuss each of the above in more detail below. We emphasise that the scope of this project did not allow us to provide a detailed assessment on GRS' operations and therefore the recommendations below should be further validated by the GRS (with input from the STO).

4.2.5.1. Consider conducting detailed process reviews

While the scope of this project is not to provide a detailed assessment on GRS' operations, our initial observations suggested that several operations currently underway in GRS will need to be reviewed and potentially restructured to be more effective in the digital age.

As detailed in Appendix D (Improvement Opportunities and Appendix D.5.2: Re-engineering Operations through Planning and Prioritisation), our preliminary review

has identified the following processes and areas which the STO should prioritise reviewing and assessing in detail:

- The process of establishing retention and disposal schedules of B/Ds ;

- The process of acquiring and appraising government archives; and

- The work that GRS is currently involved in to support the development of ERKS initiatives across the Government.

Each of these activities is intricately linked to the technologies used to create and manage records. Therefore, each of these activities must be reconsidered in order to ensure they are as effective in the digital age as possible.

We suggest that the staff involved with these processes should gather background information about the work performed and the challenges or issues encountered, in order to inform STO about the need to re-engineer these processes.

GRS may also consider placing a moratorium on some processes after the detailed review, if deemed appropriate and necessary, in order to make best use of staff time and resources. A moratorium would not be permanent; however it should not be lifted until GRS has confirmed the way forward for these processes. Once GRS has decided on the new approach and implement these approaches, then this work can resume, with stronger and more effective outcomes.

4.2.5.2. Consider formalising working groups within GRS to promote collaboration and to help identify areas for change

We recommend that the Head of STO should begin his duties by analysing existing operations and considering potential new directions as an immediate priority. To support this process, we recommend that the GRS allocate staff time and resources to examine business practices and workflows in each of the current areas of operation, in order to support transition planning.

The below table sets out our recommendation in terms of the working groups to be established (targeting major operations area), the composition of staff within each group and the groups' objectives and goals. In general, we recommend that each working group should comprise both Archivist grade staff and EO grade staff whose duties or areas of responsibility intersect or overlap.

Table 3 – Composition and Deliverables of the Working Groups within GRS

Working group to be established	Working group staff composition	Goal / deliverables
Evaluation, Appraisal and Accessioning	Staff involved with supporting the process of records scheduling; the review of records schedules; the appraisal of records and the accessioning of records into GRS.	To map out the current business processes for deciding which records should be retained through to receiving those records into GRS' custody To identify existing training available and future training needs
Collections Management	Staff involved with arranging and describing archives; preparing finding aids and descriptive tools; adding descriptive information to the GRS online access tool.	To map out the current business processes for gaining physical and intellectual control over archives and providing information to users about the GRS' archival holdings To identify existing training available and future training needs
Public Services and Outreach	Staff involved with providing reference services; addressing privacy questions; addressing intellectual property and copyright questions; using archival materials in outreach initiatives or exhibits; and planning and delivering public education and visitor experience programmes.	To map out the current business processes for providing public access to and promoting the use of GRS' archival holdings To identify existing training available and future training needs
Strategic Planning for Digital Records and Archives Management	Staff involved with planning electronic records systems with B/Ds; researching the development of TDRs or supporting EIM initiatives across government. The work of supporting	To map out the current business process for researching, planning, participating in or supporting any efforts within GRS or across the government associated specifically with electronic information or

Working group to be established	Working group staff composition	Goal / deliverables
	Government microfilming should also be included in this analysis, including any analysis of the current state of microfilming and any vision for change in the digital age.	electronic records management

To identify existing training available and future training needs |
| **Collections Stewardship** | Staff involved with planning and managing physical facilities including records storage facilities; the records centres; records exhibition spaces and other physical work spaces. The team should also include anyone involved with examining the management of vital records. | To map out the current business process for planning and maintaining the physical protection of records and archives wherever they are housed across Government

To identify existing training available and future training needs |
| **GRS Administration** | Staff involved with administering GRS' own operations. | To map out the current business process for the day-to-day management of GRS staff, facilities, finances and other administrative services and resources

To identify existing training available and future training needs |

In terms of the detailed activities of the working groups, we recommend:

1. Each member of the working group bring together all policies, procedures, standards and guidelines, background materials, and other resources they currently use to support their work.

2. The working group to prepare a 'status' report summarising all work performed, including a workflow / process map showing who conducts which actions at which stage, from beginning to end of any specific process undertaken across the organisation. For example, processes may include: requesting a B/D to prepare a records schedule; receiving archives into GRS for appraisal and accessioning; or arranging and describing archives.

3. The working group to identify any concerns or questions they have about their current role within the business processes and identify ways in which they think the workflow could change to support improved outcomes.

4. The working group to consolidate all the inputs of the group and prepare them for presentation to the STO, who can then work with the different teams across GRS to consider current practices and examine opportunities for change, as necessary, to support the transformation to the digital age.

We believe the above emphasis on research, data gathering and advanced planning will support the STO on planning a successful transition while also enhancing information sharing and communications between different operational areas and staff/grades within GRS.

4.2.5.3. Ensuring the posting period of key EO grade staff within GRS covers the entire transition process

Ideally, the GRS should have a stable workforce that does not rotate in and out of GRS regularly, which will facilitate the accumulation and retention of knowledge and experience within GRS, which is important for GRS to achieve an efficient and successful transformation. Our research into the four comparator organisations showed that professional tasks associated with records, information and archives management were performed by staff specialised in recordkeeping and archives management, not by generalist staff.

However, we have contextualised our analysis with the appreciation that there is a limited supply of records management specialists in Hong Kong, and the deployment of general grades staff along with archivist grade staff is a reality in the Hong Kong environment. As a result, while we recommend that new professional postings within GRS be for archivist grade staff, we believe that all GRS staff, including both archivist grade and general grades staff, should play an active part in the transition process, including Archivist-grade and EO-grade staff. The current mix of EO and Archivist-grades in GRS is essential to help develop GRS' capabilities in the long run.

Our Study showed that the current EOs working for GRS are providing extensive and valuable input into all work associated with the organisation. However, GRS also faces challenges in the retention of knowledge and expertise developed by some of the key EO grade staff, as they rotate out of the GRS to other Government departments, as part of their career path. In order to enhance knowledge retention especially during the critical time of the transition, we recommend that current EO postings be lengthened so that current incumbents remain at their posts when the STO team commences work and also during the transition process, ideally for at least four to five years. In the longer term, we believe that growing the professional workforce

across GRS with permanent archivist-grade positions, and appropriate support staff, will benefit GRS and the Government greatly in their efforts to manage records, information and archives effectively in the digital age.

4.3. Longer-term Recommendations

In the short term, our recommendations included the setting up of the STO with a transitional organisation structure, recruiting new staff and the finalisation of a Transition Plan prepared by the STO, approved and endorsed by the GRS Director. In the longer term, the change of GRS will largely depend on the endorsed Transition Plan. We expect that the implementation of the Transition Plan will result in GRS becoming a leader in archival and records services in Hong Kong and the region in the digital age. The reorientation of services should ensure that GRS shifts its focus away from a traditional, custodial role to a more strategic orientation in the Government, with an emphasis on the management of records, information and archives – particularly but not only digital records – as core assets of Government.

The longer term recommendations set out in this section are more aspirational in nature, which we attempt to foresee the areas of change the Transition Plan (that STO will develop for the GRS Director's endorsement) would likely put forward. It is therefore important to note that the longer term recommendations are dependent on the validation STO will have undertaken and the extent to which the Government will endorse the short-term recommendations.

We set out the longer term recommendations as follows:

1. **Create a post of Deputy GRS Director:** Given the elevated rank and increased scope of responsibilities of the GRS Director, we advise creation of a post of Deputy GRS Director to support management of GRS and communication with the government and its B/Ds.

2. **Reorganise GRS for the future:** The GRS Director, in consultation with the STO, will identify a new long-term organisational structure that will organise GRS services by goals and outcomes, instead of by functions and processes.

3. **Streamline GRS operations:** Operations of GRS will be streamlined, with improved workflows, resulting in more efficient and effective operations and a better use of staff and other resources.

4. **Strengthen staff capacity and retention**: Staff capacity across GRS will increase in the longer term, as we anticipate that the transition planning process will demonstrate the need for additional staff – particularly, we anticipate, with expertise in digital records and information management – but

also the need for ongoing initiatives to support staff education and training, in order to enhance capacity in a sustainable fashion.

We discuss each of these recommendations in detail in the following sections.

4.3.1. Create a post of Deputy GRS Director

Longer-Term Recommendation 1:

We recommend GRS to create a post of Deputy GRS Director to support the elevated GRS Director and be groomed up to be the future GRS Director.

As discussed in section 4.2.1, the rank of the GRS Director will be elevated to D4-D6 (depending on where GRS is positioned within Government) to help him/her build stronger communication and relationship with peers in other B/Ds, with an aim to establish GRS' leadership role in records and archives management for the whole of the Government.

While the elevated GRS Director will be supported by the Head of STO in management of GRS during the transition period as mentioned in section 4.2.2, it makes sense for GRS to consider creating a post of Deputy GRS Director, likely at the D2/3 level, to support the GRS Director after the transition period in view of his/her increased scope of responsibilities. GRS may consider filling this position by the Head of STO after the transition, or someone with equivalent qualifications and calibre.

On one hand, this Deputy GRS Director can support the GRS Director on management of GRS operations. This is particularly important if the future incumbent of GRS Director (equipped with deep experience and knowledge in both public administration and records, information and archives management) is not yet on board and GRS is still overseen by the 'interim' GRS Director, who will be an experienced 'public administrator' that will be more experienced in dealing with other B/Ds and will need support on subject matter issues in relation to records and archives management.

On the other hand, the position of Deputy GRS Director can be groomed and trained up to be the future GRS Director, who would be a professional and permanent role, with the necessary public administration knowledge and experience within the Hong Kong government. This serves the purpose of succession planning and will be further described in the next section.

4.3.2. Reorganise GRS for the future

> **Longer-Term Recommendation 2:**
>
> **We recommend the GRS Director, in consultation with the STO, reorganise the GRS institution based on our proposed key principles of organisational design, and use our indicative longer term organisation structure as a reference.**

In the longer term, GRS' organisation structure will need to be restructured to move away from a traditional, custodial orientation archives management towards a more strategic orientation. The new organisational structure should support an effective management of records, information and archives across Government from the time of creation, regardless of their form or medium.

Key Design Principles of the New GRS Organisation

Based on our understanding of GRS and our analysis of comparable organisation structures for archival institutions in other jurisdictions, we set out below some key design principles that will ensure the new GRS organisation will be agile, collaborative, integrated and effective. We recommend the GRS Director and STO build on our vision for a reorganised institution, incorporating these key principles of organisational design.

1. Enhanced **cross-organisational collaboration** between the various offices within GRS. This will encourage information sharing and knowledge accumulation within GRS.

2. Strengthened **strategic planning and horizon scanning** to anticipate future changes within GRS, the Government and Hong Kong, allowing GRS to play a stronger leadership role not only in records, information and archives management for the Government but also for the growth and development of the archives community in the region.

3. Strengthened **accountability** of staff across the organisation to ensure that each individual has a clear understanding of their roles and responsibilities and how their work contributes to GRS' overall vision and mission.

4. **Streamlined operations** by optimising operational workflow, reducing any duplication of effort, enhancing communications across the organisation and increasing the effective flow of information.

5. **Enhanced knowledge sharing and transfer** within GRS, which will minimise dependencies on specific individuals as well as the impact of EOs rotating out, allowing new staff to become effective more quickly.

The benefit of applying these principles is that GRS will be transformed into a **highly flexible and agile organisation,** allowing it to respond to changes in the external environment, including responding effectively to the impact of the digital paradigm shift.

Indicative Organisation Structure for GRS

Following the design principles we set out above and the recommendations we made to GRS in Appendix D (Appendix D.2-D.5) based on GRS's current structure and the organisation structure of comparable archival institutions ('Overview of Organisational Structures' in Appendix C), we present in Figure 3 an illustrative example of the suggested longer term organisation structure for GRS. The example demonstrates the changes and benefits that are required for GRS to upgrade and become a leader in supporting the management of archives, records and information for the government, including:

- **Optimised levels and hierarchies at the executive level**: The elevated GRS Director will be given greater authority, which is key for him/her to help GRS play an increasingly important leadership role in records and archives management in the government. Besides, he/she will be assisted by the newly created Deputy GRS Director in communication with the government and its B/Ds and the management of GRS. This new position of Deputy GRS Director also serves the purpose of succession planning to ensure the future incumbents of GRS Director are equipped with both professional records management knowledge and public administration and management experience.

- **Improved focus and specialisation within each office**: Units with specific function or specific interface are grouped into offices, which allows these offices to focus on their duties, strengthen their accountability and deliver sustained improvements in their areas over time. For example, the Strategic Research and Planning Office is responsible for strategy development, planning and prioritisation, which is distinctly different from the rest of GRS and crucial to GRS' long-term future; therefore, they should be a distinct office, rather than embedded in the current RSDO (which also handles more general electronic records management and development of records classification scheme), in order to make them more accountable and focused on strategic planning and

horizon scanning to ensure GRS' future leadership role in records and archives in the region. Similarly, the Government Records and Information Services Office and the Public Services and Outreach Office are responsible for facing different internal and external "customers" respectively on a daily basis, and should be specialised, instead of blended with other functions in PRO, PSO and RSDO and RMAO as in the current organisation structure, in order to foster the appropriate customer-centred culture for the different types of customers. The specialisation principle also applies to archival of collections, which is the core function of GRS. Archival of collections is a core domain function and should not spread across and be mixed with other functions (e.g. public promotion, public access to collections, etc.) as in the current PRO.

- **Strengthened teamwork between offices:** On the basis that focus and specialisation is achieved for the key functions, some offices are then organised around the key steps of GRS' core business process of records management. For example, as mentioned in the point above, archival of collections is the core function of GRS, so it should be allowed to focus and specialise – within this core function, the two core processes are then separated into two offices: receipt of collections is tasked to the Collections Management Office, while preservation of collections is tasked to the Collections Stewardship Office. This forms a natural dependency among these offices, encourages them to work together and communicate more frequently in order to foster cross-organisation collaboration, while maintaining the focus and specialisation required in the core function of collections archival.

- **Enhanced collaboration between recordkeeping specialists and EO-grade staff**: The demonstrated organisation structure is also designed in the way that each office would require both professional record-keeping experience and general management skills. This means that inter-disciplinary teams can be deployed – while recordkeeping specialists will contribute to subject matter experience or knowledge, EO-graded staff are more experienced with project management, IT, and communication with other B/Ds. The enhanced collaboration and knowledge transfer between the two groups of staff would:

  - increase the recordkeeping specialist's understanding of business operations across Government. By working more closely with EOs, the archivist can not only contribute his or her disciplinary expertise, but also become more familiar with general management skills and the business areas of B/Ds that he or she would not normally be exposed to. It is important to facilitate knowledge retention and accumulation by

recordkeeping specialists, since they will ultimately stay and progress their career within GRS; and

- allow EOs to contribute their knowledge about Government operations and also leverage their networks within the Government to help achieve the goal of wider scale of collaboration. This also helps other staff in the Government glean more insights about records, information and archives issues, which will help them become more effective recordkeepers in their own areas of responsibility. They can also share that knowledge with their own colleagues, disseminating the values of 'making and keeping good records' across the Government.

It must be noted that this structure is illustrative only. We do not suggest it is the only or ultimate way the GRS should be organised and we do not want to pre-empt the critical process of detailed analysis and restructuring of GRS operations, which we believe the STO and GRS Director will need to conduct in order to determine the best outcomes. This process is much more detailed than PwC was commissioned to conduct in this Study.

Figure 3 – Suggested Longer Term GRS Organisational Structure and Key Functions (Illustrative Only)
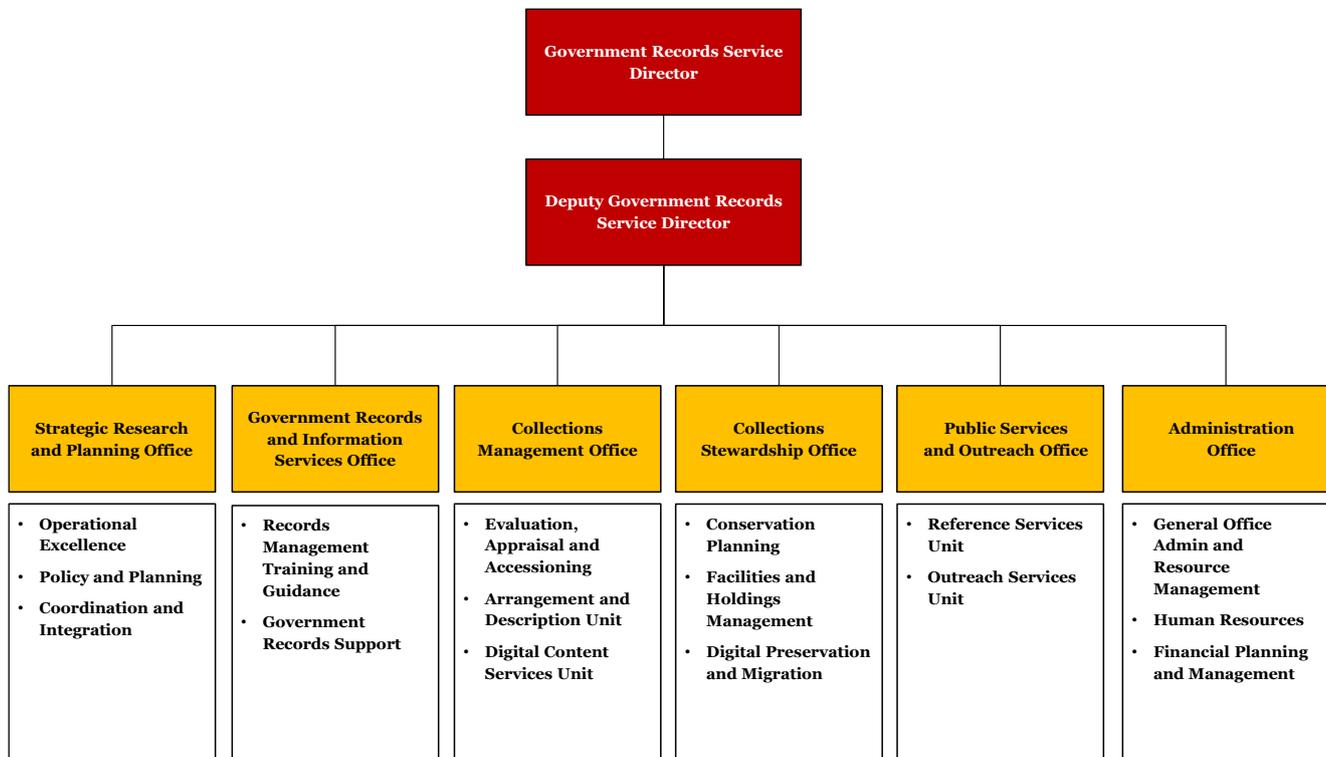
We set out the detailed functions and responsibilities for each of the role / offices suggested in the organisation structure below.

Table 4 – High-Level Functions and Responsibilities of the Longer Term GRS Organisation

Role / Office	Functions and Responsibilities
GRS Director	• Leads communication with the HKSAR Government and its B/Ds on records and archives management strategies, policies and practices • Oversees all operations of the GRS, including long-range planning, budget development, reporting, staff management, and strategic oversight across the entire institution.
Deputy GRS Director	• Supports the GRS Director in communication with the HKSAR Government and its B/Ds and management of all operations of the GRS
Strategic Research and Planning Office	**Operational Excellence** • Sets and executes the overarching strategy for GRS. • Develops operational plans to achieve strategic objectives.

Role / Office	Functions and Responsibilities
This office will be responsible for conducting regular 'strategic planning and horizon scanning' to ensure that GRS can play a stronger leadership role in records and archives in the region.	• Plans and supports digital innovation and transformation initiatives. • Ensures that work and performance of all units across GRS align with GRS strategy. • Continually drives the vision and mission of GRS. • Reviews and revises vision, mission and performance indicators regularly. **Policy and Planning** • Establishes all records, information and archives management policies and plans as required, including digital policies and plans, based on analysis of best practice standards, adapted to support local requirements. **Coordination and Integration** • Maintains streamlined workflows across all GRS operations. • Conducts knowledge transfer between outbound and inbound staff, including EOs. • Supports coordination of change management during major projects or initiatives.
Government Records and Information Services Office This office will be responsible for enhancing knowledge sharing and transfer and to facilitate cross-organisation collaboration both between various offices within GRS, and between GRS and the Government.	**Records Management Training and Guidance** • Researches, develops and maintains training and guidance resources for RIM and ERM, to support best practice in recordkeeping across Government. • Conducts training and awareness raising events across Government to guide best practice in all aspects of RIM. • Evaluates training needs and maintain continuous improvements. **Government Records Support** • Participates in and supports records and information management projects and initiatives across Government. • Provides recordkeeping inputs into planning for ICT infrastructure, privacy, security or other RIM-related activities of Government. • Develops guidance and requirements for records retention and disposal scheduling and ensures B/Ds adhere to all requirements. • Reviews and approves retention and disposal schedules and disposition requests. • Reviews records, information and archives management activities across government on a regular basis in order to

Role / Office	Functions and Responsibilities
	support best practice, identify training requirements and opportunities and identify and prioritise short- and long-term actions to continue to support quality recordkeeping and archives management across government. • Identifies vital records and advises on their appropriate management across government.
Collections Management Office This office is responsible for the distinct functions and processes involved in the receipt of records, which includes the evaluation, appraisal, accession, description and arrangement of both analogue and digital records.	**Evaluation, Appraisal and Accessioning** • Researches, develops and applies appraisal strategies and evaluation plans to identify and ensure the retention of records with enduring archival value. • Appraises incoming records based on best practice appraisal strategies and plans. • Accessions incoming archives and prioritises ongoing management, including arrangement and description, conservation, storage, digitisation, etc. **Arrangement and Description** • Develops and applies best practice approaches to all work associated with gaining administrative, physical and intellectual control of holdings. • Establishes strategic priorities for arrangement and description. • Arranges and describes records according to best practice standards. **Digital Content Services** • Develops content management strategies, systems and plans, to disseminate information from and about holdings, including web-based systems for access to archival description resources. • Plans and delivers digitisation services according to established standards and institutional priorities.
Collections Stewardship Office This office is responsible for the distinct functions and processes involved in the preservation of	**Conservation Planning** • Researches, develops and applies strategies, policies, procedures and plans for preservation and conservation services. • Plans and maintains systems for facilities and resource management, security of physical and digital records, contingency and emergency planning and vital records protection for GRS.

Role / Office	Functions and Responsibilities
records, which includes conservation, preservation and storage of both analogue and digital records.	**Facilities and Holdings Management** • Plans, develops and maintains strategies and plans for managing all facilities and holdings. • Oversees facilities operations, storage conditions and other conditions associated with the use, care, management and storage of holdings, regardless of medium. • Applies any other requirements for the protection and preservation of archival resources in all media. **Digital Preservation and Migration** • Develops and operates a trusted digital repository according to best practice standards and requirements. • Oversees migration of digital records from B/Ds to archival custody and control. • Provides ongoing advice and guidance on digital records and archives preservation and management.
Public Services and Outreach Office This office is responsible for the distinct functions of making records (both analogue and digital) available to the public and the Government.	**Reference Services** • Researches, develops and maintains access, reference, and information tools and resources for all users, both government and public. • Provides reference and access services to all users, including internal and public users of archival holdings. • Plans, supports and promotes the use of in-person and online reference and access tools and resources. • Ensures the appropriate application of access and privacy requirements for use of and access to records and archives under the custody of GRS. **Outreach Services** • Develops, and delivers strategic initiatives to foster and maintain public and client relationships and support stakeholder engagement. • Develops and delivers outreach initiatives, public programmes and other initiatives to support stakeholder communications and public awareness of and engagement with GRS, including exhibitions, educational tours and other initiatives. • Oversees marketing, licensing and other plans and requirements associated with the use and distribution of records and archives.

Role / Office	Functions and Responsibilities
Administration Office This office supports the GRS organisation on administrative, finance and HR/ personnel matters to ensure the smooth running of the GRS.	Oversees and executes all administrative matters internal to GRS, including day-to-day tasks associated with HR planning, office resources management, financial planning and management, GRS staff evaluation, general programme evaluation and general office coordination and administration.

4.3.3. Streamline GRS operations

> **Longer-Term Recommendation 3:**
>
> **We recommend streamlining the operations of GRS in order to ensure the organisation performs a more strategic and advisory role in Government in future.**

We believe that STO should vigorously assess GRS' existing work flow and operations.

From our preliminary assessment, we noted that there are areas of operations that may indicate duplication of efforts, we believe that a re-engineered work flow will help GRS enhance its efficiency and to focus its resources on strategic priorities (e.g. the development of a trusted digital repository). Please refer to Section 4.2.5 for suggested operational areas and actions to facilitate the streamlining of operations. Again, the longer term actions will be dependent on the research and validation undertaken by the STO, and approved by the GRS Director. GRS may also consider placing a moratorium on some processes after the detailed review, if deemed appropriate and necessary, in order to make best use of staff time and resources.

4.3.4. Strengthen staff capacity and retention

> **Longer-Term Recommendation 4:**
>
> **We recommend that GRS strengthen its overall staff capacity and retention through enhancing career prospects, in order to allow it to serve as a leader to provide guidance and support in records and archives management for the Government of Hong Kong.**

For GRS to fulfil its significant responsibility for supporting the management of documentary evidence, it needs to have sufficient and appropriate staff resources to help it achieve its vision to be a champion of records and archives management throughout Government and to become the leading public archives in Hong Kong. The complexity of recordkeeping in the digital age demands that GRS grow and diversify its staffing levels, so that it can perform its duties more effectively.

Detailed analysis of operations and workflows is essential to determining appropriate staffing requirements, given the need to examine and, potentially, restructure business processes and services across the organisation. The work of the STO will, therefore, be essential to reveal the optimal staffing structures – including numbers,

qualifications and positions – to foster the most sustainable and effective work environment for GRS.

Without presuming the decisions of the STO, we suggest that the following initiatives be considered in relation to addressing issues with staff capacity and retention:

1) Strengthen post-appointment education and training programmes;

2) Promote participation in regional records management conferences;

3) Pay duty visits to other comparable archival institutions as part of the horizon scanning; and

4) Support the growth of pre-appointment education for records and archives professionals in Hong Kong.

Strengthen post-appointment education and training programmes for GRS Staff

As the nature and scope of records management is transformed in the digital age, the duties of those responsible for records, information and archives management must also change. To provide the best possible service for digital records and archives management, staff across GRS will require access to post-appointment training and education opportunities that allow them to maintain and expand their skills, knowledge and abilities.

Given the limited options for records- and archives-related training and education for archives and records specialists within Hong Kong, we commend GRS for supporting the participation of archival staff in education offerings such as the University of Dundee distance-based education programme, as well as training opportunities such as the AIIM and SAA short term courses or web seminars.

Still, we believe that GRS should consider expanding and diversifying opportunities for records and archival education for its archival staff in order to broaden and deepen their knowledge in RIM and archives management in the short and longer term. Furthermore, Australia, Canada and UK are three comparator jurisdictions that offer graduate programmes in records and archives management, some face-to-face only and some via distance (in addition to the Dundee programme).

We also recommend the STO to consider incorporating new training and awareness raising opportunities into its plans in the short term, such as by identifying staff who could be released for overseas training as soon as possible after the start of the strategic planning process, to maximise learning opportunities while research is underway into possible changes within GRS.

Releasing staff for additional training or education on allied topics such as information management, information technology applications and government operations during the transition process will be a valuable way to take advantage of the interim period during the reorganisation to help staff learn the new skills necessary to support the new vision of service.

Promote participation in regional records management conferences

We recommend the GRS Director and STO incorporate into its transitional plans opportunities for GRS staff to participate in regional and international seminars or conferences on topics relevant to GRS operations. These opportunities would include, but should not be limited to, attending or even presenting papers at conferences, workshops or short courses in records and archival management.

Attendees at all such courses could return to GRS and provide briefing sessions to their colleagues on lessons learned, sharing the knowledge gleaned as widely as possible.

Providing access to a diverse range of training and educational opportunities encourages the following results: continuous learning for staff; staff exposure to international practices that may be valuable within GRS; and an increased presence for GRS and its staff in the international records and archives community.

We also encourage consideration of immediate opportunities for enhanced training for GRS staff, which should be considered even before the STO is established. Such opportunities might include supporting the attendance of GRS representatives at major upcoming conferences such as the ICA Conferences. GRS should start considering options for sending a strong delegation to the ICA's International Congress in South Korea in 2016.[16]

Duty visits to other comparable archival institutions as part of the horizon scanning

As part of the overall increase in staff capacity, and to support the short- and longer-term goals of transforming GRS to become a leader in records, information and archives management for the Government, we recommend GRS to incorporate into its short-term plans the opportunity to send a dedicated team to conduct site visits to appropriate comparator organisations. These duty visits will build on the research conducted for this Study and will allow GRS to see in person some of the conditions and activities reflected in our findings, which have helped us develop the

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[16] For more information on bursaries to support attendance by new professionals at ICA events, see
http://www.ica.org/12504/about-the-congress-2016/about-the-ica-2016-international-congress.html

recommendations offered here. These site visits do not need to be one-time events. We recommend the development of regular international duty visits, to allow different GRS staff to be exposed to operations in different jurisdictions. We believe that the experience will allow GRS staff to increase their understanding of different methods and strategies for records and archives management, allowing staff to return to GRS with new and leading edge ideas that will support the strategic direction and operations of GRS.

While we do not suggest that GRS staff visit only the comparator organisations studied for this report, we suggest that if site visits to Europe are chosen, other institutions in the region might also be visited, such as in Denmark or Norway, as the national archival institutions in those countries have developed leading-edge electronic records and archives programmes worthy of examination.

Support the growth of pre-appointment education and training

As present, there are very limited, if not no opportunities for training and education within Hong Kong for Archivist grade staff, records managers or others with an interest in or duties associated with records, information and archives management.

We understand that the University of Hong Kong offers some courses in records and archives management, but we also believe that the courses are not yet seen as adequate for the needs of GRS specialist staff, which is one reason that GRS has chosen to support staff participation in the University of Dundee programme.

We do not wish to endorse any particular educational programme, in Hong Kong or elsewhere, at this time. Rather, we believe that the STO should be assessing educational opportunities as part of its work to support strategic and transition planning. But we do wish to recommend the STO to examine options for local and international education and training and to consider if and how GRS and the Government of Hong Kong could play a leadership role in the development of more robust programmes in Hong Kong and in the region, particularly for pre-appointment records and archives education. Any expansion of professional and specialist education and training within Hong Kong will benefit GRS and the Government through the increase in qualified records and archives specialists in the region.

One of our duties in this Study has been to analyse international best practice and then contextualise that information for the Hong Kong environment. We acknowledge that the other jurisdictions studied all have formal education and training programmes in records and archives management, including short-term certificate and diploma courses, bachelor's and master's level university programmes, continuing education courses, and training opportunities through local, national and international professional associations.

While we share the aspirations of Hong Kong to build capacity in records, information and archives management in the longer term, we do not believe it is appropriate for us to require that formal credentials be considered mandatory in the near future. For example, the formal designation of "Certified Archivist" established by the Society of American Archivists has been designed specifically to address American archival practice. The resulting certificate, while recognised within the Society of American Archivists as a demonstration of the professional qualifications of the certificate holder, and while a valuable result of dedicated study in the discipline of records and archives management, is not considered mandatory by archival institutions in the United States, nor is the certificate commonly pursued by practitioners in other parts of the world.

Our Study has revealed that the most important action any nation can take to foster the growth of its records and archives profession is to support the development of locally relevant university-based education programmes in records, information and archives management. As these educational opportunities mature, the nation can also support further professional growth by supporting locally relevant technician programmes in records, information, and archives management, such as those offered by colleges or technical schools. The growth of a records and archives profession has accelerated considerably in those jurisdictions that have established such programmes, but the change does not happen overnight. The programmes offered must reflect the realities of the jurisdiction in which graduates will work, and the programmes must be supported and nurtured by government and other stakeholders over the longer term. We encourage the government to support the development of courses and programmes in records and archives management for the Hong Kong environment, to facilitate this longer-term growth in the profession.

Growth and change in education and training can be slow, but we believe that the recommendations we have offered in this Study will help GRS develop a strategic path to the future, where it is a leader in the field, not only supporting best practice in records and archives management for the government but also helping to develop a strong, dynamic and forward looking profession for Hong Kong and the region.

The next section provides a high level Implementation Plan for GRS to implement the short-term recommendations proposed and discussed in this section.

5. Implementation Plan

In this section, we have outlined a 24 to 36-month implementation plan for the short-term recommendations proposed and discussed in the previous section, which are intended to help transform and position GRS for the future.

Based on our short-term recommendations laid out in Section 4, we have identified the key implementation tasks that needs to be conducted, the responsibility owners for carrying out the tasks and the estimated timeframe for completion.

Most of the implementation tasks for our short-term recommendations can be carried out in the first 18-24 months from inception (inception being the time when our recommendations have been accepted by the Government and the necessary resources in terms of ranking and funding support have been secured), while starting from the third year, the actual implementation of the GRS transition plan should be ready to start. The actual transition from current GRS operations to a new direction for GRS – comprising various initiatives as planned by the STO, such as operational improvement, new organisation structure, new training plan etc., – may take one year or more to execute.

In the implementation plan below, we have analysed the key implementation risks and challenges that we envisage GRS will face and have suggested mitigation actions for GRS' consideration.

5.1. Short-term Implementation Plan

Our short-term implementation plan is shown in Figure 4 below, followed by a brief summary of the key tasks involved. We have divided the implementation plan into two key workstreams, which can be conducted in parallel:

- Workstream 1: Prepare GRS for the Transition

- Workstream 2: Set up the Strategic Transition Office (STO) and develop the GRS Transition Plan

Figure 4 – Short-term Implementation Plan for Transforming GRS

The start of the above Implementation Plan is assumed to be at 'inception' – when our recommendations have been accepted by the Government and the necessary resources in terms of ranking and funding support have been secured.
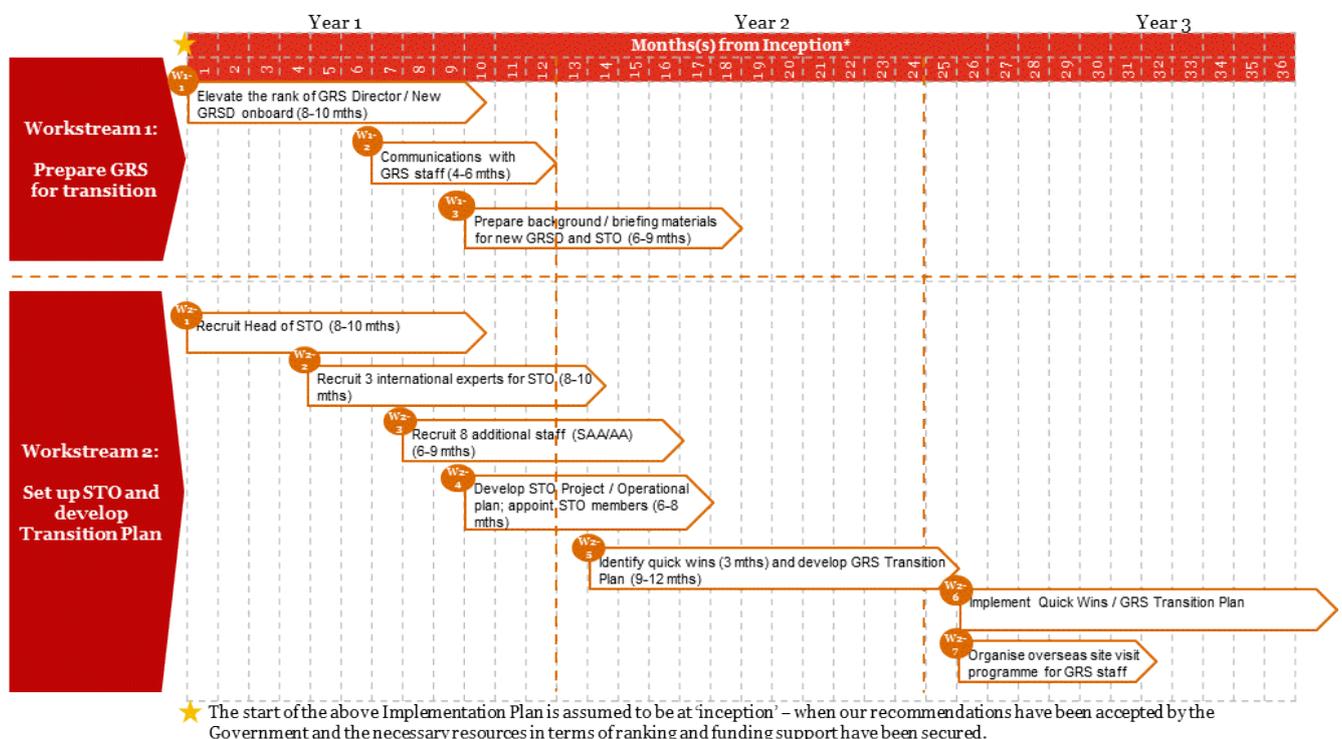
5.1.1. Workstream 1: Prepare GRS for Transition

Below is a description of the workstream we propose for preparing GRS for the actual transition.

Implementation tasks	Detailed tasks involved	Responsible	Timeframe to complete
W1-1: **Elevate the rank of GRS Director**	Prepare relevant documentation, rationale, go through Government process	Government Administration Wing – Chief Secretary for Administration's Office (CSO) / Director of Administration (DoA) (lead)	(Estimated to take 8 to 10 months from inception* for the new GRS Director to be onboard)
W1-2: **Develop communications plan and communicate with GRS staff**	Prepare an internal communications plan to communicate to GRS staff in advance of the setting up of the STO, covering the	GRS Director (lead); Senior GRS staff GRS Director should be able	4-6 months (Communications should be conducted as soon as the STO is

Implementation tasks	Detailed tasks involved	Responsible	Timeframe to complete
	following key items: 1) Objectives of the Transition – Background of the Digital Paradigm Shift 2) What is going to happen 3) What does it mean to you as a GRS staff member 4) How you can help and participate 5) Q&A Prepare external communications if necessary.	to address any staff concerns with regards to the transition process.	formally approved, and before the STO is established)
W1-3: Prepare 'briefing material' about GRS operations for the new GRS Director and STO	Prepare background and briefing material of each key function / offices such that the new GRS Director and STO can obtain a rapid understanding of the business operations and processes, challenges and issues as soon as they come on board.	Senior GRS staff (Heads of Offices)	6-9 months

Note: *Inception refers to the time when the recommendations of this Study have been accepted by the Government and the necessary resources in terms of ranking and funding support have been secured.

5.1.2. Workstream 2: Setting up of the STO and developing the GRS Transition Plan

Below is a description of the workstream we propose for setting up the STO and developing the GRS transition plan.

Implementation tasks	Detailed tasks involved	Responsible Owner	Timeframe to complete
W2-1: Recruit Head of STO	Develop job advertisement; disseminate job advertisement to the widest possible network; review applications; interview candidates; negotiate terms; make offer to candidate.	Government Administration Wing – Chief Secretary for Administration's Office (CSO) (lead)	8 to 10 months from inception*
W2-2: Recruit three international experts for STO	Develop job advertisements; disseminate job advertisements to the widest possible network; review applications; interview candidates; negotiate terms; make offer to candidate.	CSO (lead) / Head of STO	8 to 10 months from end of month 4
W2-3: Recruit eight local GRS staff (civil servants)	Develop job advertisement; disseminate job advertisement to the widest possible network (including overseas universities and professional associations); review applications; interview candidates; make offer to candidate.	GRS Director (lead) / Head of STO	6 to 9 months
W2-4: Develop STO Project / Operational Plan and appoint STO members	Develop strategic and project plans to support the work of the STO (e.g. work allocation between STO members, roles and responsibilities, key priorities, collaboration protocols with the rest of GRS)	Head of STO (lead) / GRS Director	6 to 8 months after Head of STO onboard

Implementation tasks	Detailed tasks involved	Responsible Owner	Timeframe to complete
	Appoint members of STO (including GRS secondees)		
W2-5: Identify quick wins and develop GRS Transition Plan	Develop detailed transition plans for GRS. These transition plans may include change initiatives such as reorganising the roles and responsibilities of each GRS office, refining GRS performance indicators and formalising the organisation's strategic planning process. In parallel, prioritise the identification of 'quick wins' in terms of GRS operational improvements within first 2 months	Head of STO (lead); Planning & Best Practice Officer; Training & Staff Development officer; Digital Transition Planning Officer	9 to 12 months (Identify quick wins within 2-3 months; detailed Transition Plan within 8 months)
W2-6: Implement Quick Wins and GRS Transition Plan	Implement quick wins identified during the Transition Planning stage Kick off formal implementation of the Transition Plan	STO and GRS	Ongoing from Year 3 onwards The transition / transformation may take over a year depending on the Transition Plan
W2-7: Organise overseas archival institution site visit for GRS staff	Liaise with overseas archival institutions; develop site visit programme (for key GRS personnel to broaden exposure and bring back valuable transformation lessons to GRS (e.g. current practices, challenges and priorities for addressing change in the digital age)	Head of STO to arrange (in consultation with GRS Director) Key GRS personnel to conduct site visits	Part of the implementation of the Quick Wins / Transition Plan

Note: *Inception refers to the time when the recommendations of this Study have been accepted by the Government and the necessary resources in terms of ranking and funding support have been secured.

5.2. Longer-term Implementation Considerations

As noted in our recommendations, we have provided only 'aspirational' longer-term recommendations, including our vision for the longer-term organisational structure for GRS, as we believe that the STO should work with the GRS Director to develop and confirm the most appropriate changes in the longer term.

Consequently, we have not provided a timeline for the implementation activities after 2 years, since this timeline will be highly dependent on the recommendations and actions outlined in the Transition Plan, as developed by the STO, in consultation with the GRS Director. However, we consider the following initiatives are likely to be essential and beneficial to the overall GRS organisation in the longer term:

1. Implement a new long-term organisational structure that is 'future-proof'.

2. Establish regular working group meetings across offices within GRS to increase communications, information sharing and collaboration. For example, the coordination of policy setting, training, public engagement and other strategic initiatives.

3. Develop a consultative process that helps simplify the records appraisal/disposal process to ensure it is streamlined, effective and appropriate for both analogue and digital records appraisal.

4. Research and develop a Trusted Digital Repository (TDR).

5. Strengthen post-appointment training and education.

6. Ensure there is formalised succession planning in GRS, for all levels of GRS staff, especially to support knowledge transfer and retention during the EO staff handover period.

5.3. Implementation Risks and Challenges

Below is our assessment of the major challenges and risks associated with the implementation of our recommendations; we have also included suggested mitigation actions that could be deployed.

Figure 5 – Summary of Risks and Challenges of Implementation Tasks

Workstream 1: Prepare GRS for Transition

Implementation Tasks	Implementation Challenges and Risks	Mitigation
W1-1: Elevate the rank of GRS Director	**Challenges – Medium to high:** It is expected that the level of 'red-tape' and approvals required within the Government will be complex and time consuming. There may also be difficulty in sourcing the right candidate. **Risks – Medium:** If the Government does not approve the raise of rank of the GRS Director (from the current D1 level), the influence of the future GRS will be limited in supporting accountability and enhancing efficiency and effectiveness of record management for both digital and analogue records and archives in the HKSAR Government. The change will also be limited to internal GRS operations which will have limited impact / benefits to the wider Government.	A clear and convincing case must be put forward to the Government in terms of the benefit of raising the authority level and position of the GRS to the wider Government.
W1-2: Develop communications plan and communicate with GRS staff	**Challenges – Medium:** In the communication between the GRS Director and the GRS Staff, messages must be carefully crafted to instill confidence (and not uncertainty) into the employee as well as provide clarity on the purpose and benefits of change. As senior staff of the STO are mainly external and overseas hires, cultural difference may arise.	Regular and specific channels of communication – from newsletters to face-to-face group and individual meetings, to email communications etc., must be identified, developed and maintained in order to ensure that the channels of communication are open, and that communications run both ways (e.g. allow for Q&A sessions), from top down and from bottom up.

Implementation Tasks	Implementation Challenges and Risks	Mitigation
	Risks – Medium: If the GRS staff does not have a clear understanding of the purpose and benefit of the upcoming change programme, or if cultural difference between existing GRS staff and the new STO senior staff is not addressed in a timely fashion, existing GRS staff may be resistant to changes and this may create negative working environment, which will affect morale and productivity.	The messages provided from the top must also be consistent, and senior staff of the GRS can be briefed first, for them to cascade down the right message to the junior level staff.
W1-3: Prepare background briefing material about GRS operations for the new GRS Director & Head and international experts of STO	**Challenges – Medium:** Based on our recommendation, a collaborative approach is recommended in the process of preparing these background and briefing material for the STO and new GRS Director. The challenge at the beginning is expected to be unfamiliarity with this new way of working, and the culture of sharing information and collaboration may take time to build. **Risks – Low:** Organising and preparing briefing material may not be seen as a priority, and background and briefing materials may not be complete. Sufficient collaboration may not be achieved, leading to the background and briefing material being one-sided, or missing certain information.	A template can be developed for each stakeholder to fill out with regards to their job duties and their understanding of the work flow, before the cross-functional/office meetings take place. During the meeting, a facilitator role could be brought in to ensure that each stakeholder's views and information is heard and considered, in order to develop a complete and accurate view of the workflow and duties. The finalised document and briefing material need to be vetted and approved by each party to ensure same level of understanding.

Workstream 2: Setting up of the STO and developing the GRS Transition Plan

Implementation Tasks	Implementation Challenges and Risks	Mitigation
W2- 1 & 2: Recruitment of the Head of the STO and other international candidates for the STO	**Challenges – Medium:** It may be challenging to find the right individuals with the required qualifications and experience within a 12-14 month timeframe. **Risks – High:** The calibre and commitment of the STO team are key to the success of the GRS transformation. Without the right team to drive the transition and implementation of change, it is unlikely that transformational change can happen within GRS. Besides, given the lead time required to recruit members of the STO, there is possibly pre-mature departure of any recruited member. An incomplete STO team will not be able to deliver the required transformation for GRS.	The CSO / DoA should aim to grant immediate authorisation of the recruitment of the STO (including staffing requirement, budget provision etc), and commence the international recruitment process as soon as practicable. This would include the creation of a suitable job description and advertisement and ensure the widest possible dissemination of the advertisement through appropriate international channels in order to reach the broadest possible range of suitable candidates as quickly as possible. It is also recommended that the CSO/DoA reach out to our SME network for suitable referrals of candidates. The compensation for this team of international expert will need to be competitive[17], and the expectation of their work deliverables clearly communicated. It is also recommended that the contractual notice period be lengthened.
W2-3:	**Challenges – Low:** Since	Recruitment effort should not

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[17] Our recommended range of remuneration for the new recruits is covered in Section 6: Cost Analysis

Implementation Tasks	Implementation Challenges and Risks	Mitigation
Recruitment of additional archivist grade staff (on local civil servant terms, at AA level)	SAA is a promotion rank, there needs to be an adequate number of high-calibre AAs (at least two) to be promoted to SAAs. These AAs need to be backfilled by recruitment on top of the 4 AAs to be recruited in Hong Kong with the relevant degrees and records management knowledge. **Risks – Medium:** Without these new local hires, there will be a shortage of staff for business-as-usual operation within GRS as some of the experienced GRS staff get seconded into the STO to work on the Transition Plan and implementation.	be limited to the local market, but should also include international market (e.g. overseas universities, libraries) as there may be candidates who may wish to relocate back to Hong Kong if it is their home. Less experienced candidates with the right qualification and calibre should be considered for AA recruitment, and immediate on-the-job training should be provided to them to get them up to speed with backfilling some essential tasks within GRS as soon as possible.
W2-4: Develop STO Project / Operational Plan and appoint the STO members (e.g. GRS secondees)	**Challenges – Low:** While the Head of STO is responsible for setting the overall work plan and the roles and responsibilities of different parties in the overall transition, he/she will be required to communicate and get support and buy-in from the GRS Director as well as the STO team and relevant GRS staff to get the project plan approved by the GRS Director. **Risks – Low:** The risk of this task would be that approval on the STO project/operational plan could not be obtained from GRS Director, and timeline will be delayed. It is considered the probability of such a risk is low, given that	For the Head of STO to work effectively to deliver its Project/Operational Plan, he needs to engage in sufficient communication with the new STO members (international) and existing GRS staff (local) to understand the culture, operational issues and limitations, history and background, in order to develop a practical Project / Operational Plan for the STO work.

Implementation Tasks	Implementation Challenges and Risks	Mitigation
	the objectives of bringing in the STO is to facilitate change and therefore it is not expected that major push back will be expressed by the GRS Director.	
W2-5: Develop GRS Transition Plan and identify quick wins	**Challenges – High:** The tasks of developing the Strategic Plan for GRS; a new organisation structure; and a transition implementation roadmap are highly complex in nature. It is essential for the STO to quickly get up to speed with the current organisation structure and challenges facing the GRS, and then leveraging his overseas experience and expertise in archives and records management to set the strategic direction of GRS. Based on the STO Project Plan developed above, it is also critical that all the different parties within STO work effectively together (the three international experts, with the GRS Secondees) to deliver a cohesive and practical Transition Plan. Based on the STO's detailed review of the GRS operations, it is important to identify quick wins that could deliver obvious and measureable results. For example, a significantly more efficient way for GRS to approve 'disposal schedule' based on some new guidelines.	The purpose of seconding GRS staff (SAA or EOI or above) into the STO is to help bridge the gap of understanding and expectation between the international experts and the local GRS organisation and Director. By having the GRS secondees constantly and actively involved in the direction setting of the Transition Plan and the provision of necessary input and challenges to the STO, as well as regular and effective communication between the Head of STO and GRS Director on the progress of the Transition Plan, the level of acceptance at the end should be increased.

Implementation Tasks	Implementation Challenges and Risks	Mitigation
	Risks – Medium: The Transition Plan needs to be approved by both the GRS Director and may also involve changing the way the B/Ds work compare to before. There is a risk that the Transition Plan will be faced with resistance, and ultimate buy-in could not be secured to move forward with the transition.	
W2-6: Implement Quick Wins and Transition Plan	**Challenges – Medium:** Once the Transition Plan is clearly laid out and approved, the challenge in implementation would be to get all stakeholders on board (i.e. understand the necessity and benefits of change) and then to provide clear instruction and guidance in terms of how things should be done compared to the past. **Risks – Medium:** There may be considerable resistance from stakeholders to change their existing way of working, including within GRS or across Government.	It is normal for the STO to be faced with resistance as the GRS staff or B/Ds are asked to do things differently. Therefore, successful implementation of these changes must be equipped with clear rationale, clear authority and endorsement from the top (i.e. GRS Director), and clear and well thought out guidance on the new way of doing things.
W2-7: Organise overseas archival institution site visit for GRS staff to visit comparator	**Challenges – Low:** As this is expected to be the first overseas site visit organised by GRS after establishment of the STO, the planning and organisation of the site visit may require significant time and effort on GRS' part in	GRS could leverage the help of this Project's SME to help facilitate the coordination and liaison with the appropriate archival institutions and sites to visit. The programme agenda of the

Implementation Tasks	Implementation Challenges and Risks	Mitigation
institutions	dealing with: 1) site selection and liaising with the comparator organisation on schedule and timing; 2) working out the site visit programme agenda and logistics; and 3) selecting the appropriate candidate to go on this Site Visit within GRS. **Risks – Medium:** If the site visit is not properly organised, the intended benefits of seeing and learning in person how leading archival operations work (as documented in our Study) may not be achieved. Also, the dedicated team selected to go on the site visit should be well-versed with the findings as discussed in our Interim Report (recapped in Appendices C and D of this report), and be able to learn and transfer that knowledge to the rest of GRS and provide input and ideas to the STO to support the GRS transition. Otherwise, the intended benefits of the site visit will be undermined.	site visit must be vetted and approved by the Head of STO to ensure alignment with overall strategic direction of the GRS, and then clearly communicated to the comparable archival institution to make sure appropriate arrangement can be made. The Head of STO should also communicate clearly to the selected GRS team about the programme objective, agenda and intended outcomes to ensure that the site visit will be valuable and beneficial.

In the next section, we present an analysis of the costs involved in the recruitment of additional resources within GRS according to our recommendations.

6. Cost Analysis

In this section, we have analysed and estimated the remuneration costs of the recommended additional personnel in order to support the transition of GRS.

We recommended the GRS Director to be upgraded and to recruit additional staff including four international specialists in the Strategic Transition Office (including one Head of the STO and three STO Unit Heads), who will have short- to medium-term employment contracts (minimum of 3 years); as well as 8 additional permanent headcounts within GRS, which are expected to be on local civil servant terms[18].

The cost increment to upgrade the GRS Director from the current rank at D1 to the new rank at D4-D5 is estimated to be **HK$1.2mn to HK$1.5mn**[19] (including annual salary and staff on-cost) per annum.

The cost estimation of other additional recruitments in the STO is based on the principles and guidelines provided in 'Civil Service Bureau Circular No.2/2001 – Employment of Non-Civil Service Contract Staff' ("the Circular") published by Government Secretariat and updated in December 2011.

The following table summarised the estimated cost of personnel in the first year of transition. Composition of cost is provided in the following subsections. Detailed assumptions are provided in Appendix G.

Table 5 – Summary of estimated personnel cost for transition (first year) [20]

Positions	Type of employment packages	No. of staff	Estimated annual cost per head (HK$) (Basic salary + benefits when applicable)
Head of the STO	Expatriate package,	1	$2.7mn to 3.0mn

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[18] As NAMS 2016/17 is the source of basic salary for various directorate ranks as well as other ranks, it is used for estimating the basic salary for the Head of the STO (D2/D3 level) and the STO unit heads (Archivist / CEO level). An on-cost factor of 44% is multiplied to the NAMS figures to calculate the cost difference resulted from the upgrade of the post of GRS Director from D1 to D4/5 and the additional post of the Deputy GRS Director at D2 rank.
On the other hand, as Staff Cost Ready Reckoner 2015/16 is the source of the total local packages (salary + on-cost) of the various ranks, it is used for the cost estimation of the eight additional staff.
[19]
D1: Approximately HK$ 2,395,000 per annum (salary + on-cost)
D4: Approximately HK$ 3,640,000 per annum (salary + on-cost)
D5 Approximately HK$ 3,865,000 per annum (salary + on-cost)
[20] Expatriate packages are estimated and subject to negotiation between candidates and GRS. They are fully-loaded costs with benefits and allowances included. Local civil servant package includes salary and on-cost. Detailed rationale and analysis are illustrated in the below subsections.

Positions	Type of employment packages	No. of staff	Estimated annual cost per head (HK$) (Basic salary + benefits when applicable)
	contract-based		
STO Unit Heads	Expatriate package, contract-based	3	$2.0mn
Senior Assistant Archivist (SAA)	Local civil servant package	2	$976k
Assistant Archivist	Local civil servant package	4	$415k
IT Specialist (Analyst/Programmer I)	Local civil servant package	2	$1,011k

In the first year of transition, the capital cost for GRS will be HK$8.7mn to HK$9.0mn (expatriate packages), and the recurring expenditure (salaries for civil servants) will be HK$5.6mn.

Assuming annual pay increase for the civil servants at an average of 5% per year[21], and no change to the expat packages given they are expected to be on a fixed-term contract, the second and third year costs for the eight civil servants remuneration will be HK$5.9mn in Year 2 and HK$6.2mn in Year 3.

6.1. Expatriate Package

As discussed in Section 4, recruiting international specialists (expatriates) from overseas archival institutions with the right experience and qualifications is key to the success of the Strategic Transition Office. A well-designed and competitive compensation package is crucial to attracting the right personnel.

Based on our experience, the compensation package for international specialist positions should be composed of a basic salary, as well as additional allowances in order to cover the relocation cost to Hong Kong:

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[21] Average percentage of pay adjustment in the past five years from 2011/12 to 2015/16, i.e. 5.04% for the middle and lower salary band

1) **Basic salary:** This should be at least comparable or more attractive to that earned by the candidates in their home countries; and

2) **Expatriate allowance:** This is to cover the expatriate's cost of living in Hong Kong. We have made reference to the Hong Kong civil servant fringe benefits when estimating these allowances, which included cash benefits such as education allowance, housing benefit and retirement benefit.

The international specialists in the STO should be contracted for a minimum of 3 years to cover the transition period.

The compensation of the international staff would be considered as capital costs for the GRS transition and is estimated as follows. Detailed sources for our assumptions are provided in Section 6.3.

Table 6 – Estimated expatriate compensation package for (first year of transition)

Remuneration package item	Amount per head (HKD per year)	Benchmark / reference
Basic salary		
Basic salary for Head of the STO	$2.0mn to $2.3mn (Equivalent to D2/3 remuneration level)	TNA (UK) Director grade – SCS1: HK$710k to $1.4mn LAC (Canada) Assistant Deputy Minister – EX-04: HK$950k to $1.1mn HK Government D2/3 grade: HK$2.0mn to $2.3mn (excluding allowance)
Basic salary for each STO Unit Heads	$1.3mn (Equivalent to an Archivist / CEO grade remuneration level)	HK GRS Archivist /Chief Executive Officer grade: HK$1.3mn (excluding allowance)
Expatriate allowances		
Housing benefit	$426k for Head of the STO $379k for STO Unit	Based on the HK civil servant Non-accountable Cash Allowance (NCA) scheme for civil servant officers at rank D2 – D5 (i.e. HK$35.5k per month or

Remuneration package item	Amount per head (HKD per year)	Benchmark / reference
	Head	HK$426k per year) and MPS45-D1 (i.e. HK$31.6k per month, or HK$379k per year.)
Retirement benefit	$18k	Equivalent to employer's contribution for the HK Mandatory Provident Fund (MPF)
Education allowance	HK$130k per child per year (maximum claimable 4 children per expatriate)	Benchmarked to the international school fees of four Kowloon-based international primary and secondary school fees. Taken the average of the school fees.
Summary		
Total compensation for Head of STO	$2.7mn to $3.0mn per year	• Basic salary: $2.0mn to $2.3mn • Allowance: $704k (assuming 2 dependent children)
Total compensation for STO Unit Heads per head	$2.0mn (per head)	• Basic salary: $1.3mn • Allowance: $657k (assuming 2 dependent children per expatriate)

Thus, the total cost of the four expatriate packages (capital cost for GRS) is estimated to be **HK$8.7mn to HK$9.0mn** per year, assuming two dependent children per international expat staff.

6.2. Local Civil Service Package

According to our recommendation, six additional archivist grade staff and two IT specialists should be hired to be permanently stationed in GRS on civil service terms. For the purpose of cost estimates, we have assumed two SAAs, four AAs and two IT specialist posts will be created. The salaries for AAs should be equivalent to the level of MPS16-27, with annual salary of HK$415k while the salaries for SAAs and the IT specialists should be equivalent to the level of MPS28-33, with annual salaries of HK$976k and HK$1,011k respectively.

The AA/SAA rank staff and IT specialists are granted civil servants allowances (e.g. overtime and related allowances, job-related allowances and subsistence allowances) and fringe benefits (e.g. medical and dental benefits, housing benefits) according to

Government policy. The allowances are granted when circumstances are met, and fringe benefits are dependent on the rank, length of service, terms of appointment and other rules.

As an additional reference point, we have provided the average total annual package amount for each grade / rank (according to the Government "Staff Cost Ready Reckoner 2015-16") as an indicative total package costs, which should include allowances and fringe benefits.

Table 7 – Estimated compensation for local civil servants

Expected rank of hire	No. of Posts	Equivalent Master Pay Scale	Average Annual Staff Cost per head (HK dollars)
Senior Assistant Archivist (SAA)	2	MPS 28-33	*$976,236*
Assistant Archivist (AA)	4	MPS 16-27	*$414,900*
IT specialist (Analyst/ Programmer I)	2	MPS 28-33	*$1,011,120*
Total cost of salary for additional civil servants	First year: HK$5.6mn Second year: HK$5.9mn Third year: HK$6.2mn		

Thus, the total costs of the six SAA/AA and two IT specialists posts are estimated at **HK$5.6mn** for the first year. The compensation of these civil servants would be a recurring expenditure for GRS and expected to increase by about 5% each year based on historical pay adjustment trends.

6.3. Longer-term cost consideration

A key personnel change after the transition period will be the creation of Deputy GRS Director (potentially filled by the STO Head), as detailed in Sections 4.2.1 and 4.3.1. Assuming annual pay increase for the civil servants at an average of 5% per year[22], the

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[22] Average percentage of pay adjustment in the past five years from 2011/12 to 2015/16, i.e. 5% for the upper salary band

cost of the position of Deputy GRS Director at D2 rank three years from now is estimated to be **HK$3.3mn**[23] (including annual salary and staff on-cost) per annum.

Other longer-term changes will be defined and detailed by the proposed STO after examining the GRS's business plans and operations. The cost impacts of these changes will need to be included and budgeted in the GRS Transition Plan, as part of STO's deliverables.

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[23] D2: Approximately HK$ 2,840,000 per annum (salary + on-cost)

Appendix A. - *List of Interviews Conducted*

B/Ds	Position Title	Full Name	Other attendees	Date
Chief Secretary for Administration's Office	Director of Administration	Ms Kitty Choi	• Mr Bobby Cheng (Deputy Director of Administration, Chief Secretary for Administration's Office) • Mr Simon Lam (Principal Consultant, EU) • Mr Stanley To (Government Records Service Director)	17 Nov 14
Office of the Government Chief Information Officer (OGCIO)	Deputy Government Chief Information Officer (Consulting and Operations)	Mr Victor Lam	• Mr Simon Lam (Principal Consultant, EU) • Ms Jenny Woo (Senior Systems Manager, OGCIO)	19 Nov 14
Civil Service Bureau, General Grades Office	Director of General Grades	Mr Peter Chan	• Mr Simon Lam (Principal Consultant, EU) • Mr Stanley To (Government Records Service Director)	20 Nov 14
Government Records Service (GRS)	Government Records Service Director	Mr Stanley To	--	14 Oct 14
	Curator, Preservation Service (PS)	Mr Edward Tse	• Ms Teresa Lee (Senior Consultant, EU)	18 Nov 14
	Archivist, Public Records (PR)	Ms Jessica Lau	• As above	19 Nov 14
	Senior Assistant Archivist (PR)1	Mr Alan Lee	• As above	18 Nov 14
	Senior Assistant Archivist (PR)2	Mr Bernard Hui	• As above	18 Nov 14
	Senior Assistant Archivist (PR)3	Mr Ted Cheng	• As above	18 Nov 14
	Senior Assistant Archivist (PR)4	Mr Manson Kwan	• As above	24 Nov 14
	Senior Assistant Archivist (PR)5	Mr Jack Lau	• As above	19 Nov 14
	Senior Executive Officer, Acting Head of Records Management and Administration (RMA)	Mr YK Wong	• As above	20 Nov 14
	Senior Executive Officer (Records Management Review)	Mr KM Chan	• As above	21 Nov 14
	Chief Executive Officer, Records Systems Development (RSD)	Mr Andy Ng	• As above	20 Nov 14
	Senior Executive Officer (RSD)1	Mr CY Chow	• As above	21 Nov 14
	Senior Executive Officer (RSD)2	Ms Jessica Hui	--	21 Nov 14
	Senior Executive Officer (RSD)3	Mr Victor Wong	• Ms Teresa Lee (Senior Consultant, EU)	20 Nov 14
	Librarian (SD)1	Ms Annie Yung	• As above	24 Nov 14
	Librarian (SD)2	Ms Helina Bee	• As above	24 Nov 14

Appendix B. - *International Research Framework*

We set out below for reference the International Research Framework that was prepared in Phase One of this Study and was agreed with the Efficiency Unit.

B.1. Introduction

B.1.1. Overview

The Efficiency Unit (EU) of the Government of the Hong Kong Special Administrative Region (Government) has commissioned PricewaterhouseCoopers Advisory Services Limited (PwC) to conduct a consultancy study (Study) for the review on the organisation and staffing structure of the Government Records Service (GRS).

B.1.2. Background

In Hong Kong, public records are managed by the GRS department. The GRS is responsible for setting the directives and guidelines related to records management and formulating policies that need to be followed by Bureaux and Departments (B/Ds) across Government. Apart from identifying and acquiring archival materials from across the Government, GRS also provides records storage and disposal services and promotes public awareness of records management.

The post of the Head of the GRS (the 'GRS Director' or 'Director'), pitched at the Principal Archivist (D1) level, is currently held by a directorate D1 officer from the Executive Officer (EO) grade. The Director manages about 100 staff in four offices that undertake different Government records and archives management duties: the Public Records Office (PRO); the Preservation Service Office (PSO); the Record Systems Development Office (RSDO); and the Records Management and Administration Office (RMAO). The Heads of offices are a combination of specialist archivist (PRO), curator (PSO), as well as EOs (RSDO and RMAO).

A recent investigation into the public records management by The Ombudsman of Hong Kong identified several inadequacies relating to GRS' organisational structure and staffing and its legal mandate, amongst other issues. More specifically, The Ombudsman observed that a lack of capacity and skills has hindered the GRS' ability to address effectively the challenges resulting from the increase in the volume and complexity of record keeping in today's world.

Against this backdrop, the Government has decided to commission a review of the organisation and staffing structure of the GRS. The main objective of the Study is to develop recommendations – based on best practices from overseas territories but contextualised for Hong Kong – around the GRS' leadership and management structure, including workforce skills, grade level/rank mix and modus operandi.

B.1.3. Scope for the Study

The scope of the Study involves:

1) Conducting benchmarking research on the national archival bodies in four international jurisdictions that are well-established and effectively operated, and evaluate the lessons that the GRS could learn from these jurisdictions with regard to their modus operandi, organisational and management structure, manpower composition as well as performance;

2) Recommending the optimal organisation structure and staffing provision, which may include institutional changes in the grade and rank of the GRS Director, internal governance, skillset and capability requirements; and

3) Developing an implementation plan with a practical timeline, having identified and evaluated the potential issues of implementation and implications in terms of costs and benefits (qualitatively), readiness of stakeholders and impact.

B.2. International Benchmarking Data

The following information will help support international benchmarking. Any additional information that the SMEs feel is valuable is more than welcome.

B.2.1. Legislative framework (Source of authority)

1) National archival institution
   a. Full and legal name
   b. Year of establishment
   c. Links to website

2) Governing legislation
   a. The title of the primary governing legislation and the year of implementation
   b. The date of the first governing legislation, if the current legislation is not the original, and the year of implementation
   c. Copies of or links to key legislation
   d. Any plans to change the legislation drivers or concerns that might influence the legislative framework of the institution in future
   e. Any other legislation that plays a pivotal role in the role, duties, and operations of the institution

3) Source of authorities for the national archival institution
   a. Any authorities in the legislative framework that give the national archival institution its authority for enforcement
   b. Any authorities or advisory entities in the legislative framework that oversee or advise on the policy and / or operation of the national archival institution
   c. Any other sources that give the national archival institution authority for action or enforcement
   d. Any other authorities or business that may play a pivotal role in the role, duties, and operations of the institution (such as Information Commissioner of UK who may exercise his authority under other respective legislation)

4) Any additional comments about the history of the governing legislation, or related legislation, that would help contextualise the current state of legislation

B.2.2. Accountability and transparency (Source of authority)

1) Information about whether or not the national institution reports to an advisory board or similar oversight agency, or has done so in the past
   a. If so, additional information about the mandate, responsibilities and composition of the advisory board or agency
   b. If so in the past but not now, information about why the status has changed. If not, information about why there is no such oversight agency and whether or not there has been any discussion of establishing same

2) Copies of or links to any descriptions of the role, purpose and duties of the advisory board or agency

3) Information about whether and how the national institution reports on its activities (annual report, periodic report, etc.), and how long that reporting process has been in place

4) Information about whether those reports are published or made publicly available, and how (e.g., digital, print, both)

5) Copies of or links to the most recent reports, if possible

B.2.3. Organisational structure and hierarchy

1) The position of the institution within government (department, division, arms-length agency)

   a. The reporting relationship up through government

   b. Whether or not the institution has changed its organisational placement recently, or if any notable changes in organisational placement have occurred, and information about why those changes are significant

2) Head of the institution

   a. Title and rank of the head of the institution, particularly information related to the placement of the position relative to other senior government roles (very senior, not very senior, etc.)

   b. Typical or traditional hiring practices for heads of institution (i.e. internal appointments versus external appointments, "rise through the ranks" or other means of appointment)

   c. The nature of career paths within the institution and across the government (i.e., will the head of the institution rotate to other government departments, etc.)

   d. Pay grade and scale, including information related to ranking of that pay grade in relation to other comparable government roles

   e. Qualifications and background of the current incumbent and the mandatory requirements of the post

   f. Copies of or links to job description/descriptions of duties for the head of the institution

3) Organisational structure

   a. The organisational structure and reporting relationships across the institution, including staff positions and responsibilities

   b. Copies of or links to any organisational charts or related information about staffing or organisational structures

B.2.4. Staffing (Workload and Staffing)

1) Definitions used by the institution for different staffing levels (i.e. professional versus technician versus support)

2) Detailed information about salaries, ranks, pay grades, hierarchies etc.

3) Copies of or links to job description/descriptions of position and duties

4) Number of staff across the institution and breakdown by:

   a. Different units of the institution

   b. Full-time positions versus part-time positions (or FTEs versus partial FTEs or contracted)

   c. Different types and definitions of skill sets: Professional staff versus technician versus support staff versus management staff

5) Recruitment:

   a. Professional requirements/educational or training requirements for hiring staff at different staffing levels (as defined by the institution)

   b. National archives hiring policies and practices with regard to external or internal appointments (particularly whether and when new staff might be hired or seconded from which sources, such as from private sector institutions, from other levels of government, or from other agencies within the national government, for example)

6) Training:

   a. Information about whether or not post-appointment training is provided and, if so, whether it is provided in house, through contracts with training agencies, etc.

   b. What specific kinds of training are provided, particularly associated with the core operations of the institution (e.g., records and/or archives management, as opposed to more general public service training, language training, etc.)

7) Information about the nature, scope, and process of staff performance measures or assessments

8) Information about the nature of career paths and any requirement for rotation within the government, particularly for professional staff, within the institution and across the government (i.e., great mobility within the government versus life-long careers within the institution only, etc.)

9) Information about perceived staffing needs, gaps, or priorities for the future

10) Commentary on whether professional qualifications in records and archives management are seen as required or desired for this position (professional qualifications might include formal credentials or tertiary education in records management/archives)

B.2.5. Nature and size of holdings (Workload and Staffing)

1) General description of, and statistics about, current holdings, particularly: volume of paper records, volume of digital records, numbers of special media items (photographs, maps, etc.)

2) Procedures involved in acquisition and management of archival materials, such as appraisal, accessioning , indexing, preservation

3) Size of backlog of unprocessed archival materials (in volume, or in estimated time to process)

4) Current storage capacity or needs, including available space, whether or not holdings are in one or more facilities, records centres, special media storage facilities, etc.

5) Information about priorities or concerns for managing holdings in the future

B.2.6. Scope of service (Workload and Staffing)

1) Responsibilities:

a. Description of the institution's responsibilities: for instance, traditional archival service (acquire, preserve, make available) versus direct or indirect records management service (direct includes establishing and maintaining government records programs; indirect includes establishing policies and standards and monitoring/auditing compliance)

b. Whether or not the institution is responsible only for government archives, for government records (i.e. current) and archives (i.e. historical), for the acquisition of private, non-government archives, etc.

c. Whether or not the institution is responsible for the management of publications, artifacts, art, special media, etc. as a core part of its mandate

d. Whether or not the institution is responsible for records centre management, and a description of those responsibilities

e. Whether or not the institution is responsible for formulating records management policies, setting standards and guidelines for government agencies to follow, overseeing, monitoring or auditing government records operations and, if so, to what extent and under what conditions (i.e., continuous oversight of records creation across government versus participation in government-led audits versus limited monitoring role only)

f. Whether or not the institution is responsible for executing any sanction as stipulated in relevant legislation, or instituting any disciplinary / administrative actions against responsible staff who do not comply with the practices required by law or government regulations

g. If the institution is responsible for more than government records and archives management, additional information about the scope of additional services, origins and history over time or any additional information that will help explain the nature of that scope of service

2) Retention and disposition:

a. Whether or not the institution has direct involvement in the development of government retention and disposal schedules, and the nature and scope of that involvement

b. The institution's role and responsibilities for actual records disposition, including destruction or transfer to archives

3) Information about how the institution conducts appraisal practices (including appraisal of government records, government archives and acquisitions from other sources)

4) Whether or not other national institutions within the country are responsible for these activities (e.g., a separate national library, museum, gallery, film archives, etc.)

5) The relationship between the national institution and these other institutions (i.e., formal collaboration, occasional cooperation, limited interaction, etc.)

6) Copies of or links to the institution's vision, mission, goals, objectives statements and the institution's mandate statement(s), if available

7) Description of any changes in that responsibility over the last 10 years or so, particularly with regard to the management of electronic records

8) Information about any perceived changes coming in the future in relation to the institution's scope of service or duties

B.2.7. Electronic records management practices

1) Current responsibilities for and scope of service for electronic records management across government, including information about how long different electronic records management programs have been in place and what priorities are emerging for the future

2) Role of the institution in setting standards for electronic records creation, maintenance, use or storage

3) Role of the institution in selecting, certifying or authorizing electronic document or records management systems across government; if so, the nature of selection, certification or authorization (e.g., software only, software and operations, staff requirements, etc.)

4) Role of the institution in overseeing, auditing, or monitoring electronic records creation, maintenance, use or storage across the government

5) Current activities or research into the development of trusted digital repositories within the institution, to manage acquisitions of electronic records

6) Information about the institution's priorities for, or concerns about, electronic records management in future

B.3. Other Questions (Optional)
B.3.1. Budget and resources

1) The total budget of the institution, and the budget as percentage of overall government budget

2) The breakdown of the budget into different departments, units, functions or categories

3) The level of autonomy or authority the institution has over creating and administering budgets or managing its financial resources

4) Whether or not budgets distinguish between different operations, such as archives management versus records management, electronic records management versus other operations, preservation versus other operations, etc.

5) Copies of or links to current budget documents or other financial information

B.3.2. Analogue Preservation practices

1) Current responsibilities for and scope of service for preservation: i.e., paper conservation, media preservation, digital preservation, including information about how long different preservation programs have been in place and what priorities are emerging for the future

2) Role of the institution in setting standards for records creation, maintenance, use or storage (particularly in relation to preservation requirements

3) Role of the institution in overseeing, auditing, or monitoring records creation, maintenance, use or storage across the government (particularly in relation to preservation requirements)

4) Information about the institution's priorities for, or concerns about, preservation management in future

B.3.3. Access and privacy practices

1) Information about whether or not the government is bound by access or privacy legislation

2) Information about the role of the institution in administering that legislation, directly or indirectly

3) Information about how the institution addresses government compliance with that legislation (e.g., by overseeing access/privacy directly, by providing standards or guidance on how to address access/privacy issues, by applying access/privacy requirements only to its own holdings, etc.)

4) Information about the institution's priorities for or concerns about managing access and privacy in the future

B.3.4. Arrangement and description practices

1) Current arrangement and description practices (i.e., levels of arrangement or description achieved for different types of holdings, priority areas or types of records/media for general versus detailed description, etc.)

2) Information about descriptive standards used

3) Information about descriptive tools or software used (such as ICA AtoM, for instance, or other packages)

4) Information about the institution's priorities for, or concerns about, arrangement and description in future

B.3.5. Records, archives and information standards

1) Information about key national or international records, archives or information standards that have been formally adopted by the institution, including names of standards, when adopted (if known), and any additional details about how the standards are being applied

2) Copies of or links to any documents created by the institution outlining its position re: national or international standards

B.3.6. Reference services

1) Information about the scope of on-site reference services (hours, days, location(s), etc.)

2) Information about the scope of remote reference services (telephone, internet, fax, postal)

3) Conditions of or restrictions on access or use (such as requirements for registration, copyright guidance, etc.)

4) Copies of or links to any reference and users guidelines etc.

5) Information about the institution's perception of the strengths or weaknesses of its reference services

6) Current activities or plans for developing or expanding remote reference services or access using digital technologies

B.3.7. Outreach and public programming activities

1) Information about different types of outreach activities, including on-site or remote exhibits, public lectures or other events, to provide a general understanding of the scope and nature of outreach services

2) Information about different types of educational initiatives (such as school group visits, etc., liaisons with universities) undertaken by the institution, to provide a general understanding of the scope and nature of public programming/educational services

3) Information about whether the institution uses social media (e.g., Facebook, Twitter, etc.) for outreach, public programming, or other purposes, including when those services began and within which unit(s)

those services are managed

4) Information about the institution's perception of the success or value of its outreach and public programming services, including social media services

B.3.8. Other issues

1) Any other major activities that the institution is undertaking that ought to be noted but have not been identified yet

2) Information about any other issues, drivers, concerns or priorities that the institution is facing now, or concerned about

3) Any commentary or additional inputs from the SME on any or all of the findings, to support the international benchmarking analysis

Appendix C. - *International Research (Extract from Final Interim Report)*

C.1. Introduction

In this section, we provide key findings from our international benchmarking research on the four overseas comparator organisations as follows[24]:

- Australia – The National Archives of Australia (NAA);

- Canada – Library and Archives Canada (LAC);

- Netherlands – The National Archives of the Netherlands (NAN); and

- The United Kingdom (UK) – The National Archives of the United Kingdom (TNA).

Our goal is to study how these comparator organisations discharge a range of records management duties, structure and staff their organisations, and address common challenges. Where information is available, we also look at the current trends in records and information management within these overseas jurisdictions. In our analysis, we have focused particular attention on those issues that we feel offer insights of value to the consideration of future directions for GRS. In Appendix D of this report, we have provided our suggestions on the improvement opportunities for GRS, based on our analysis of the research findings in relation to the Hong Kong situation and our contextualisation of these findings in relation to the current arrangements for GRS.

In conducting the benchmarking research, we have relied primarily on desktop research.[25] Where there are gaps in information, we turned to our Subject Matter Experts (SMEs) for their experience and insights. As necessary, our SMEs conducted further interviews with other experts and gathered information more informally from the comparator organisations in their jurisdictions, in order to fill the gaps. All research was structured in order to support the Study's scope of work. The agreed research framework used to gather comparator organisation data for this Study, along with key sources used to gather data, are presented separately in Appendix B and Appendix C; further sources used throughout this research are identified in Appendix D.

The research findings in this section are organised as follows:

1) Institutional Overview

2) Legislative and Regulatory Frameworks

3) Strategic Direction

4) Scope of Service and Modus Operandi

5) Organisation and Management Structure

6) Staffing

C.2. Institutional Overview

We begin by providing a brief overview of each of the overseas national archival institutions examined for this Study, to place our research into these organisations in context. This overview places the institution in the

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[24] The sequence of presentation is according to the alphabetical order of the countries.

[25] In relation to the research into NAN, in the Netherlands, it is noted that most of the relevant websites are only available in Dutch. Further, our SME advised us that some of the publicly available English translations may not present accurate information, limiting our ability to compare information precisely against the other comparator jurisdictions. We have relied on our Dutch SME to translate some of the key information for this Study (including titles of relevant legislation, regulations and guidelines, as well as highlights from relevant reports). Given this limited access to information in English, despite the supplementary inputs from our SME, we note that some of the information we gathered about other jurisdictions was not always equally available in our analysis of the situation in the Netherlands.

wider government structure and its historical context; summarises the scope of holdings and location of offices; and comments on notable current initiatives, such as work associated with the digitisation of holdings. Each overview concludes with the current vision/mission statement for each institution.

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Highlights of key findings:

Our research reveals that in the four jurisdictions, the general scope of service for each national archival institution is the same: to preserve and protect the archival resources of the government and to provide oversight, guidance and support for records, information and archives management across government. Each institution has also undergone a transition over the last decade, in response to the challenges of digital technologies. The institutions have repositioned themselves so that they are no longer in a reactive position at the end of the records' life cycle but instead are increasingly at the forefront of electronic recordkeeping. Each institution structures its operations differently, however, in order to function within their particular legislative, regulatory and organisational frameworks. While no one institution presents a definitive model for effective recordkeeping oversight in the digital age, GRS can draw on the examples offered – both in terms of strategies adopted and lessons learned – as it seeks to be more proactive in the protection and preservation of digital records with enduring value.

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The National Archives of Australia (NAA)

The National Archives of Australia (NAA) is an executive agency of the Government of the Commonwealth of Australia, reporting to the Attorney-General of Australia. The Attorney-General's department delivers programmes and policies to maintain and improve Australia's law and justice framework, strengthen national security and emergency management and provide support for arts and culture.

Historical context and location of offices

There was a separation of the national archives from the national library in the 1960s. The National Library of Australia was originally responsible for the preservation of Commonwealth Government archives after the First World War, but in 1961 the Commonwealth Archives Office was formally separated from the National Library. The Commonwealth Archives Office was renamed Australian Archives in 1975 and became National Archives of Australia in 1998.

NAA maintains offices across Australia, a country with a population of over 22 million. NAA's head office and exhibition spaces are in Canberra, and some satellite offices have been co-located with state archival institutions.

Scope of holdings

NAA's holdings span more than 380 linear kilometres, including paper files, audiovisual and photographic materials, digital records and microforms, representing almost 10,000 government agencies (past and present) and Commonwealth persons. In terms of digitising holdings, over 26 million digital reproductions of archival records, approximately 4% of the collection, are available through the Archives' online database, called RecordSearch. The work of NAA to manage audiovisual materials is complemented by the work of a separate National Film and Sound Archives of Australia, which exists to develop, preserve, maintain, promote and provide access to a national collection of film and sound archives. NAA does not actively collect library holdings, as that function is within the mandate of the National Library of Australia, and NAA holds only a small collection of three-dimensional objects and textiles, such as physical court evidence.

Vision and mission

The vision and mission of NAA, according to its Service Charter, is as follows:

'We [NAA] strive for excellence in our service delivery and to continue to raise awareness of the rich content in our collection and to aid access to that material. We contribute to the development of Australian culture by helping Australians better understand their heritage and democracy.'

Specifically, it sets out its roles to:

- help Australian Government agencies create and manage their records;

- select the most valuable records created by Australian Government agencies to become part of the national archival collection;

- store, describe and preserve the national archival collection; and

- make records in the national archival collection that have entered the open access period publicly available.

Library and Archives Canada (LAC)

Library and Archives Canada (LAC) reports to the Minister of Canadian Heritage and Official Languages. This Ministry promotes culture, the arts, heritage, official languages, citizenship and participation as well as Aboriginal, youth and sport initiatives.

LAC works closely with the Treasury Board of Canada Secretariat (TBS), a separate government agency with a mandate that includes helping government departments plan and develop effective and efficient information management processes and systems. The duties of LAC and the Treasury Board Secretariat are complementary; LAC provides oversight in order to ensure the provisions of the *Library and Archives Canada Act (LAC Act)* are respected in all information and records management policies, and TBS provides operational guidance and advice to government departments about records and information management.

Historical context and location of offices

There was a merger of the national archives and the national library in 2004. LAC was first established as an Archives Branch within the Department of Agriculture and the Arts in 1872 but became a separate department of the government with the passage of the *Public Archives Act* in 1912. In the 1950s, the then Public Archives of Canada began facilitating the management of government records and information, a responsibility that was formalised in 1987 when the institution was renamed the National Archives of Canada. In 2004, the National Archives and National Library of Canada were merged into one agency, Library and Archives Canada, as directed by the *LAC Act*.

LAC is headquartered in the National Capital Region, in the province of Ontario. LAC operates a major building in downtown Ottawa as well as preservation facilities in other locations across the city, including a purpose-built facility for the low-temperature storage of nitrate film, which opened in 2011. LAC also operates regional records centres in several major cities across the country. Canada has a population of nearly 35 million.

Scope of holdings

LAC's collections include the records of government entities and non-government organisations (NGOs) with a national focus; the papers of prime ministers and prominent individuals; treaties and constitutional documents; records of significant corporations and trade unions; and records of writers, artists and others in society. These materials span all documentary formats from broadcasting to architectural drawings; plans and maps; audio- and video recordings; short- and full-length films; documentary art; and photographic images.

LAC serves as both the country's national archival institution and its national library. According to LAC, its collection of holdings, assembled over 140 years, includes[26]:

- some 20 million books published in various languages, from rare artists' books and first editions to literary classics and popular fiction;

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[26] It is not rational to generalise the volume of records in kilometres and compare it to other jurisdictions because different jurisdictions have different standards to categorise records.

- 241 linear kilometres of government and private textual records;
- more than 3 million architectural drawings, plans and maps, some dating back to the early 16th century;
- about 4.5 million megabytes of information in electronic format, including thousands of Canadian theses, periodicals and books available online;
- nearly 30 million photographic images, including prints, negatives, slides and digital photos;
- more than 90,000 films, including short- and full-length films, documentaries and silent films, dating as far back as 1897;
- more than 550,000 hours of audio and video recordings;
- over 425,000 works of art, including watercolours, oil paintings, sketches, caricatures and miniatures, some dating back to the 1600s; as well as medals, seals, posters and coats of arms;
- approximately 550,000 items constituting the largest collection of Canadian sheet music in the world; documentation related to music in Canada; and recordings on disks and records of all formats, including piano rolls, reels and spools, and eight-track tapes;
- the Canadian Postal Archives;
- textual archives for various individuals and groups who have contributed to Canada's cultural, social, economic and political development;
- national newspapers from across Canada, from dailies to student newspapers, and from Aboriginal magazines to ethnic community newsletters.

LAC has a significant presence on the web and in social media, as part of its commitment to provide a high-level of public service using modern technologies such as Flickr, Facebook, YouTube and Twitter.

Vision and mission

The mandate statement of LAC is to:

- preserve the documentary heritage of Canada for the benefit of present and future generations;

- be a source of enduring knowledge accessible to all, contributing to the cultural, social and economic advancement of Canada as a free and democratic society;

- facilitate in Canada co-operation among communities involved in the acquisition, preservation and diffusion of knowledge; and

- serve as the continuing memory of the Government of Canada and its institutions.

The National Archives of the Netherlands (NAN)

The Nationaal Archief or National Archives of the Netherlands (NAN) reports to the Ministry of Education, Culture and Science (Ministry of OCW). The Ministry of OCW's mission is to ensure that the general public gets a good education, enjoy the arts, and is prepared for responsibility and independence. In addition, the Ministry of OCW aims to create the right conditions for teachers, artists and researchers to do their work.[27]

Historical context and location of offices

NAN was established in 1802 with the appointment of Hendrik van Wijn as the archivist for the Batavian Republic. Since then, NAN has evolved into the central agency responsible for the archives of the central government, as well as for the archives of the province of Zuid-Holland. The Netherlands has a population of close to 17 million.

The *Archives Act 1995* did not mention a National Archives as such; it identified a General State Archives (Algemeen Rijksarchief : part of the larger entity called the Rijksarchiefdienst, with offices throughout the country). Since the reorganisation in 2002 the General State Archives (GSA) is now called the National Archives. NAN's headquarters are based in The Hague, and NAN also oversees the care of central government

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[27] The official name in Dutch is Ministerie van Onderwijs, Cultuur en Wetenschap.

archives located in different provinces, through Regional Historical Centres (RHCs). These RHCs were originally provincial branches that were part of the (broader) Rijksarchiefdienst (the General States Archives agency), but they became more or less independent in the years from 1997 to 2004, and many of them merged with or collaborated with other archival institutions, such as municipal archives or other cultural institutions in their regions. As a result, the RHCs receive funding from NAN to manage regionally located central government archives, but they also pursue a broader mission to care for archives related to their regional governments and populations.

In 2011, a decision was made to merge the Nationaal Archief and the National Library of the Netherlands (Koninklijke Bibliotheek). However, the Ministry of OCW cancelled the intended merger as a result of its investigation into the effects of digital technologies on the archival process and on the role and responsibilities of the State archives. This decision not to merge was made public in 2013. Instead, NAN was reorganised in 2012-2013, effective 1 January 2014. As part of this reorganisation, a distinction was made between NAN itself (responsible for managing the archival records in custody and providing access to the public) and a services organisation (responsible for providing digital infrastructure, knowledge centre, supporting RHCs etc.). The services organisation provides services not only to NAN but also to RHCs as well as to government agencies if required. These two directorates are together within NAN under the direction of the National Archivist.

Scope of holdings

The full scope of holdings in both the central repository in the Hague and the RHCs extends to about 200 km. The holdings include photographic materials, maps and drawings, and a collection of about 60,000 reference publications. Audiovisual materials generated by government agencies are partially in the custody of the Netherlands Institute for Sound and Vision. Many of NAN's archival inventories have been digitised, and NAN aims to digitise about 10% of its most frequently used holdings over the next 15 years.

Vision and mission

According to NAN's mission statement, the Nationaal Archief supplies historical information to a varied public, based upon the content of its collection: the archives related to national government.

The National Archives of the United Kingdom (TNA)

The National Archives of the United Kingdom (TNA) is a government department and executive agency of the Ministry of Justice. The Ministry of Justice is a ministerial department that protects the public and reduces reoffending and provides a more effective, transparent and responsive criminal justice system for victims and the public in the UK.

TNA is responsible for preserving the government archives of England, Wales and the United Kingdom. There are separate National Archives in Scotland and Northern Ireland.

Historical context and location of offices

The *Public Record Office Act 1838* gave the then Public Record Office (PRO) responsibility for preserving and making accessible public records with archival value. The population of the United Kingdom, including England, Scotland, Wales and Northern Ireland, is nearly 64 million.

Between 2003 and 2006, PRO was merged with three other government bodies – the Royal Commission on Historical Manuscripts, Her Majesty's Stationery Office and the Office of Public Sector Information – to form The National Archives. Today, TNA defines itself as 'the official archive and publisher for the UK government, and for England and Wales,' with a responsibility 'to collect and secure the future of the government record, both digital and physical, to preserve it for generations to come, and to make it as accessible and available as possible.' TNA is headquartered in Kew, a suburb of London, England.

Scope of holdings

The physical holdings of TNA span more than 185 km and include government archives in all media. With limited and specific exceptions, TNA does not acquire non-government archives, but part of its Historical Manuscripts Commission duties is to identify and document the location and contents of manuscripts and private papers of historical interest. The online catalogue of TNA, called Discovery, includes more than 32 million descriptions of records held both by TNA and by more than 2,500 other archival repositories across the country. Over 9 million records are available for download from TNA's website.

In terms of TNA's relationship with the UK's national library, TNA does not actively acquire library holdings. The duties of a national library are performed by the British Library, which also collects non-government archives and personal papers of national interest. The BFI National Archive, part of the British Film Institute, collects and preserves film and television archives.

Vision and mission

The TNA's vision statement says that TNA's 21st century role is to collect and secure the future of the government records, both digital and physical, to preserve it for generations to come, and to make it as accessible and available as possible.

C.3. Legislative and Regulatory Frameworks

In our analysis of the legislative and regulatory frameworks for the four comparator organisations, we identified conditions that we believe GRS can learn from, even though we recognise that our project scope was limited to identifying legislative and regulatory conditions, not advising on potential legislative or regulatory structures for GRS.

Highlights of key findings:
The operations of all four comparator organisations are bound by formal records and archives legislation as well as by associated regulations and directives. In all instances that legislative and regulatory framework gives the national archival institution:
- Responsibility for leading, supporting or advising on government records management;
- Responsibility for ensuring the protection of the government's archives; and
- A leadership role in promoting the care of archival resources across their jurisdictions.

In two instances – Canada and the Netherlands– the archival institutions are also formally mandated to acquire and preserve non-government archives.

Beyond the specific scope of records and archives legislation, the national governments in all four jurisdictions have also enacted other legislation, regulations and directives addressing wider information and records issues. These instruments are seen in part as a response by these governments to the fundamental changes in the creation, management, dissemination, use and preservation of public-sector information and records around the world as a result of digital information technologies. These include mandatory requirements intended to support public access to government information while requiring government agencies to protect personal information appropriately. All jurisdictions are also actively pursuing 'open government' initiatives to support proactive access to government records and information.

A brief summary is presented below highlighting the major legislative and regulatory frameworks in each jurisdiction that directly affect information and records care, including their legal mandate; relevant legislation, regulations and directives; and where possible, the different roles of agencies within government in overseeing or supporting these legislative or regulatory requirements; and finally, the role of other government departments in records management.

Australia

Legal mandate

NAA's mandate, as assigned by the ***Archives Act 1983* (with amendments to 2014)**, is twofold: (1) to preserve Australia's most valuable government records and encourage their use by the public; and (2) to promote good records management by Australian Government agencies. NAA is also legally mandated to encourage the preservation of all other archival resources relating to Australia and to promote the co-ordination of activities across the country that support the preservation and use of Australia's archival resources.

Relevant legislation, regulations and directives

The ***Freedom of Information Act 1982* (with amendments to 2015)** aims to give the Australian community access to information held by the Commonwealth Government by requiring agencies to publish information and by guaranteeing a legal right of access to documents. The Australian Parliament sees the legislation as formal recognition that Government information is a national resource, to be managed for public purposes. The ***Privacy Act 1988* (with amendments to 2014)** aims to promote the protection of the privacy of individuals while facilitating a balance between personal privacy and the free flow of government information. In 2010, the Government issued a ***Declaration of Open Government,*** intended to demonstrate a commitment to creating a public-sector environment that promotes and upholds 'better access to and use of government-held information.'

Roles of agencies within government in overseeing or supporting these legislative or regulatory requirements

The National Archives works in partnership with the Office of the Australian Information Commissioner (OAIC), the Australian Government Information Management Office (AGIMO), and others across government, to provide direction, advice, tools and services to help government agencies and organisations address information and records management issues, with the goal of supporting effective and open information and records management and to ensure the preservation of materials with archival value. OAIC is responsible for strategic government information policy and planning, as well as for the protection of privacy and oversight of freedom of information requirements across government. AGIMO plans and supports open government and information technology management initiatives and manages information technology requirements across government.

The role of other government departments in records management

Government departments are responsible for ensuring they create and keep records as evidence of their activities and that they manage records-related risks in their day-to-day work, such as managing records appropriately in the event of legal actions and ensuring the protection of vital corporate records.

Canada

Legal mandate

As set out in **the *Library and Archives Canada Act 2004* (with amendments to 2012)**, LAC has a comprehensive legal mandate to acquire, preserve and make available documentary media from official and private sources to document Canadian society and its governance. LAC is the sole decision authority for the disposal of official records of all government departments and agencies, and LAC has also established agreements for archival management with the Governor General, as head of state, and with the Supreme Court. Under legal deposit, LAC receives two copies of all Canadian publications as well as graduate theses and maps; those transfers now largely take place using digital technologies. LAC also leads the development of an overall recordkeeping regime for the government and is also empowered to take action to protect official records it deems to be in danger.

Relevant legislation, regulations and directives

The *Access to Information Act 1983* **(with amendments to 2014)**, provides Canadians with the right to access to government records. The principles behind the *Act* are that: government information should be available to the public; that exceptions to access should be limited and specific; and that decisions on the disclosure of government information should be reviewed independently of government.

The *Privacy Act 1985* **(with amendments to 2014)** is intended to protect individual privacy by governing how departments manage and make available any personal information they gather and incorporate into records or other information sources as part of their daily business.

In 2014, the government issued a ***Directive on Open Government*, linked to its *Action Plan on Open Government*,** both of which confirm the government's commitment to support and foster efficient, effective, transparent and accountable information management practices across government. The objective of the *Action Plan* is to 'maximize the release of government information and data of business value' while applying necessary restrictions on access, such as those associated with personal privacy, confidentiality and security.

Roles of agencies within government in overseeing or supporting these legislative or regulatory requirements

Responsibility for information management in the Canadian government is spread across a number of agencies. TBS (Treasury Board of Canada Secretariat) leads the government's information management strategy, in consultation with LAC, but LAC has ultimate authority for decisions about the retention and disposal of all government records. TBS provides guidance to government institutions to support compliance with access to records, information and privacy requirements and works with agencies across government to support initiatives that foster open data and the proactive disclosure of information. Public Works and Government Services Canada provides IT support for digital information and content management activities across government, while the Canada School of Public Service develops and delivers training programmes in information management for public servants, in consultation with functional authority centres such as LAC.

The role of other government departments in records management

Government departments are directly responsible for ensuring that their programmes, services and operations are designed to ensure that records and information are created and managed in order to facilitate accountability and transparency, support collaboration and foster informed decision making.

The Netherlands

Legal mandate

The operations of the National Archives of the Netherlands are bound by the requirements of the ***Archives Act 1995*** and the ***Archives Ordinance 1995.*** The purpose of the Archives Act is:

- To ensure that government agencies and organisations are responsible for proper recordkeeping and that after an approved appraisal process archival records will be transferred to the NA.
- To establish a general state archives as well as an general state archivist
- To set the maximum transfer period for records to move from offices to archival custody as 20 years after closure.

Relevant legislation, regulations and directives

The **Archives Ordinance 1995** provides more in detail rules and procedures for implementation, based on the main articles in the Archives act. Under this guiding legislation, NAN has a legal obligation to acquire and preserve government archives and historical materials of value from non-government sources, and to make those records widely available for use. Ministerial regulations also establish requirements for NAN to ensure the sustainability and accessibility of records in its care and for overseeing the construction and/or maintenance of physical repositories to house records and archives. Ministries and government agencies may consult NAN about recordkeeping issues, but it is not an obligation. With respect to recordkeeping standards

NAN may suggest or advise on the use of certain standards, but it cannot prescribe them. There is however a standardisation body, called the Forum Standaardisatie.

In the Netherlands, access to information and the protection of personal privacy are rights enshrined in the **Dutch Constitution**, which was first enacted in 1815 and revised most recently in 2005. This constitutional right is enhanced by **the *Freedom of Information Act 1980*,** which allows any person to demand access to information in public documents and requires the government to provide information to the public on a proactive basis, in the interest of democratic governance. The Netherlands has established a range of other information-related laws and regulations, intended to support wider access to government information, to set requirements for the ways in which government agencies may conduct electronic and other transactions with citizens and companies, and to ensure the sustainability and orderly management of government records and archives. These legal and regulatory requirements are media neutral; it does not matter if the information is digital or not for the government to be required to manage it appropriately.

The role of other government departments in records management

By law, government authorities are required to manage their business records effectively and to transfer them into repository care if the records are not eligible for destruction and are more than twenty years old. Legally, any failure to ensure records are not managed appropriately or are not transferred into care as and when required may result in the imposition of penalties.

The United Kingdom

Legal mandate

The *Public Records Act 1958* (with revisions to 2013) governs the management of public records and archives in the United Kingdom. The *Act* establishes the position of 'Keeper of Public Records' and requires that person to 'take all practicable steps for the preservation of records under his charge' as well as to provide access to records and to disseminate information about the materials in the custody of TNA. The merger of the Royal Commission on Historical Manuscripts, Her Majesty's Stationery Office and the Office of Public Sector Information into The National Archives expanded the statutory responsibilities of the institution considerably, with much greater scope to provide leadership and guidance in records and archives management across the UK government.

TNA, which defines itself as 'the official archive and publisher for the UK government, and for England and Wales,' undertakes 'to collect and secure the future of the government record, both digital and physical, to preserve it for generations to come, and to make it as accessible and available as possible.'

Relevant legislation, regulations and directives

The UK *Freedom of Information Act 2000* ensures a statutory right to access information from public bodies in the UK, including public authorities, publicly owned companies and designated bodies performing public functions, while protecting the inappropriate disclosure of personal information. The Data Protection Act 1998 governs access to and use of personal information, requiring government agencies to ensure the data in their charges is collected, managed and disposed of in keeping with privacy requirements. The UK has also committed to an open government framework and in 2013 was ranked first in the world in open data readiness.

Roles of agencies within government in overseeing or supporting these legislative or regulatory requirements

TNA plays an active role in providing public access, including by archiving datasets from central government and undertaking quality assurance for public data, information and records.

Under the *Freedom of Information Act,* the Lord Chancellor – who oversees public records and archives management – has the right to issue codes of practice to provide guidance in the 'keeping, management and destruction' of records. The Information Commissioner's Office, which reports to the Lord Chancellor, has

direct responsibility for ensuring the data protection and freedom of information laws are applied appropriately across government.

The role of other government departments in records management

TNA works closely with the Information Commissioner on the promotion of best practice principles for the management and dissemination of information and records. Across government, Departmental Record Officers (DRO) are responsible for ensuring departmental compliance with the *Public Records Act* and play a central role in the management of information within their departments. Departments also engage other Knowledge and Information Management staff to support departmental information and records management responsibilities.

C.4. Strategic Direction

In our analysis of comparator organisations, we identified strategic planning as one of the most important components of the different institutions. We believe that GRS can benefit greatly from understanding the different strategic directions being pursued by the governments in the four jurisdictions, not just in terms of the operations of their national archival institutions but – more importantly – in relation to the management of digital information and records across government.

Highlights of key findings:
Every jurisdiction is striving to address the 'paradigm shift' we discussed in Section 3. The ways in which each government is tackling digital information technologies varies, depending on the legislative, regulatory, and management structures in place in the different jurisdictions. But the important underlying finding is that all jurisdictions are taking a strategic approach to managing information in a digital age. GRS can draw on the different approaches adopted by the jurisdictions studied in order to develop its own strategic direction for digital records and information management.

As discussed in Section 2, the concept of an 'archives' is transforming from a primarily physical, custodial place to an increasingly virtual institution. The cultural and heritage responsibilities of custodial archival care are also being reimagined. Digital technologies are dramatically changing how governments and organisations create, manage, use, share and preserve their information and records. The greater challenge today is not preserving traditional analogue and paper-based archival materials but, instead, ensuring that digital records and information are created, captured, used and preserved – whether in a digital repository within an archival institution or in other locations but under the care and control of the archival agency – with their authenticity, integrity and reliability intact.

Around the world, the roles and responsibilities of the archival institution and the people involved with ensuring the management of records and information are being redefined. Governments increasingly expect archival institutions to play a leadership role in information and records management, in order to ensure records retain the authenticity and integrity that is so critical to their enduring value as documentary evidence – as proof of actions, decisions and transactions that need to be available for use today and a century from now.

Governments also require records management expertise not only in staff in traditional archival positions but also in staff working with records and information across government departments: from managers and line staff who have to understand how to 'make and keep' good records as part of their daily work; to records specialists who provide support and assistance with information and records management programmes and systems in their departments; to specialist staff in the archival institution, who establish the guidelines, standards and requirements for best practice in records and archives management and work in collaboration with offices across government to train, advise, guide and monitor all aspects of records creation and care.

To support this fundamental change in the scope of service of archival institutions in the four jurisdictions examined as part of this Study, a number of major strategic initiatives are underway, as summarised below.

Australia: Re-prioritising Digital Records Management

NAA has been addressing digital records and archives management for some years, but recent legislative changes are anticipated to formalise the role and increase the responsibility of the NAA for digital records and archives management. Recent legislative changes include the introduction of the *Public Governance, Performance and Accountability Act 2013* (*PGPA Act*), which replaces the *Financial Management and*

Accountability Act 1997 (*FMA Act*), and the introduction of the *Commonwealth Authorities and Companies Act 1997* (*CAC Act*), effective 1 July 2014, which aims to ensure the efficient, effective, economical and ethical use and management of public resources, including Commonwealth records as defined by the *Archives Act 1983*. It is anticipated that one of the benefits of these legislative changes will be that the *Archives Act* may also be changed, incorporating digital records and archives management more fully into the scope of NAA duties.

NAA is not waiting for legislative change, however, and it has emphasised digital records and archives management as a priority in its 20-year strategic outlook, which addresses NAA's role in responding to technological changes, managing the increasing volume of born-digital records and supporting the growing public demand for access to archives. To support this strategic outlook, NAA commits to addressing key drivers for change and presents a vision for new approaches to records and archives management, including:

- Increasing NAA's role in providing advice to Commonwealth agencies on information management from creating information to managing it and providing access;

- Increasing collaboration between the Archives and other Commonwealth agencies and archival organisations to provide shared services for the benefit of all Australians;

- Fostering greater alignment with key Australian Government agencies and industry to promote better information and records management

- Collaborating with other cultural agencies to increase awareness of Australia's cultural assets and promote access to them

- Expanding the use of automated processes for the transfer of digital information and records from Australian Government agencies, – including digital information with evidentiary value stored in databases and business systems – to support improved and more efficient access.

NAA is also leading the implementation of a Digital Transition Policy, which was developed by the Department of the Prime Minister and Cabinet and approved in July 2011. NAA is required to report to the Minister annually until 2017 on the status of digital information and records management in the Commonwealth, and identify further opportunities and strategies to improve efficiency, which will then be incorporated into further government planning.[28]

Canada: Supporting Modernisation

LAC emphasises its responsibility not just to manage the records of 'government' but the records of 'governance.' By this, LAC is acknowledging that a national archives does not just have a responsibility to manage the records of the departments of government but must also ensure that 'both sides' of the relationship between a government and its citizens is documented. LAC's mandate includes acquiring and preserving the records of institutions established constitutionally to govern a society, such as the head of state and government, plus records documenting legislative, executive and judicial functions. In a modern society, this broad interpretation of governance can result in the collection of records documenting the work of agencies in society that receive a substantial portion of their funding from public sources or that deliver services mandated by the state. As part of its remit, therefore, LAC also supports the preservation of the documentary heritage of wider Canadian society, by appraising and acquiring non-government archives with national significance and by fostering and supporting the development of a cooperative system of archival institutions across the country.

When the National Library and National Archives merged into LAC in 2004, the intention was to create a collaborative, integrated service that would support the goal of documenting the complexity and diversity of Canadian society and foster integrated and easy public access to information and evidence, in order to meet the

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[28] Source: http://www.naa.gov.au/records-management/digital-transition-and-digital-continuity/digital-transition-policy/index.aspx.

needs and expectations of the modern knowledge society of Canada as well as the needs of users around the world. But this merger did not diminish the role of the national archival institution to support government records and information management, a role that, as noted earlier, LAC and its predecessors had been performing since the 1950s.

To that end, LAC's 2013-2016 business plan outlines a number of key strategic initiatives that specifically address new digital realities. These initiatives are designed to allow LAC to take advantage of digital information infrastructures and to support the government's digital information strategies, in order to serve the Canadian public more efficiency and effectively. LAC has identified a number of key priorities for action, as summarised below.

- To establish new policies and procedures for the evaluation and acquisition of archives, allowing LAC to develop a collection that best represents Canadian society.

- To improve disposition authorities and records management tools to allow government departments and agencies to identify and manage their information resources of business value and allow LAC to acquire government information of enduring value.

- To digitise information resources and migrate digital holdings towards a more sustainable format, to ensure long-term access and preservation. (For example, LAC digitised over 17 million pages of its collection in 2013-2014, compared with a total of 2 million the previous year.)[29]

- To implement a strategic, structured and sustainable approach to the long-term preservation of information resources in analogue format. (For example, conservation experts at LAC processed more than 80,000 items in 2013-2014, triple the amount processed in the previous year. LAC also achieved its annual target for migrating audio-visual content, having reached 44% of its target of migrating 178,598 hours of audio-visual content by 2019.)[30]

- To improve the ability of Canadians to discover, consult and use LAC's information resources and to ensure LAC's clients receive direct, accessible and continuous services.

- To ensure content held by LAC is distributed in a proactive manner so as to be open, discoverable and accessible to all.

- To collaborate with partners and stakeholders in order to exchange information, discuss common issues and challenges, and establish collaborative arrangements to advance dialogue as well as to establish concrete initiatives of mutual interest and benefit.

- To improve the efficiency and effectiveness of LAC in carrying out its mandate, ensuring LAC employees have the necessary tools and competencies to develop the potential of the digital environment fully. As part of this work, the Librarian and Archivist of Canada worked closely with all LAC employees to discuss specific issues LAC faces and the ways in which it can fulfil its mandate. LAC also issued a new version of its Code of Conduct: Values and Ethics in 2013, as a result of in-depth consultations with employees aimed at defining and articulating the link between the values of the institution and its employees and those of the public service. LAC also undertook a number of engagement activities to engage government and the public in discussing a vision for LAC's future and finding ways to realise that vision, and projects were launched to renew employee interest and pride in the institution's mandate and collection.[31]

Within the institution itself, LAC established a 'digital office initiative' (DOI) in 2010 to support internal modernisation efforts. While this initiative does not reach beyond the archival institution, it is seen not only as

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[29] http://www.bac-lac.gc.ca/eng/about-us/departmental-performance-reports/departmental-performance-report-2013-2014/Pages/dpr-2013-14-sect2.aspx#4.
[30] Source: http://www.bac-lac.gc.ca/eng/about-us/departmental-performance-reports/departmental-performance-report-2013-2014/Pages/dpr-2013-14-sect2.aspx#4.
[31] http://www.bac-lac.gc.ca/eng/about-us/departmental-performance-reports/departmental-performance-report-2013-2014/Pages/dpr-2013-14-sect2.aspx#4.

an opportunity to improve internal practice but also as a way to establish new and collaborative solutions for digital records creation and management that might be shared across government.

As outlined earlier, LAC and TBS share responsibility for ensuring that the government's information resources are safeguarded as a public trust and are managed as a strategic asset to maximise their value in the service of Canadians. The Canadian government also relies on the Canada School of Public Service to provide records and information management training to staff across government departments. Strategic collaborations and cooperation are a fundamental component of success with these and other strategic information, records and archives initiatives underway in LAC and across the Canadian government.

The Netherlands: Developing a Digital Information Infrastructure

The Netherlands has actively developed strategic plans and regularly reviews its policies and operations. Government-wide assessments of records and archives services are also performed, such as one in 2010, when the General Court of Audit (Algemene Rekenkamer) conducted an investigation of information management across the Dutch government, building on an analysis of digital records and archives management conducted a decade before. One of the most recent planning document is the *Toekomstplan Nationaal Archief* or plan for the future of the Dutch National Archives (2013-2016). This plan provides the mission and policy framework for NAN over three years. It is anticipated that the new National Archivist, Marens Engelhard, who took over the post in November 2014, will develop new strategic plans to support various government initiatives in electronic information management as outlined below.

In 2013, the Dutch government decided to transform government operations entirely from analogue to digital workflows by 2017. In developing its vision, the government recognised the need to reorient NAN away from a traditional, custodial framework toward a more proactive position as a key player in information and records management. The government articulated a goal of creating 'a well-equipped NAN, functioning as a centre of expertise and advice not only for the creators but also the users of (State) archives.' Consequently, the government developed its strategic plan for the development of a digital infrastructure to enable the management of digital government records; the establishment of requirements with respect to digital preservation and information management in government agencies; and the formulation of mechanisms for enabling open access to digital archival material.

Over 30 million Euros have been allocated to this initiative, to be spent by 2017, with the goal of developing a digital infrastructure to support the management and preservation of digital archives. In addition, the responsibilities of NAN have been broadened to include a service organisation to support not only NAN but also the RHCs and other users of the digital infrastructure. The strategic plan also calls for the digitisation of paper-based archives and the development of guidelines for managing digital records and ensuring their sustainability.

As part of this broad initiative, several specific projects are underway as of 2015, as highlighted below.

Programma Archief2020 (http://www.archief2020.nl), which runs from 2013-2016, aims to provide sustainable access to government records. The Project is based on a covenant between the Ministry of Education, Culture and Science and a collaborative group of provincial governments, along with the Association of municipalities and the Association of Water Boards, with archival associations and institutions as partners in the project. The project includes the following specific action areas:

1. establish a digital infrastructure that will enable to transfer and manage digital archival records of the central government;
2. establish an organisational structure to provide services based on that digital infrastructure as well as develop those services;
3. digitise paper records: target to digitise approximately 10 % of the total archives (in custody) of central government in the next 15 years' and
4. develop a set of standards, guidelines and rules to enable sustainable access to (central) government information (records).

A second project, **Project DWR-archief**, aims to establish digital longevity of government records, in order to comply with legal and policy requirements for recordkeeping. The project is intended to improve information exchange amongst civil servants as well between government and citizens, resulting in increased transparency and improved access to information. This project is part of a broader I-strategy program of the Ministry of the Interior, intended to create coordinated government-wide information strategies and practices and to provide a strategic direction for the future of information management.

As well, the government has established a **Programma Digital Taken Rijksarchieven (DTR),** a digital archival programme for the government archives, running from 2013-2016. The objectives of this programme, which aims to reposition the National Archives and the RHCs to manage digital and digitised state archives effectively, are as follows:

- to develop a common digital infrastructure to enable the management of digital government records (in archives);
- to establish a set of requirements with respect to digital preservation and information management in government agencies; and
- to enable open access to digitised archival material.

A central component of the digital infrastructure is a (central) digital repository (referred to in Dutch as an e-depot). Each of the RHCs will be a tenant within this e-depot or digital repository, which will include both born-digital and digitised materials.

NAN is seen as a primary support agency for all these initiatives, helping the government by: accelerating the transition to a digital environment; building processes that can be carried out in a fully integrated, common digital working environment in order to support collaboration and information sharing; ensuring that requirements for keeping authentic and reliable records are integrated into these business processes; and replacing paper records with digital materials whenever possible to achieve the result that paper is no longer 'leading' the government operations.

UK: Streamlining Operations for the Digital Age in the United Kingdom

The United Kingdom has long been a leader in open access and information management. The UK government was ranked first in the Global Open Data Index in 2014, in recognition of its proactive approach to the provision of government data, records and information. To support the government's aspirations to provide easy access to the widest possible scope of public information, TNA developed a digital strategy in 2012 that focuses on developing streamlined and effective operations in TNA's three core areas of archival responsibility: collection, preservation and access. The vision for these three areas of responsibility is summarised below.

- To achieve its vision for collection, TNA is committed to developing stronger frameworks for the management of retention schedules; the appraisal of government records; the protection of digital records; the automatic 'publishing' of records to TNA via the web; and the construction of automated collection mechanisms.
- To achieve its vision for preservation, TNA is committed to building a 'simple repository' that: is scalable; identifies formats; cleans digital records of viruses and certifies them for authenticity; captures essential metadata; secures and holds the digital record without degradation; ensures the release of records after the 20/30 year closure period has passed; and protects privacy while supporting compliance with Freedom of Information requirements. As of 2013-2014, TNA had successfully completed the development of its Digital Records Infrastructure system to enable the automated transfer of all born-digital and digitised records, had moved the system into day-to-day operation, and had begun ingesting both digitised and born-digital records.[32]

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[32] http://www.nationalarchives.gov.uk/documents/annual-report-13-14.pdf.

- To achieve its vision for access, TNA has prioritised the development of an access system that provides research tools as well as search capacity; this system will also be open and reusable, will allow for a range of charging models and will enable users to contribute metadata and add moderated content TNA establishes and maintains rigorous standards for all aspects of its operations, including access and the management of digital content, as described in various policy documents available on TNA's website.[33]

TNA has also produced a range of other business and strategic plans to improve both digital and physical preservation facilities, increase funding, improve access to records and identify gaps in the representation of documentary heritage of England and Wales.

C.5. Scope of Service and Modus Operandi

In keeping with the scope of work for this Study, we examined the scope of service and modus operandi of the four comparator organisations, particularly with respect to how the selected authorities discharged the full spectrum of records management duties. This analysis is intended to provide a basis for the analysis of GRS operations, which will be discussed in Appendix D of this report.

Given the particular concern for records management operations, we have highlighted the following areas of operation:

(1) Standards implementation, in order to understand the application of recordkeeping standards to records and archives operations;

(2) ERKS implementation, in order to assess the role of the archival institution in overseeing, guiding or implementing electronic records management systems;

(3) Operational records management, whether the role of the archival institution is more hands-on support or to provide high-level advice and guidance;

(4) Records appraisal and scheduling;

(5) Records centre management;

(6) Records preservation, in order to understand how the organisation is positioned in terms of managing government records; and

(7) Microfilming and digitisation, particularly but not only with regard to the duplication of government holdings.

While it would be possible to expand the analysis of modus operandi considerably, we recognise that our responsibilities are limited to studying the records management operations of the comparator organisations specifically in order to assess potential future directions for GRS. Given the critical need to reorient records and archives services in jurisdictions around the world, in order to position those institutions to address the paradigm shift brought by digital technologies, we have focused our analysis on key issues of direct relevance to this transformation in recordkeeping service.

Standards Implementation

A great number of important international standards have been developed to support consistency on electronic records management. In order to assess the records management operations in the different comparator organisations, we must first examine whether and how they integrate these standards into their records management operations. While we recognise that other standards also apply specifically to archival operations, such as standards for archival description or the creation of cataloguing and indexing authorities, we have limited our analysis only to those standards specifically relevant to records management and recordkeeping.

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[33] See, for example, http://www.nationalarchives.gov.uk/documents/information-management/custodial_policy.pdf.

> **Highlights of key findings:**
> Our research revealed that all four comparator organisations formally adhere to and endorse the use of ISO standards for records management. Each comparator organisation also supports the use of other standards for specialist tasks within their institutions.

Indeed, NAA was the leader of the Australasian Digital Recordkeeping Initiative or ADRI (an international collaboration involving twelve other archival institutions) at the time that ADRI was working with the ICA to develop the functional requirements for managing electronic records in office environments, which evolved into the ISO 16175 standard. In the Netherlands, NAN continues to serve on ISO committees to support the development of records standards, including current participation in work underway to revise the ISO 15489 records management standard. The Netherlands Standardization Institute has also published its own standard outlining requirements for records management functionality in software (NEN 2082:2008 nl).

Each comparator organisation also supports the use of other standards for specialist tasks within their institutions. For instance, all four institutions follow best practice professional principles and standards for the arrangement and description of archival holdings. In Australia, NAA follows the Commonwealth Records Series System and the Australian descriptive standard *Describing Archives in Context: A Guide to Australasian Practice*. In Canada, LAC follows the guidance for arrangement and description outlined in *Rules for Archival Description*. NAN and TNA have both adopted the international standard for archival description developed by the ICA, *ISAD(G): General International Standard Archival Description.*

ERKS Implementation

A primary consideration in our analysis of scope of service is the archival role in the management of electronic records and information resources, including the implementation of electronic recordkeeping systems.

As discussed throughout this section, all governments in the jurisdictions studied are actively addressing electronic records management challenges, and the national archival institutions are becoming more directly involved in activities to support the effective management of electronic information and records. The particular focus of these archival institutions is on the development of guidance and best practice for the creation and preservation of digital records.

Highlights of key findings:

None of the institutions plays a direct role in the development, implementation or operation of actual electronic recordkeeping systems across their governments. Their focus, as outlined above, is on setting overall electronic records policies and standards and providing guidance and support for the capture and preservation of digital records. They are also actively involved with developing, testing and implementing digital repositories to hold digital archival holdings within their custody and control. While several of the organisations were involved with certifying software systems at some point, they all appeared to have stepped away from that responsibility for one reason or another.

At one time, the Australian Government had 'preferred supplier panels' identifying approved software development companies and products; departments were required to select only from those products, unless they could present a compelling business case otherwise. NAA was involved in determining which recordkeeping systems were selected for the panel. When the panel listing was discontinued, NAA issued its own standard outlining functional requirements for electronic recordkeeping systems, which government offices were required to use when selecting from any recordkeeping system on the market. Later, that standard was withdrawn and, as of 2014, government departments are now required to use ISO 16175 for selecting or developing electronic recordkeeping software.

In Canada, Open Text was identified as the Government of Canada's service provider for document and records management as of 2010. But TBS has also developed a *Standard for Electronic Documents and Records Management Solutions (EDRMS)*, which endorses the use of the ISO 16175 standard but does not limit departments to the selection of a particular software tool.

In the Netherlands, NAN is responsible for providing guidance on standards, requirements and practices in recordkeeping but not for actual certification; it was noted that if NAN took up a role certifying and authorising ERKS and other applications it would require considerably more staff than presently at hand, given the number of applications in central government.

In the UK, TNA once pursued a policy of certifying a range of competing recordkeeping systems. This approach proved inefficient: it resulted in higher costs and it meant that there were difficulties with sustainability whenever government decided to reallocate responsibilities between different departments. The policy is no longer in place. Instead, TNA issues advice on records systems, rather than participating more directly in their development; examples include guidance on the use of Microsoft SharePoint as a records management system and on migrating records from EDRM systems.

The Evolution of Recordkeeping Technologies

Research suggested that there is a growing sense that ERKS, as dedicated recordkeeping systems, are evolving or changing as new types of documentary evidence – such as data in databases that have evidential value – need to be managed. ERKS systems are, essentially, digital versions of a paper recordkeeping model, oriented towards the needs of records managers, not the needs of business. In the current more distributed and complex digital environment, more advanced recordkeeping functionality is required, which will increasingly be integrated into business systems.

Further, it is increasingly evident that ERKS tools do not accommodate the reality that, in the digital age, evidence that needs to be captured and preserved may not even take a traditional documentary form any more. ERKS are not well designed to capture the broader universe of digital information, such as tweets, emails, websites and so on. An August 2014 review of records issues within the UK government noted that 'a more pressing issue is the systems in place for capturing and storing data, and organising it in a way that will enable records to be searched and retrieved. Almost all departments have struggled with Electronic Document and Records (EDRMS) systems, switching between systems as experience with earlier ones proved unsatisfactory."

Across all jurisdictions there was a common belief that acquiring an electronic recordkeeping system is a business decision and therefore should be determined by business drivers. Therefore, it seems that the role of national archival institutions in the process of acquiring such systems is becoming more focused on providing

advice and guidance on records management issues, not on taking responsibility for or participating in business-level planning about systems or technologies.

Operational Records Management

In our research, we also consider the role of the archival institution not just in the development of electronic recordkeeping systems but also in the overall management of organisational records (as opposed to the acquisition and preservation of private manuscripts, for example).

Highlights of key findings:

We found that despite, or indeed because of, the transformation in information and records management brought by digital technologies, all the comparator institutions approach records management from a media-neutral perspective. The distinction between digital or physical records is addressed as and when necessary to ensure effective preservation and management of records in different media or formats. But it is widely accepted that records – as sources of documentary evidence – ought not to be considered different simply because they take an analogue or a digital form. While archival institutions will have to establish a range of operational practices to manage the different formats in which evidence is created and kept, from paper to audiovisual to electronic, the role of the institutions in guiding their governments in making and keeping good records is focused primarily on standard setting and oversight.

We also found that the primary focus in all comparator organisations was on providing advice and guidance, not on formally auditing or monitoring records operations. Three of the four institutions studied – NAA, NAN and TNA – are responsible for records management standard setting and policy development, to support best practice in the governments they serve. These institutions also develop procedures, guidelines and advice on government records management.

In the Netherlands, advisory and supervision duties were undertaken by the General State Archives until about 1998, at which time the duties were separated, and an independent 'public records inspectorate' was established. The purpose of the separation was to distinguish clearly between the work of advice and guidance (now performed by NAN) and the work of inspection and supervision (now performed by a Public Records Inspectorate). In 2005, the Public Records Inspectorate was merged with the State Inspectorate for Archaeology, the Inspectorate of Cultural Heritage and the State Inspectorate for Listed Monuments.

As noted earlier, in Canada LAC and TBS undertake different but complementary duties with regard to records management, with the former responsible for setting standards and identifying records with archival value and ensuring their preservation and the latter developing policies and procedures to ensure compliance with those requirements.

None of the institutions has responsibility for monitoring or auditing records practice in order to ensure compliance with the standards set. All jurisdictions have an audit office, which includes oversight of internal administration and the operations of the public service – including the management of information resources and information technologies – as part of their central audit responsibilities. In practice, the enforcement in Canada lies largely in the hands of the Auditor General of Canada.

It is noted, though, that from 2011 to 2013 agencies in Australia were required to self-assess and report back to NAA. This requirements was initiated in part to validate and review a new assessment tool called 'Check-up,' which had been introduced at that time and which NAA wanted to test directly with government agencies. This assessment tool is still actively used as a central tool for guiding best practice in electronic recordkeeping across the Australian government.

In general, though, our research shows that the primary emphasis across all four institutions is on developing standards, guidelines, procedures and advice to encourage government offices to follow best practice in information, records and archives management, irrespective of the form or medium of the records in question.[34]

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[34] Source for Check up: http://naa.gov.au/records-management/check-up/index.aspx.

Records Management Training

In terms of records management training, both NAA and TNA provide such training for government staff. Currently NAN does not, but it is being repositioned to play a more central role in recordkeeping as part of the digital infrastructure initiatives underway as of 2013. In Canada, LAC and TBS work with the Canada School of Public Service, the training arm of the Canadian government, to develop and deliver training programmes in records management for government staff. (LAC also delivers internal training programmes for staff, to orient them to the operations of LAC itself.)

Records Appraisal and Scheduling

In our research, we also examined how the different comparator organisations approached the appraisal of government records and the development of retention and disposal schedules. Our research confirmed our understanding that these records management duties have changed significantly in recent years.

> **Highlights of key findings:**
> In the 21st century, digital information technologies are dramatically changing how archival institutions carry out core archival practices, such as archival appraisal. In the paper-based environment, the relationship between records management and archival administration was often limited and uncoordinated. Archivists may or may not have had a direct voice in deciding which records should be retained as archival and which could be destroyed when their operational value had ended. Further, there was a strong tendency to adopt 'selective' retention criteria when developing records retention and disposal schedules, so that the archivist could review actual records before deciding which should be kept and which could be destroyed.
> Today, the demands of digital information management are transforming the ways in which records are selected for their enduring value. As found in all the comparator organisations, national archival institutions have final authority for deciding which records will be kept as archives, and they exercise that authority in large part through the review of retention and disposal schedules or authorities. **More and more often, however, the act of appraisal does not happen after records are transferred into archival custody. That 'microappraisal' approach is now more than the exception than the norm. Instead, appraisal decisions are based on a 'macroappraisal' process, which involves assessing the functions and activities of the business unit in question, not the specific records it produces.** Retention decisions are incorporated into retention and disposal schedules, appraisal reports and other tools in order to support and document the whole process and results of the appraisal and scheduling efforts.

To carry out macroappraisal successfully, and to review retention and disposal schedules in keeping with high-level appraisal decisions, those staff members within the archival institution responsible for appraisal must understand not only archival principles and practices but also the business conducted by the departments or units whose functions and activities they are considering. It is common for archivists to be given portfolio responsibilities, with different archivists assigned to manage the overall appraisal process for specific units: one archivist in charge of several departments, another in charge of other departments and so on. These portfolio responsibilities may be rotated among the archivists involved, so that over time the archivists learn more and more about the wide scope of business across government and can bring that knowledge to all their archival duties.

The summaries below outline the current practices in appraisal and scheduling undertaken for the four comparator organisations, which generally reflect this new functions-oriented, macroappraisal approach. We believe that GRS can learn from the approaches adopted by these different institutions, which reflect their own changing understanding of the most appropriate strategies for appraisal and selection in their own jurisdictions. In all cases, the traditional after-the-fact microappraisal approach, which required the examination of individual series of records, sometimes many years after they were first created, has been replaced with broader macroappraisal approaches that support new and different strategies for the development of retention and disposal schedules.

Macroappraisal at NAA

NAA adopted the principles for appraisal and records scheduling outlined in Standards Australia's *Australian Standard for Records Management* (AS ISO 15489 – 2002). Derived from this, NAA follows a macroappraisal approach to appraisal and it uses a 'big bucket' scheduling process, which addresses much larger groups of records than in the past and focuses more on functions and activities than on records themselves. In this model, agencies generally develop schedules themselves, or with consulting support, following the standards and guidance provided by NAA. Very clear and strict processes must be followed for research, analysis, stakeholder consultation and document contents and composition. This process reduces the role of NAA in detailed review and agency interaction. In recent years the overall time frame for development and issue of a records schedule has gone from 2 years to only a few months in some instances.

NAA manages about 260 agency/function- specific schedules covering most of government. About 20% of those pre-date 2004, which means they are likely to be reviewed in the near future. NAA has only 14 general (whole-of-government) records schedules and relies on the Administrative Functions Disposal Authority (AFDA) as a key resource to address retention for administrative functions.

The actual disposal of records, by transfer to the custody or control of NAA or out of Australian Government custody or ownership, is regulated by Section 24 of the *Archives Act 1983*. Under this legislation, it is illegal to destroy records without permission from NAA, unless destruction is specified in another piece of legislation or is allowed as part of a normal administrative practice.

LAC

LAC not only follows the 'macroappraisal and functional analysis' approach to appraisal; LAC staff actually developed the model, which is now in use by archival institutions around the world. As explained above, the procedure, as outlined in LAC's *Guidelines for Performing an Archival Appraisal on Government Records,* focuses on researching functions and activities across government, rather than on assessing actual records, in order to identify functions of key importance in providing evidence about both government and governance. Following the macroappraisal model, LAC staff perform a high-level analysis of functions and activities, after which they perform a risk analysis to consider other factors that might influence appraisal decisions. Finally, they develop an appraisal report, which defines selection criteria of records to be preserved and transferred to the archival institutions, for review and consideration. In conjunction with the appraisal process, LAC authorises records retention and disposal schedules across government but leaves the actual task of developing those schedules to the departments responsible for the functions, activities and records in question. Ultimately, though, no department of government can act on its retention and disposal schedules until the schedules are formally approved by the Librarian and Archivist of Canada. Finally, the actual disposal of any government or ministerial record is permitted only with the written consent of the Librarian and Archivist of Canada or his or her delegate.

LAC issues five comprehensive schedules for the key administrative functions of all departments and agencies: human resources, finance, facilities, audit and ministers offices. LAC also manages another 2300 schedules, which includes some old schedules that are being replaced by agency-wide or branch-level schedules.

Appraisal at NAN

In the 1990s, the retention schedules of the Netherlands central government have been formulated following the 'institutional research' method, developed as part of the PIVOT project, which ran from 1992 to 2001.[35] Using the PIVOT methodology, archivists would appraise not the archival records but the activities of government bodies in relation to areas of policy. The results of this research are documented in a written report, which lays the basis for decisions about which records to retain and which can be destroyed when obsolete. Over time, the process was revised to include a concise historical-social analysis by an external expert, in order not only to consider the value of the records as evidence of government but also to assess their value as

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[35] PIVOT is a Dutch acronym for Project Invoering Verkorting Overbrengings Termijn or, in English, 'Project Implementation Reduction Transfer Deadline.'

resources about Dutch history and culture and their importance as sources of information about wider issues of governance in the Netherlands.

In 2008, NAN introduced a new appraisal methodology, which consists of three approaches:

- A risk assessment, which intends to identify how long records need to be kept based on the business perspective. This risk assessment is currently being undertaken at the Ministry of Defence as a pilot project.
- A so-called system analysis, which looks at the organisation to see where the most important centres of decision making are situated. This analysis will help to inform appraisal decisions.
- A broad perspective analysis, intended to identify so-called 'hot spots' in the political scene, society, etc. This analysis will help to assess the main developments (and events) in society, in order to document Dutch society effectively. This analysis is currently being undertaken at the Ministry of Education, Culture and Science as a pilot project.

The Dutch government is actively pursuing new appraisal strategies, in part to align with the vision, currently being articulated in the revised ISO15489 records management standard, that sees appraisal as 'the (recurring) process of evaluating business activities and work processes to determine which records need to be created and captured and how long the records need to be kept.'

Today, NAN's appraisal methodology involves a three-way 'strategic information consultation' between a representative of the government unit, the records manager, the archivist and an external expert representing the interests of the citizen. These groups work together to consider which records should be preserved or destroyed. The resulting draft disposal decisions are made available for public consultation and review over a six-week period. After all public inputs are received and consolidated, the Minister of OCW makes a final decision and publishes the disposal information officially in the *Staatscourant* (the government's official publication instrument). After publication of the decisions, another six weeks are scheduled to allow for public appeals before the decisions are finalised. Once the retention schedule (Selectielijst) has been confirmed and published, government agencies can destroy records according to the approved time frames, but they must report fully on any destruction they perform, noting what was destroyed, when, by whom and why.

The sum total of schedules currently in place in NAN number no more than a couple of hundred.

Appraisal at TNA

The appraisal and selection process for TNA also starts at a high level and includes only detailed analysis as required. The four-stage procedure is summarised below:

1) Departmental Appraisal: An appraisal report determines key business functions and defines series of interest.

2) Series Appraisal: A series-level appraisal questionnaire describes each series and records. If this series review is accepted, the process moves to stage 4. If this series review is not accepted, the process moves to stage 3.

3) File Appraisal: A file-level appraisal is conducted, by listing and considering individual files. If this file review is accepted, the process moves to stage 4.

4) Transfer Planning: The completion of a series-level time plan for each transferring series, to prepare for the work of description and cataloguing.

A detailed appraisal of individual files is conducted for only some series, most often from departments with major responsibilities that affect government and governance at a significant level. Large-scale collections of individual records, such as census records or military service records, are subject to macroappraisal at the organisational or government level.

The TNA maintains about 60 'operational selection policies,' which address appraisal decisions for different functions of government at a high level. These policies are, in essence, administrative disposal authorities relevant to records created across government, such as human resources, finance or administrative records.

Departments also produce their own appraisal reports for department-specific records, which are then reviewed by TNA and approved or revised. About 200-300 appraisal reports specifically related to operational records are currently in force across government.

TNA's records decision panel holds the ultimate authority for determining which records are to be selected for permanent preservation and whether they are to be preserved at TNA or in other places. No actual destruction of records may take place without that confirmation of records to be retained.

Records Centre Management

Our examination of records management in the four jurisdictions included an examination of their role in the management of semi-active records stored in records centres.

Highlights of key findings:
Our research revealed that only one of the four organisations studied – LAC – is involved with the management of government records that have not yet been transferred into archival custody or control.

In Australia, the NAA and other state archives in Australia used to store temporary records transferred by agencies in line with their disposal schedules. But the costs associated with storage and maintenance, along with an increasing shortage of space and the growing frequency of retrieval requests from agencies, meant that the archival institutions were effectively running secondary storage facilities. These institutions made a deliberate policy change and agreed only to accept permanent records. Temporary records in NAA custody were gradually destroyed once they had reached the end of their legal retention periods, and other records were returned to agencies to store themselves.

In Canada, LAC operates Regional Service Centres (formerly known as Federal Records Centres) to manage and store records in all media on behalf of over 200 federal government departments and agencies. Centres are located in Halifax, Québec City, Ottawa, Toronto, Winnipeg and Vancouver. These centres store records of continuing value to government institutions when it is no longer cost effective for them to be maintained in departmental premises. The centres also hold backup copies of electronic records which are deemed essential, in the event of disaster or emergency, to the operations of government and the protection of rights. The Regional Service Centre in Ottawa also manages the records of former military personnel, and the Centre in Winnipeg manages the records of former federal public servants.

In the Netherlands, the RHCs provide storage and preservation for archival holdings, not for semi-current records.

The UK government does not operate a records centre in the sense of a storage facility that holds and processes large quantities of non-current records before they are either destroyed or transferred to the archives. Rather, each department makes its own arrangements for managing its own non-current records. Many of these services are now contracted out to private document handling contractors.

Records Preservation

Our analysis included consideration of archival responsibilities for records preservation, in order to understand how the organisation manages the physical protection of government records.

Highlights of key findings:
We learned that all four institutions have state-of-the art preservation and conservation facilities and they all draw on the expertise of a range of preservation and conservation professionals to support archival preservation and conservation. An overview of the preservation facilities and priorities for each jurisdiction are summarised below. As shown in the descriptions below, digital records management is a major concern for all institutions at the moment.

Australia

NAA operates several physical archival repositories (most of them purpose built) in Canberra, Melbourne, Sydney, Brisbane and Perth; NAA also stores digital records in the Canberra and Sydney repositories. A number of new construction projects are underway to increase storage space, allowing NAA room to accept records up until 2031. These initiatives include an upgrade to the Sydney facility and the construction of preservation and storage facilities in the Australian Capital Territory (ACT).

In its 2014-15 to 2018-19 corporate plan, NAA confirmed its core preservation responsibilities to 'plan and manage the efficient transfer, description and storage of records from agencies and ensure optimal use of our storage facilities across Australia' and to 'store the records we hold in appropriate environmental conditions.' NAA also identified digital preservation, audiovisual obsolescence and digital access as key challenges and established two specific strategic priorities directly related to preservation. These strategic priorities include: ensuring contemporary storage capability to secure and preserve the archival resources of the Commonwealth; and providing leadership and support for the transition to digital information and records management capability across the Australian Government.

Canada

LAC operates a dedicated Preservation Centre in Gatineau, Quebec, with 48 separate storage vaults of approximately 350 square metres each over three floors. The facility includes preservation laboratories for conservation treatment; preservation copying of records; and digitisation. LAC also maintains Federal Records Centres in Nova Scotia, Quebec, Ontario, Manitoba and British Columbia to hold federal archives generated in the regions.

LAC's business plan for 2013-2016 highlights two major preservation priorities. The first is to 'improve documentary heritage preservation in analogue and digital formats,' with the expected outcomes of ensuring 'information resources are digitized and migrated toward a sustainable format to ensure long-term access and preservation,' and ensuring that the 'long-term preservation of information resources in analogue format is supported by a strategic, structured and sustainable approach.' LAC also aims to improve overall efficiency by such actions as implementing 'a long-term infrastructure strategy to meet the needs for space in a rigorous, responsible manner while taking the new digital reality into account.'

The Netherlands

NAN's headquarters and storage are in its main facility in The Hague, but other central government archives are stored in 11 RHCs around the country. There is a plan to open another storage facility in Emmen, near the German border. As well, the government has engaged the services of an organisation called Doc-Direkt, which has about 190 staff, to help the government reduce its paper records, which is currently about 150 shelf km.

While NAN seeks to achieve best practice standards in all its preservation duties, for both analogue and digital materials, its main priority in 2015 is to support the transformation of the workflow of the Dutch government by offering the digital archival infrastructure for records preservation. Therefore, the government has acknowledged the need to develop 'a well-equipped Nationaal Archief' with a primary focus on electronic records management and digital archives preservation. As noted elsewhere, to support this goal, the Minister of OCW has budgeted more than 31 million Euros to equip the National Archives with the necessary infrastructure for electronic records management and for the digitisation of holdings. NAN's preservation emphasis now is on prevention and on providing advice to records creators and parties responsible so that it is possible to transfer digital archives in an organised and accessible form. NAN also aims to digitise 10% of paper archives holdings, with selection criteria for digitisation based on the frequency of use, in order to facilitate both preservation and access.

To support planning in digital preservation, NAN is actively collaborating on national and regional initiatives, including the **National Coalition on Digital Preservation (NCDD).** The NCDD was founded in 2008 by organizations from the public sector who care for the digital information in the public domain among their core business, and the coalition aims to set a national agenda for digital preservation across institutions that have a responsibility for recordkeeping. Participating institutions include the Institute for Sound and Vision, the

National Library, the National Archives, Data Archiving and Networked Services (DANS) and a coalition of other cultural institutions.

Within the NCDD is a coalition specifically for archival institutions called the Archives Coalition on Digital Preservation or ACDD. Established in 2010, ACDD aims to collaborate on the development of common e-filing facilities for the archive sector. Members of ACDD include the National Archives, the Municipality of Rotterdam, the Amsterdam City Archives, the eleven Regional Historical Centres, the sector records offices in the Netherlands, the Royal Society of Archivists in the Netherlands (KVAN), the National Organization of Provincial Archive Inspectors and the Foundation for Digital Heritage Netherlands (DEN).

The United Kingdom

As mentioned, TNA's headquarters and primary storage facility are at the main building in Kew, but TNA also stores archives in a commercial storage facility (called DeepStore) in Cheshire, England. A digital repository is in the early stages of testing and implementation as of January 2015. TNA reports that it keeps about 83% of its holdings at Kew, with the remainder at the Cheshire facility.

According to its 2011-2015 business plan, TNA's preservation priorities are to 'ensure optimal physical and digital preservation,' by striving to achieve the a range of goals, including: enhancing capacity for capturing official records in digital form; developing a 'formal approach to digital records transfer' from departments; developing 'standard business and technical architecture to gain economies of scale, and provide best practice for the wider sector'; providing 'accredited best practice' for physical and digital collections in archival institutions around the country; 'clarifying its approach to managing both its Kew location and offsite storage facilities; and providing 'advice and support for the wider sector on cost-effective preservation in tandem with an accreditation and skills programme.' In this plan, the TNA notes that its collections will always combine paper and digital records and that the preservation of different records brings their own challenges. However, TNA acknowledges that 'as the balance of accessioned government records shifts from paper to digital, we will more clearly define and provide resources for a digital preservation approach to our collections.'

Microfilming and Digitisation

Another aspect of government records management worthy of examination is the role of the archival institution in microfilming or digitisation, particularly with regard to the duplication of government holdings. As discussed under the analysis of preservation priorities above, all institutions see digitisation as a priority not only to enhance access but also to support preservation and conservation, a key requirement for effective and records management. The legal admissibility of electronic records is a critical issue being addressed by national archival institutions around the world, including in the comparator organisations. It is one of the most important topics for the future of the management of electronic records, and is one of the reasons that national archival institutions are focusing more attention on strategic research and planning, in order to stay at the leading edge of issues such as ensuring the authenticity and reliability of electronic records in the digital age.[36]

> **Highlights of key findings:**
> In all four institutions, digitisation has replaced microfilming as the preferred reproduction process, though all institutions continue to hold and make available the microfilm materials in their care.
> None of the institutions carries any direct responsibility for microfilming or digitising the current records of government departments or agencies as a records management service. However, they all provide guidance and oversight about standards for digitisation and microfilming, in order to ensure the materials and processes

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[36] Extensive research is being conducted across the international archival community to address issues such as the authenticity of electronic records, and all national institutions studied have dedicated staff resources to researching this issue either within their countries or as part of national or international research initiatives. Of particular note, the Director General of NAA, in his capacity as President of the International Council on Archives, is actively promoting analysis and policy development in the management of electronic records. On 11 March 2015, for instance, he spoke on 'e-Government: Policy Responses from the National Archives of Australia," at Library and Archives Canada in Ottawa, as part of a collaborative visit between the two national institutions. See http://www.bac-lac.gc.ca/eng/news/Pages/2015/wallot-sylvestre-david-fricker.aspx.

NAA has received transfers of digital records into its e-repository, but it has not yet established a formal and regular transfer process.

LAC completed the development of a TDR in 2011 but found that the system could not accommodate the wide variety of digital materials expect to come into custodial care; LAC has committed to the start of a 'digital transformation' programme that would see the incorporation of a variety of digital repository models, based on a 'stewardship' approach that allowed for flexibility and sustainability over time.

NAN's 31 million Euro project includes the development of a trusted digital repository.

Finally, TNA has constructed its TDR and, as of January 2015, has begun testing the process of ingesting digital archives. At present, no institution has begun to receive accessions of digital records from government offices on a regular and formal basis.

C.6. Organisation and Management Structure

Our examination of organisational and management structures highlighted many interesting insights in approaches across the different jurisdictions such as: the organisational placement of the institutions; their reporting relationships to higher levels of government; the authority and position of the Head of Institution; the organisational structures within each institution; approaches to internal leadership and management; and the nature of external relationships and collaborations.

We do not believe GRS should consider replicating any of these different structures. Government organisations should keep with their local legislative and regulatory frameworks and no approach is immediately transferable to another jurisdiction without adaptation to accommodate different organisation and management conditions. GRS should consider examining and potentially adapting the different international approaches in order to enhance its own management practices.

Institutional Arrangements and Reporting Responsibilities

Each archival institution is placed in government as outlined below. All the organisations are responsible for producing a variety of strategic and operational plans, business plans, reports on performance and so on, many of which are publicly available on their official websites.

Table 8 – Institutional Arrangements

Australia	Canada	The Netherlands	UK
NAA is a portfolio agency within the Attorney-General's Department of the Australian Government, within the 'management of government records' portfolio. **NAA and the Advisory Council both report to the Attorney-General of Australia.**	LAC is a branch of the federal administration, operating within the Department of Canadian Heritage portfolio (as a departmental agency). LAC reports to Parliament through the Minister of Canadian Heritage and Official Languages.	NAN is an autonomous agency of the Ministry of Education, Culture and Science. NAN reports to the Minister of Education, Culture and Science and the Ministry reports on NAN activities as part of its reporting responsibilities.	TNA is an executive agency of the Ministry of Justice and a government department in its own right. TNA incorporates the Office of Public Sector Information, Her Majesty's Stationery Office and the Royal Commission on Historical Manuscripts. TNA and the Advisory Council both report to the Lord Chancellor.

Authority and Position of the Head of Institution

The Head of each comparator institution is posted at a senior level in government. The Heads are not subject to rotation within government. In all four institutions, the incumbent and recent predecessors all brought extensive related experience in disciplines such as archives, history and information management, as well as extensive experience in government management. Dutch legislation requires that the General State Archivists in the Netherlands must have formal archival qualifications. In the other institutions, no specific archival qualifications were identified.

In the consideration of heads of institution, it is important to note the unique nature of the position of National Archivist in the Netherlands. In that jurisdiction, a distinction is made between the roles and responsibilities of the general director of the National Archives and the General State Archivist. According to the Archives Act 1995, the General State Archivist is: the advisor to the Minster of Education, Culture and Science in matters related to archives throughout the Netherlands; is responsible for the management of the archival records of the central government; and has a delegated mandate on behalf of the minister to approve (or not approve) retention schedules that are made or reviewed by government organisations at all levels of government. According to legislation, the General State Archivist has to have a master degree in archival science. The General Director of the National Archives, on the other hand, is responsible for leading the NAN as an institution. Given the strictly administrative role, there is no requirement for this person to have archival qualifications. There is no reason that both roles/positions cannot be performed by the same person, however, and currently that is the case, with one incumbent responsible for both roles.

Table 9 - Rank of Head of Institution

Australia	Canada	The Netherlands	UK
Rank: DG **The Director-General is the most senior civil servant position in a government department, reporting directly to the minister responsible for that department.**	Rank: GC-8 Directors are ranked GC-1 to GC-10 with GC-10 as the highest.	Rank: S17 Senior civil servant positions rank from S1 to S18; above this rank are government ministers and senior managers of major government agencies such as the Dutch National Bank.	Rank: Senior Civil Servant 2 (SCS2) Directors are ranked SCS1, SCS1A, SCS2, and SCS3, with SCS3 as the highest.
Notes on education and qualifications: **Five out of the 10 previous heads have prior archival management experience.** **The current head of NAA has a background in computer science and was the Chief Information Officer for the Australian Security Intelligence Organisation. He is currently (as of 2014) the President of the**	*Notes on education and qualifications:* The current and previous two heads all hold post-graduate degree in History or Applied Human Science, and have archives-related senior management experience. A previous head of LAC, Ian Wilson, served in several senior positions with the International Council on Archives and is a member of the Order of Canada and of France's *l'Ordre des Arts et des*	*Notes on education and qualifications:* The current head has a Master's degree in Archival Science and has prior archival management experience. The previous head, Martin Berendse, has a degree in law and held several senior positions in the Ministry of Education, Culture and Science before his appointment as Director of The National Archives of The Netherlands in 2007. He completed the	*Notes on education and qualifications:* The current and previous two out of the four heads hold a Master's degree. The current head of TNA has a Masters' degree in history and had extensive experience of archives and libraries. The current head and two of his recent predecessors worked at the British Library before joining TNA. Recent Chief Executives have had strong management focus, one of whom had

Australia	Canada	The Netherlands	UK
International Council on Archives.	*Lettres.*	archival training required by law in order to take up the position of General State Archivist in May 2009.	an MBA and another of whom had previously worked at a major consultancy.

Overview of Organisational Structures

A high-level overview of the organisational structures of the different institutions is presented below, current to 2014.

Highlights of key findings:

The key findings below represent the common observations from all four international jurisdictions:

1) All the organisations have independent functions responsible for strategic planning and policy setting. The names of those functions are:
   a. Strategic Planning and Governance (in the branch of Executive and Information Services) of NAA;
   b. Strategic Research and Policy (in the branch of Corporate Secretary) of LAC;
   c. Strategic and Policies Research of NAN; and
   d. Information Management and Practice, Information Policy and Standards (in the branch of Information Policy and Services) of TNA.
2) Roles and responsibilities are clearly defined within each office or branch.
3) Two out of the four organisations have specific departments for legal or legislative services: Legal Services in NAA and Legislation Services in TNA.
4) Three out of the four organisations have facilities/holdings management departments: Facilities and Procurement in NAA, Holdings Management in LAC, as well as Estates and Facilities in TNA.
5) Three of the international organisations have public facing services related functions within their organisation structures: Access and Communications in NAA, Services in LAC and Public Services and Human Resources in TNA.
6) Three international organisations have in-house information technology department to handle their own information systems: ICT Infrastructure Support and Systems in NAA, IM and Corporate Systems in LAC and Information and Communication Technology in TNA.
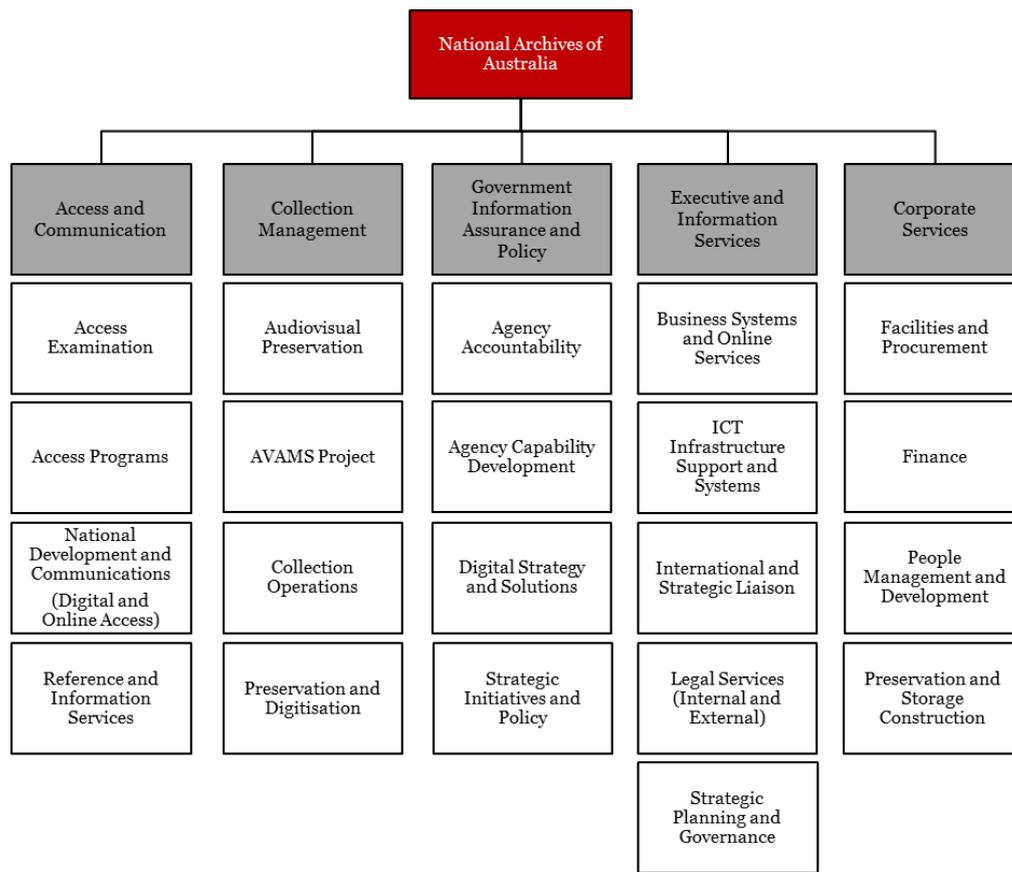

Figure 6 – NAA Organisation Chart

NAA is composed of 5 departments:

1) Access and Communication is the public face of the NAA, delivering reference, digitisation, exhibition, website, education, marketing and event services.

2) Collection Management manages transfers of national archives from Australian Government agencies; stores, secures, preserves and describes these records; and reviews records already in NAA custody to ensure that they merit permanent retention.[37]

3) Government Information Assurance and Policy works closely with Australian Government agencies to help build capability and promote accountability in information management.

4) Executive and Information Services ensures compliance with regulations, examines sensitive records for access before their public release, oversees strategic relationships and provides executive support to the Director-General.

5) Corporate Services supports the NAA in meeting its obligations under the *Archives Act 1983* and in keeping with the requirements of the Portfolio Budget Statements Outcomes and Programmes.

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[37] Audiovisual Archive Management System (AVAMS) Project aims to build audiovisual asset management system with integrated analogue and digital capabilities.

Figure 7 – LAC Organisation Chart

LAC's different units perform the following activities:

1) Evaluation and Acquisitions is responsible for the systematic development of the LAC holdings and the appraisal of government and private records and for implementing a comprehensive strategy with the 600 other archives in the country to ensure that Canadian society is documented in all its complexity and diversity. This work is divided into two broad fields, dealing with aspects of governance and having the same staff deal with government records and related private acquisitions, such as to document governance and developments in these broad subject fields, after which strategies are developed for records management and advice and for filling identified gaps in the documentary record.

2) Services is responsible for all public services, reference, exhibitions and public programming.

3) Stewardship is responsible for the proper preservation, storage and retrieval of the holdings, as well as for copying and digitisation, condition assessment and identifying priorities for and maintaining oversight of the regional centres.

4) Operations Integration ensures that services, preservation activities and acquisitions are linked across the organisation and that projects are coordinated.

5) Innovation and the Chief Information Officer is responsible for LAC's technology infrastructure and for developing innovative ways to use technology to advance LAC's mandate.

6) Strategic Planning and Infrastructure Management is responsible for integrated planning and strategic development; financial management and accountability; human resource management; and planning and maintaining LAC's many buildings.

7) Strategic Research and Policy carries out forward planning and positioning of LAC and also monitors trends and opportunities.

8) Stakeholder Relations, Community Support and Collaboration manages the relationship between and, as appropriate, provides leadership to the national archival and library systems, the research and genealogical communities and international communities.

NAN Organisation Chart[38]
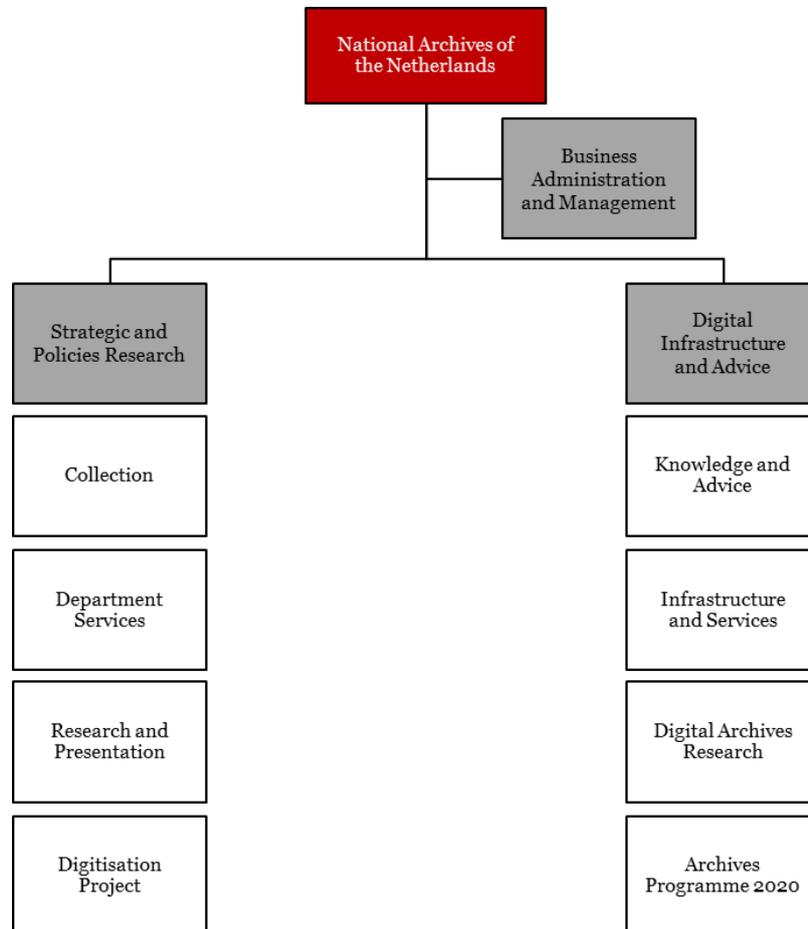
Figure 8 – NAN Organisation Chart

NAN is composed of 2 major departments and one minor department:

1) Strategic and Policies Research has a wide range of responsibilities from archival strategy, policy setting and appraisal to advisory services.

2) Digital Infrastructure and Advice is focused on digitisation initiatives to ensure that NAN continues to lead digital initiatives in Europe.

3) Business Administration and Management is responsible for providing administrative support in order for NAN to carry out its operations.

[38] The NAN organisation chart is translated from Dutch.

Figure 9 – TNA Organisation Chart

TNA consists of 6 departments:

1) Technology is in charge of reviewing the technology landscape, implementing practical improvements to TNA's systems and infrastructure, developing and managing digital preservation systems, leading research into digital preservation and related subjects and advising on longer-term strategic plans for technology.

2) Information Policy and Services provides leadership in information management and policy across government, the wider public sector and the archive sector to improve the way information is handled and exploited, in order to deliver real benefit for those that use and access this valuable resource. The unit in charge of Information Management and Practice also has responsibility for physical records management, and the department also provides administrative support.

3) Corporate Services and Finance is responsible for managing TNA's finances and liaising with Treasury. In addition, it is responsible for corporate planning, risk management, estates and facilities, on-site security, procurement and strategic project management support. As well, a team of project managers supports projects across TNA.

4) Public Services and Human Resources is responsible for providing and developing on-site, online and remote services to the public and to schools and leads TNA's human resources and organisational development work.

5) Customer and Business Development is responsible for customer, product and service strategies, partnerships and business development, trading services and marketing and communications.

6) The Chief Executive Office provides support for the Chief Executive Officer, including liaising with the Ministry of Justice and other government departments on policy issues, preparing answers to questions from MPs and overseeing complex Freedom of Information requests.

Internal Leadership and Management

Internally, the four organisations draw on the expertise of their management staff in different ways, in order to support planning and management, including creating internal leadership teams and, in some cases, by seeking input from external advisory councils. (The organisations also consult with stakeholders and the public, particularly during the appraisal and schedule development process, as discussed below.)

NAA draws on the support of its Leadership Team to provide guidance to the organisation and its staff and to support collaboration and consultations across the organisation. Each Assistant Director-General responsible for one of the five departments of NAA serves with the Director-General on this Leadership Team. Additional oversight and support is provided by an Advisory Council, established under sub-section 10-1 of the Archives Act 1983, which exists to 'advise the Minister and the Director-General on matters relevant to the Archives' functions.'

LAC has integrated a 'horizontal management' structure into its organisation, in addition to the traditional 'vertical' organisational structure, in order to support communications and collaboration across the organisation. The Operations Integration unit supports this horizontal integration by ensuring that services and activities across the organisation are linked and that specific projects are coordinated. The approach is also intended to improve decision making and to allow LAC to ensure its programmes and activities remain relevant for the government as a whole.

In the Netherlands, leadership for NAN lies with the board of directors, which comprises the National Archivist and his two directors (one for Infrastructure and Advice and one for Collection and Public Services).

In the UK, TNA brings its executive team together on a Management Board that advises the Chief Executive and Keeper on the plans and strategic direction of TNA and provides regular reviews of performance and risks. The Management Board is composed of the Chief Executive and Keeper (as chair), as well as five executive directors and up to four non-executive directors. TNA is also guided by the Advisory Council on National Records and Archives, which advises the Lord Chancellor on major objectives, programmes and policy changes, proposed legislation affecting TNA, the implications for records and public services of any proposed change to the status of TNA and any other subjects brought to its attention by the Lord Chancellor.

External Relationships and Collaborations

All four organisations participate in collaborative initiatives with different groups within their governments, across their countries and around the world. The information presented below is not exhaustive but instead highlights the level of national and international relationship building on the part of these institutions.

National Archives of Australia

Within Australia, the NAA:

- contributes funding to and helps manage the Community Heritage Grant, a programme funded by the Australian Government through the National Library of Australia; the Ministry for the Arts; the National Film and Sound Archive and the National Museum of Australia;

- regularly sponsors the annual conferences of both the Australian Society of Archivists and Records and Information Management Professionals Australia;

- maintains strategic relationships with various Australian government agencies to work towards the common goals of full, accurate, and secure records and information; and

- maintains relationships with organisations such as the Australian Society of Archivists, the Australian Institute for the Conservation of Cultural Material, Museums Australia and universities and other research institutions across the country.

Across the Australasian region, the NAA:

- operates shared reading rooms;

- meets regularly with national, state, and territory archivists of Australia and New Zealand;

- supports Blue Shield Australia in protecting cultural sites in Australia; and

- maintains relationships with regional associations, such as the RIM Professionals Australasia, an organisation that supports records and information management across the region, and the Pacific Regional Branch of the ICA.

NAA also plays a leadership role in the International Council on Archives. As noted, the current Director-General of NAA took up the post of President of the ICA in 2014. NAA is also active in the Forum of National Archivists or FAN, an ICA group of institutional members from central or national archival institutions, who offer 'high-level strategic responses to the contemporary challenges of managing archives.'

Library and Archives Canada

Aside from offering advice, support, services and training to federal institutions in Canada, LAC also provides advice to other agencies on request, and LAC staff regularly present papers at conferences, symposiums and forums. The goals of LAC are supported by the Friends of Library and Archives Canada, a volunteer organisation that aims to

- promote and encourage public awareness of, interest in and protection for the work of Library and Archives Canada (LAC) in fulfilling its role as a preserver of the documentary heritage of Canada;

- provide interested persons and organizations with the opportunity to share in the programs and activities of LAC;

- attract donated collections of published Canadian and archival material as gifts to LAC; and

- generate revenues, raise funds and organise fundraising events in support of a variety of LAC endeavours, including special acquisitions.

LAC also provides leadership and coordination for the Canadian archival community, including providing foundational support for the creation of the Canadian Council of Archives, which serves over 500 co-operating archival institutions across the country. Conceptually, the 'National Documentary Heritage' of Canada is represented in this collaborative system of independent institutions.

LAC has been a leader in international archival initiatives. The former Librarian and Archivist of Canada Ian Wilson served as the President of the ICA's CITRA round table in 2000, was a vice-president of the ICA from 2000-2004 and served as President from 2008-2010.

The National Archives of the Netherlands

NAN actively collaborates with institutions across the Netherlands as part of the National Coalition on Digital Preservation, in order to establish a national agenda for digital preservation. In 1996, NAN worked with other cultural heritage institutions in the Netherlands to develop the *Atlas of Mutual Heritage,* a digital academic catalogue of images.

Across Europe, NAN is involved with:

- Open Preservation Foundation – originally the Open Planets Foundation, a worldwide collaboration founded in 2010 with the goal of developing and sustaining technology and knowledge for digital preservation; and

- Archives Portal Europe or APEx, a framework for European archives to collaborate for wider and enhanced accessibility to their web content. NAN currently serves as project manager for APEx, which includes participants from 33 European archival institutions in 32 countries.

Internationally, NAN is involved with the ISO TC46/SC11 working group on recordkeeping standards and with the DLM Forum, a platform for the exchange of experiences and information between interested parties across sectors active in information governance. NAN has also worked with the National Archives of Indonesia from 2010 to 2012 to develop projects that support the digitisation of archives related to Indonesia and to the history of the Dutch East Indies. NAN has also played an active role in the ICA, with the former National Archivist Martin Berendse serving as the ICA President for two terms, from 2010 to 2014.

The National Archives of the United Kingdom

Within the United Kingdom, TNA works collaboratively with the Arts Council England; the Local Government Association; the Digital Preservation Coalition; and the British Library. The TNA also works with the Friends of The National Archives, whose 1,000+ members work to 'promote and assist the work of The National Archives through fundraising and practical support and educate the public in the knowledge of public and other records.'

TNA also works with various government security organisations to run training in IT security for staff in departments, and the Chief Executive of TNA meets regularly with the Information Commissioner on issues regarding Freedom of Information or Data Protection. The TNA is also active in ARA, the Archives and Records Association of the UK.

TNA provides leadership to the archival community in England and Wales and provides guidance, training and development initiatives for the sector. It funds cataloguing initiatives and delivers digital catalogues from local archives through its online Discovery system. In addition, TNA has a strong education department which has a record of liaison with schools across the UK both physically and digitally. Internationally, members of TNA's staff contribute actively to seminars and conferences around the world.

C.7. Staffing

The most complex area of comparative research for this project was the study of different staffing levels, responsibilities, grades, ranks, and qualifications. Gathering data was often problematic and the information gleaned was often limited, particularly because detailed staffing information is rarely shared outside of the boundaries of specific institutions. We also recognise that it is not possible to compare actual staff numbers across jurisdictions, as factors such as the size, scope and complexity of government; the placement of the archival institution in government; or the level of attention on electronic records results in dramatically different staff levels and responsibilities.

As well, from our research and interviews with the subject matter specialists, we were not able to identify any critical factors that determine the basis of the establishments (or size) of these four comparator institutions. We however noted that sizes of these archival institutions are influenced by the bargaining power of the Head of these institutions and his authority to develop strategic staffing plans and budget independently for consideration by treasury functions in their respective governments.

Still, we believe that our research into staffing gleaned four key findings as follows.

Staffing Levels and Grades

In each institution, the total number of staff in all grades (based on FTEs or equivalents) is 429 for NAA[39], 858 for LAC[40], 136 for NAN[41] and 652 for TNA.[42]

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[39] A detailed breakdown of staff allocations by department was not publicly available.

[40] This total number represents staff for both library and archival operations; a more precise breakdown was not available.

[41] According to communications with NAN, staff levels are expected to increase to 189.99 FTE, of which 54.27 will be temporary and the remaining 135.72 will be permanent. The breakdown of this 135.72 permanent staff number is:

- The Directorate for Infrastructure and Advice will have 32.8 staff, responsible for providing services;
- The NA will have 74.22 staff responsible for managing the collection and providing access; and
- 28.7 staff will work in facility management and policy development.

Regarding the temporary staff, a large portion of them (41.77 FTE) will work on IT-related projects in the Directorate in charge of Infrastructure and Advice.

[42] In the attempt to break down the number of staff according to different functions, we noted that different sources provide different total number of staff for TNA. The numbers below, which represent the most authoritative information we can locate, provide a general a sense of distribution of resources within TNA:

According to the "Senior and non-senior civil servants' pay data" from TNA's website, which is undated, the total number of FTE is 571.42 (Source: http://www.nationalarchives.gov.uk/about/our-staff.htm). Breakdown of FTE as below:

A summary of staffing levels and grades applicable within each institution is shown in the table below, followed by a more detailed analysis.

Table 10 – Staff Grades

Australia	Canada	The Netherlands	UK
Non-executive (junior government staff) grades, which includes archival positions, range from APS 1 to APS 6. **Executive level staff grades range from EL 1 to EL 2.** **Senior executive service staff grades range from SES 1 to SES 3.** **SES grades are considered senior government staff but below the level of Director-General.**	Historical Research grades (for professional archival staff) range from HR1 to HR 5. Executive (EX) staff grades range from EX1 to EX5. Governor in Council (GC) grades range from GC1 to GC10.	Archival grades range from S8 to S17. Staff with a university degree usually start at S10 and can reach S14. Senior managers will be in the range of S14-S16. The National Archivist is the only staff that ranks at S17. All civil servants (except the really high ranked people, such as ministers, secretary-generals etc.) in central government sit in the range of S1-S18.	Non-executive staff grades across government range from Band A to Band H. A records specialist or archivist with a post-graduate archival qualification would start at E, and more senior archivists would fall into F and G with heads of department at H. Senior Civil Servant grades in the Ministry of Justice range from SCS 1 to SCS 3. TNA directors are graded at SCS1 or SCS1A and the Chief Executive is at SCS2.

Below is a brief analysis of job classifications across the four jurisdictions. This analysis is largely restricted to archival service but discussion is also included about other information or records positions within the government in question, not including the director-level position, which was addressed earlier.

This summary addresses the following key points: the general job classification scheme for archival service within the comparator organisation; identification of any pre-appointment qualifications needed by applicants to positions within the institution; information about whether or not staff in different grades within the institution can move to other jobs in the government as part of that grading structure; and whether or not there is another classification for staff with records or information management responsibilities across government, separate from the position of archivist.

- Senior staff (Executives): 7
- Chief Executive's Office (Junior staff): 11
- Customer and Business Development: 68.66
- Finance and Performance: 21.38
- Information Policy and Services: 124.91
- Operations and Services: 229.59
- People and Learning: 20.75
- Technology: 88.13

The "Workforce management information" shows that TNA has 633 headcount and 596 FTE as of Sep 2014 (not including agency staff and specialist contractors). However, the website where we downloaded this document has subsequently disappeared. The breakdown of FTE by rank is as below:

- AO/AA: 154.49
- EO: 124.95
- SEO/HEO: 261.18
- Grade 6/7: 60.3
- SCS: 4

In Australia, the Australian Public Service Commission (APSC) identifies records and archival duties across the government as falling within the scope of duties of staff within three different classifications. The APS classification ranges from APS 1 to APS 6; the executive level service ranges from EL1 to EL 2; and the senior executive service ranges from SES 1 to SES 3. These classes are in place across government and do not apply only to archivists. Civil servants classified within the APS classification may begin their careers as an APS 1, responsible for procedural, clerical, administrative support and operational tasks, but they can progress through all the ranks of government – or begin at a much higher level – with experience or if they commence work with qualifications, education or experience that places them at a higher level.[43]

Expected competencies within the different classifications vary in keeping with the level of authority and responsibility assigned. For instance:

- An employee at the APS 1-4 level 'understands general information management responsibilities for Australian Government employees and how they apply to their own work, understands the link between information and records management and the APS Values and Code of Conduct, or similar guidelines for non-APS agencies, and understands information is a business asset.' As of 30 June 2014, there are 165 APS 1-4 staff in NAA in total.

- An employee at the APS 5-6 level 'understands the link between information management responsibilities and accountability and is able to describe the benefit of information management to staff and the value to the agency.' As of 30 June 2014, there are 162 APS 5-6 staff in NAA in total.

- An EL staff member 'promotes and monitors information management responsibilities and understands the value of information as an asset to improve decision-making, service delivery, efficiency and effectiveness.' As of 30 June 2014, there are 88 EL staff in NAA in total.

- An SES-level staff member 'understands and models the general information management responsibilities for Australian Government employees and accepts personal responsibility for information management as part of their role, and understands the strategic value of information to improve outcomes and as a source of business intelligence.' As of 30 June 2014, there are 6 SES-level staff in NAA in total[44].

While there are no formal prerequisites for appointment in NAA, it is expected that incoming staff at any professional level, including new recruits with no previous employment experience, will have at least an undergraduate degree, which are often in subjects ranging from history and anthropology to the arts, computer sciences or other disciplines. Many recruits may have graduate diplomas or Master's degrees in archives/records/information management, and several such educational programmes are in place across Australia.

The APS, EL and SES classifications apply to a wide variety of roles across the whole of government. For instance, a review of a sample of job listings within the Australian government resulted in the identification of postings such as: APS 6: Senior Administrator; APS 4: Help Desk Operator; SES 1: Assistant Secretary of a Department; EL1: Accommodation Project Manager; and APS 4: Visitor and Tourism Officer. NAA simply uses the same government-wide classifications for its professional staff and then describes specific duties and tasks in relation to responsibilities for records or archives management.

Given the generic nature of the APS, EL and SES classifications, there is scope for staff mobility across the public service, if staff can demonstrate the knowledge, skills and abilities needed for particular jobs. Archival staff holding an APS, EL or SES classification are able to transfer anywhere in government, at their same or higher levels, if they can demonstrate their qualifications for the job in question.

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[43] Source: http://www.apsc.gov.au/publications-and-media/current-publications/worklevel-standards/aps1.
[44] Source: http://annualreport.naa.gov.au/2013-14/management-and-accountability/human-resource-management.aspx.

Because government classifications are not tied to the specific agency, staff working in information, records and archives management can move into similar roles across government. Equally, they can apply for other jobs where their experience and qualifications can be applied, but perhaps in a different way: for example, they may be engaged as business analysts or provide a support role for software/systems development, or they may take on project responsibilities for the implementation of ERKS or the management of web content.

In addition to archival jobs within NAA, there are many employment opportunities for information, records and archives management across the Australian government. All medium-sized agencies within government departments will have a dedicated records or information manager on staff, and many will actually have a small group of staff with records and archives responsibilities and expertise. Even small agencies would have someone with records and information management responsibilities included in their duties.

Canada

In Canada, archivists are classified as part of the 'Historical Research' job classification. According to the Jobs Canada description of this category, The Research Group

> comprises positions that are primarily involved in the application of comprehensive scientific and professional knowledge to the planning, conduct, evaluation and management of fundamental research, knowledge enhancement, technology development and innovation relevant to defence science, historical research and archival science, mathematics and the natural sciences.

Positions in this job category address not only archival responsibilities but also duties in areas such as history, anthropology, art, and natural and human sciences. Activities include: planning, conducting and evaluating research; promoting and disseminating knowledge; locating, selecting, analysing, classifying and exhibiting relevant material; participating in development and innovation in the field; and undertaking responsibilities for management, advice and leadership. Pre-employment professional qualifications are preferred but not necessarily required. However, all the staff positions are permanent that are not subject to regular postings which allows the retention of corporate knowledge and the accumulation of experience.

Job postings for archivists at LAC may require that successful applicants are graduates of a recognized programme in a field related to the position or that they bring an acceptable combination of education, training and experience. In particular, expected pre-appointment qualifications include 1) a Bachelor's degree with a minor in archival studies or a university degree with a certificate in archival studies; or 2) a Master's degree in archival studies, archival studies and information science, library science or history.

The HR position exists in various departments across the Government of Canada, and staff working in HR positions within LAC are eligible to apply for these positions, as well as to compete for other positions in government in other classifications. In the latter case, the candidates are assessed with other candidates in relation to their qualifications and experience; they are not limited by virtue of their current position as HR staff.

In addition to the Historical Research classification, the Government of Canada identifies a separate Information Services classification for people performing information-related work across the government. This specialty includes responsibilities such as: operating and controlling information management equipment and services; collecting, recording, arranging, transmitting and processing information; filing distributing information holdings; applying rules and regulations associated with information management; and planning, developing, delivering and managing government policies, programmes, services or other activities dealing with information, including access to information and privacy administration. The IS classification includes grades from IS1 to IS6.

The Netherlands

The General State Archivist must have formal archival qualifications, as must the Directors of the RHCs and the Directors of archival institutions at the lower levels of government (provinces and municipalities). But the National Archives is free to hire other staff as they see fit, and there is no specific job classification scheme for

archivists in the Dutch government. (In the 1962 *Archives Act* there was a distinction between archivists with a 'level A' qualification, from a university, and a 'level B' qualification, from a polytechnic institution. That distinction was removed in the 1995 legislation.) Common backgrounds for archival staff include university degrees in history, law, a language, sociology etc., and now that there is a formal programme in archival science at the University of Amsterdam, in addition to several programmes from polytechnic institutions across the Netherlands, more and more people receive a specialist education in the discipline. Other qualifications that may be required when applying for a job at NAN are knowledge of information management, systems development, information architectures and other topics related to managing and implementing information systems and information management programmes.

As noted, archives and records management education in the Netherlands takes place in polytechnic institutions (formerly classified as level B) and universities (formerly classified as level A). Additionally, a wide variety of other courses and programmes is available across the Netherlands. Most archival staff in the National Archives have university-level qualifications; today approximately 20 of the FTE staff at the National Archives have formal university degrees in archival studies.

Staff at NAN can move to other government agencies if they want to, since there is only one system of ranking across government. Staff do move around government periodically, often to take up positions in policy development or project management.

The United Kingdom

Job postings within TNA normally require job-specific skills (including, for example, expertise in a particular type of records). For archival posts, TNA normally requires a post-graduate archival qualification or a post-graduate qualification in history or a related field. TNA may also request proof that a candidate has 1) a post-graduate qualification in archives and/or records management that is recognised by the Archives and Records Association; or 2) relevant working experience recommended by Archives and Records Association. The UK Civil Service grades are specific to individual departments; there are no equivalent classifications that would enable archivists to easily move between departments.

In addition to jobs specifically within the TNA, the UK Civil Service identifies a distinct Government Knowledge and Information Management (KIM) profession, which is used to classify people performing information-related work across the government. This KIM profession 'is made up of qualified civil servants who look after knowledge storage and information management systems – assets that critically underpin the work of government.' The UK Civil Service's Government Knowledge and Information Management Professional Skills Framework, published in April 2009, outlines the key skills required by KIM professionals, including, at the highest level: strategic planning for knowledge and information management; using and exploiting knowledge and information; managing and organising information; and information governance. These specific KIM skills operate alongside an overall civil service competency framework issued in 2012.

C.8. Conclusion

This section has provided an overview of operations at the four comparator institutions chosen for this study: the National Archives of Australia, Library and Archives Canada, the National Archives of the Netherlands and The National Archives, UK. The discussion included: an overview of each institution; an explanation of the regulatory frameworks guiding not just archival operations but also the wider information, records and archives environment in each jurisdiction; an analysis of strategic initiatives and directions presently being pursued by the different governments; an examination of the organisation and management structures in each comparator organisation; a description of the different staffing structures in place; and a review of the scope of service and modus operandi in the four institutions studied, particularly in relation to records management operations. The purpose of this section is to illustrate the current status of services and structures at these institutions, with the hope that this information may prove useful for benchmarking, as we consider possible future directions for the GRS as the lead agency for records and archives services in the Hong Kong government.

As we examine the findings of our international benchmark research and consider the improvement opportunities for GRS, we must reiterate the critical reality that adjusting the operations of an archival

institution is not sufficient by itself to address the sweeping changes that come with the adoption of digital information technologies. The paradigm shift of the digital age is affecting all aspects of government and society, and government must develop approaches to addressing those changes at the highest level in a strategic fashion, not piecemeal. Therefore, while our specific remit for this project is to consider the potential for change and growth within GRS, we would strongly encourage the Government to look at the broader context of information and the fundamental changes brought by digital technologies.

We believe that lessons can be learned from the experiences of the different comparator organisations, not only in terms of the actual changes they have made to address digital technologies but also the lessons they have learned, often through their own trial and error. The international jurisdictions studied have made their own way through the difficult transition from the analogue to the digital age – in many ways they are all still striving to continue that transition – and GRS will benefit considerably from not simply adopting approaches applied in other jurisdictions but from considering the examples provided as GRS looks at opportunities to improve its own systems and services. Rather than 'accept and adopt' new ways from other locales, we urge GRS to 'analyse, apply and adapt' – approaching the transition to the digital age in a strategic fashion and recognising the importance of continually reviewing and amending records and archives management practices so that they remain current as the recordkeeping environment of the Government continue to grow and change over time.

Appendix D. - *Improvement Opportunities (Extract from Final Interim Report)*

D.1. Introduction

This section presents our analysis of potential improvement opportunities for GRS, to reposition itself more strategically and address the challenges it faces in achieving its vision and mission, especially in relation to the changes in the volume and complexity of information and records across Government. We recognise and emphasise the fact that these challenges are not unique to the Hong Kong environment – they have also been faced by other archival institutions around the world, as demonstrated in the institutional benchmarking analysis in Appendix C of this report. Where appropriate, therefore, we have supplemented our observations about GRS with insights from our research of the archival institutions in the four overseas jurisdictions, and we have also referenced international trends in archival management. We have also explored these areas with GRS personnel during our interviews with them.

D.1.1. Looking Forward: Records Management for Hong Kong

To support effective records and archives management in the digital age, the 'paradigm shift' of electronic records needs to be reflected in all aspects of any archival organisation's operations. We believe that the primary emphasis should be on the agency's role as standard setter for quality information, records and archives management across Government, as explained in our earlier discussion of the inter-relationship of those traditionally distinct duties. In the digital age, it is only through the effective management of information, records and archives from the point of creation to their ultimate disposal that authentic and reliable archives will be created and kept.

Conceiving of information, records and archives management not as independent activities (but as a continuum of care) helps to enhance operations not just in one agency (such as an archival institution), but also across Government and, ultimately across the jurisdiction represented by that Government. The immediate aim of records and archives management – of effective recordkeeping – as part of that wider information management responsibility, is to provide oversight and guidance for the management of all documentary evidence, regardless of form or medium, in order to:

   a. support Government accountability and transparency through quality recordkeeping;
   b. ensure the protection, for as long as needed, of reliable and authentic documentary evidence; and
   c. facilitate the preservation of and access to Hong Kong's documentary heritage.

To be as effective as possible, this wider information management responsibility will take into account the need to protect records and archives not just for immediate use but as evidence for the long term.

The positive outcome of this change in focus is that, as accountability, identity and memory are fostered, the value of information, records and archives is increasingly recognised across communities. The successful implementation of sustainable records and archives management systems within the Government now will help to create and foster a stronger recordkeeping regime for the whole of the Hong Kong and, perhaps someday, throughout the wider region.

Aspiring to be a leader in records and archives management, the GRS of the future will need to:

   • Establish and enforce best practice standards and requirements for recordkeeping among B/Ds, to enhance accountability, support identity and foster memory.
   • Promote best practice in recordkeeping and records and archives management among B/Ds and public organisations.
   • Support the preservation of authentic and reliable records and archives from B/Ds and public organisations, whether in custodial care or through decentralized oversight and control.

- Build and maintain a trusted digital repository for the preservation of authentic and reliable records and archives.
- Provide professional services for records and archives appraisal, acquisition, accessioning, and arrangement and description, regardless of the medium of the materials.
- Provide user-friendly, convenient and widespread access to records and archives, while ensuring respect for necessary restrictions on access and use, most particularly related to the protection of personal information.
- Support the development of comprehensive, diversified and representative archival collections for the benefit of the Government and citizens of Hong Kong.
- Promote awareness of and appreciation for Hong Kong's documentary memory and heritage.
- Play a leadership role in supporting and developing the records and archives field in Hong Kong, across Asia and around the world.

D.1.2. Regulatory Framework

While the scope of this Study is not intended to comment on the outcome of LRC's review into whether there is a need to introduce archival legislation, our comparator research shows that the introduction of formal legislation (a goal set out in the International Council on Archives' Universal Declaration on Archives, adopted by UNESCO in 2011[45]) has had a significant impact on the organisation, roles and responsibilities of those overseas archival institutions we studied. Our research also shows that the four overseas national archives all operate under formal legislative and regulatory frameworks that position those institutions not only as custodians of the archival record but also as leaders in the management of information and records across their governments. Two of the four institutions, Australia and the UK, also draw on the support of advisory committees or councils in their work.

Furthermore, ISO and other recordkeeping standards recognise the importance of identifying the regulatory environment in which records are created, managed, and used, and enhances archival institutions' ability to play an authoritative role in all aspects of recordkeeping, such as:

- setting policies and standards;
- assigning responsibilities and authorities;
- establishing and promulgating procedures and guidelines;
- providing a range of services relating to the management and use of records;
- designing, implementing and administering specialized systems for managing records; and
- integrating records management into business systems and processes. [46]

We therefore believe that it is important to highlight the impact that legislation may have on GRS should the Government decide to introduce archival laws. Doing this should help "future proof" GRS' organisation, staffing and modus operandi.

D.2. Areas for Improvement

Like other archival institutions around the world, GRS has been working to address the paradigm shift brought by digital technologies by developing strategies for records and archives management. We have identified three key areas of improvement:

1. Organisation and management structure;
2. Staffing; and
3. Modus operandi.

We will discuss the challenges in each of these areas and potential areas of improvement in the sections below.

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[45] According to the Universal Declaration on Archives (International Council on Archives): "We [ICA] therefore undertake to work together in order that: appropriate national archival policies and laws are adopted and enforced" Source: http://www.ica.org/13343/universal-declaration-on-archives/universal-declaration-on-archives.html
[46] ISO 15489-1:2001, Part 1, p. 4.

D.3. Organisational and Management Structure

We consider three aspects of organisational and management structure:

- Institutional arrangement
- Grade and rank of GRS Director
- Collaboration between GRS Offices.

The placement of the organisation within the wider Government, the grade and rank of its leadership and the ability of its staff to provide input into all aspects of records and archives management, would help project the necessary authority for GRS to fulfil its roles. These improvement opportunities are explored in the paragraphs below.

D.3.1. Institutional Arrangements

As noted earlier, there is no one 'correct' administrative placement for an archival institution within any government. Still, the most effective position, as articulated in ISO 15489, is one that gives the archival organisation the responsibility and authority to 'establish, document, maintain and promulgate policies, procedures and practices for records management,' and that ensures that those policies are 'adopted and endorsed at the highest decision-making level and promulgated throughout the organisation.'[47]

In the comparator organisations, we found that two institutions, Australia and the UK, are formally aligned with areas of government responsible for legal and judicial responsibilities, highlighting the institutions' focus not just on managing the historical record for its heritage and cultural value but also on ensuring accountable and effective information and records management across government.

The institutions in Canada and the Netherlands are both aligned with ministries responsible for matters related to heritage and culture, but both institutions still fulfil their legislated responsibilities for public-sector recordkeeping:

- Library and Archives Canada (LAC) is a branch of the federal administration, operating within the Department of Canadian Heritage portfolio (as a departmental agency) and it works with the Treasury Board of Canada. This institutional arrangement exemplifies a collaborative, team-based approach to information management as discussed later in this Study. LAC helps facilitate information, records and archives management, with ultimate responsibility and authority to ensure government information of enduring value is identified and preserved. The Treasury Board Secretariat provides more direct support to offices across government through the development of policies and guidelines and in assessing and monitoring compliance.
- In the Netherlands, the NAN is an autonomous agency under the Minister of Education, Culture and Science, who has reporting responsibilities on NAN activities. The Minister allocated 31 million Euros as part of a strategic plan to enhance digital infrastructures across the public sector, confirming the central role of the National Archives as a pivotal agency to support electronic records management. The growing recognition of the importance of accountable recordkeeping is leading to the recognition of more and more archival institutions as the 'integrity agency of government,' which is how the National Archives of Australia positions itself. As TNA explains, its strategic vision is forward looking, in order to secure the future of government records: 'For the record. For good.'[48]

At present, GRS is an executive arm of the CSO. Whether this continues to be the case, or GRS reports to some other part of Government or becomes a department in its own right, will largely depend on the outcome of the LRC review. However, in the short term we believe the placement of GRS within Government will stay the same. That said, we believe that there is an opportunity for Government to reconsider the placement of GRS once the recommendations of the LRC have been articulated.

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[47] ISO 15489-2001, Part 6.1.
[48] http://www.nationalarchives.gov.uk/documents/the-national-archives-business-plan-2014-2015.pdf.

D.3.2. Grade and Rank of GRS Director

As we have found in the comparator organisations, there is not generally a formal requirement for the incumbent to have formal qualifications in records and archives management, with the exception of the Netherlands, where the 'General State Archivist' (who also serves as the National Archivist) must, by law, be formally qualified in archival studies.

Our comparator research shows that: (i) the head of the national archival institution in all jurisdictions studied is selected through an open competition; and (ii) the selection process in recent years has favoured candidates with knowledge of and/or experience with information, records and archives.

Our research has also shown that in the four comparator organisations the position of head of the institution is not subject to rotation and is positioned at a very senior level within the different civil service structures:

- Australia: Director-General (DG) rank, which is higher than the Senior Executive Service or SES rank;
- Canada at the Director-level rank of GC-8, with GC-10 as the highest Director-level rank;
- the Netherlands: S17 rank, one rank below the highest senior civil service rank in government, S18; and
- the UK: Senior Civil Servant rank of SCS2, with SCS3 as the highest Director-level rank.

In the three of the four overseas jurisdictions, the post of the Head of the archival institution does not require the incumbent to have archival qualifications.

At present, the GRS Director post is a supernumerary PEO post that is held against a Principal Archivist post. The GRS Director is now a PEO who is subject to job rotation. While we understand that members of the EO grade are strong at general management, administering B/Ds and have substantial business knowledge on Government operations (especially about the types of Government records and about IT, HR and resource management), it is worthwhile considering how best to support the GRS Director so that the archival and recordkeeping knowledge held by staff across all functions of the organisation can be shared at the highest levels to support the sustainability and continued growth of records and archives initiatives over time.

The GRS Director plays a leadership role in recordkeeping across the Government. Currently, the GRS Director is ranked at D1 although, on occasions, he needs to liaise with peers in B/Ds who may be ranked at D2. [49]

We believe that there are opportunities for:

- GRS to consider how best to ensure that the relevant archival and recordkeeping knowledge and expertise is formally shared across the organisation to support records and archives initiatives and to advise the GRS Director.
- Government to consider whether GRS Director should be ranked at a higher level to help facilitate his leadership role in recordkeeping across Government.

D.3.3. Collaboration between GRS Offices and with the wider Government – a Team-Based Approach

With the impact of digital technologies, the need to manage records from the point of creation, or even before, demands a new and integrated approach to recordkeeping. The traditional division of responsibilities – with records management in one unit, archives management in another and preservation and duplication services in another – is giving way to more cohesive organisational structures that encourage the active involvement of recordkeeping specialists not only in the work of archival institutions but also more widely across governments, to allow governments to benefit from the skills and expertise of qualified recordkeeping staff to support all aspects of records and information management.

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[49] The most senior Directorate rank within the Hong Kong SAR Government is D8.

Recordkeeping is a team-based initiative in the digital age, which means it is no longer sufficient for archivists to wait for records to become 'old' enough to be transferred into archival custody. The complexity of records and information systems means that no one person – archivist, records manager, IT technician or government official – can single-handedly ensure the effectiveness of recordkeeping operations. Success in records and archives management depends not just on the integration of staff inputs but also on the presence of enough qualified professionals – working with allied professionals as teams – to support all aspects of recordkeeping across the organisation.

Currently, the four units of GRS – PRO, PSO, RSDO and RMAO – operate to a large extent independently of each other.

The PRO serves as the central repository for the permanent archives of the Government, with primary responsibility for the key archival functions of appraisal and accessioning; arrangement and description; public programming; and reference services.

The PSO's main functions are to protect Hong Kong's archival heritage through preservation (including digitisation) and conservation of archival and library holdings according to the decisions made by the PRO, and to operate the Government Microfilm Centre, which provides microfilm services for Government agencies.

At the same time, RSDO is responsible for promoting electronic records management across the Government, as well as for establishing electronic records management policies. As for RMAO, it is responsible for formulating records management policies and standards for B/Ds, providing training, advisory, review and records centre services, as well as supporting the development of records retention and disposal schedules and other disposal matters.

We believe there is an opportunity to revisit how the four units interact with each other so that there will be greater collaboration and inter-disciplinary working between different grades. For example, PRO staff could provide even more input into records management decisions currently made by RSDO and RMAO staff than it does now, thereby drawing more fully on the specialist knowledge, skills and experience of archivists and EOs. This information sharing can be both formal (e.g. through the reorganisation of work units or development of collaborative committees or teams) and informal (e.g. through the establishment of project-specific work groups).

Another benefit of collaborative approaches will be to increase the recordkeeping specialist's understanding of business operations across Government. By working closely as part of cross-organisational or cross-Government project teams, the archivist can not only contribute his or her disciplinary expertise, but also become more familiar with the business areas of B/Ds that he or she would not normally be exposed to. Similarly, EOs can contribute their knowledge about Government operations and also leverage their networks within the Government to help achieve the goal of wider scale of collaboration. Other staff will glean more insights about records, information and archives issues, which will help them become more effective recordkeepers in their own areas of responsibility. They can also share that knowledge with their own colleagues, disseminating the values of 'making and keeping good records' across the Government.

D.4. Staffing

Even in those archival organisations that are appropriately authorised and empowered, regular planning and review are critical to ensuring that the institution's operations meet the current needs of their government and citizens and that the institution continues to evolve and grow in an effective and strategic fashion. One of the areas to consider in such planning is the organisation's approach to staffing its records and archives operations.

In the digital age, the traditional custodial archivist position is being transformed to a recordkeeping position, responsible not only for the preservation and protection of custodial archives – whether in analogue or digital format – but also for helping organisations manage all their information and records. The archival institution staff's goal today is to manage documentary evidence in all its forms, from its creation to its ultimate disposition, in order to support organisational accountability, to help the organisation protect its documentary

heritage and to foster a sense of organisational and wider community identity. The potential improvements described below can supplement each other in building the right infrastructure to achieve these goals.

From interviews with GRS staff and from our observations, there are several opportunities around staffing that GRS may seize to improve its recordkeeping role in the Government, including:

- Enhancing the role of the recordkeeping specialist;
- Staff numbers;
- Career progression;
- Inter-disciplinary teams; and
- Professional qualifications and continuing education.

We examine each of these in turn below, to consider how improvements in these areas can assist GRS in building capacity to deal with the challenges it faces today, especially around the impact of digital technologies.

D.4.1. Enhancing the Role of Recordkeeping Specialist

A more integrated approach towards recordkeeping requires adequate numbers of qualified recordkeeping specialists[50] to provide advice, share knowledge and train civil servants about recordkeeping.

The development of effective recordkeeping policies and standards should be led by specialists with a strong understanding of the principles and practices of effective records and archives management. To allow these specialists to provide the best service possible, their particular knowledge, skills and expertise need to be deployed flexibly both within their organisations and more broadly across Government. Limiting the scope of records and archives support solely in traditional, custodial archival positions will limit benefits of this specialist knowledge.

Of particular importance to accountability is the incorporation of specialist oversight in the Government's management of records from the point of creation, not only when the time comes to move them into archival care. Staff across B/Ds cannot be expected to understand how and why to create, manage and keep electronic records effectively without clear guidance and support. As ISO 15489 highlights, compliance monitoring and auditing, as well as ongoing training in records management requirements and practices, are all essential to successful recordkeeping. Recordkeeping specialists should be at the forefront of these training, monitoring and auditing initiatives, in order to ensure that the B/D's records systems, procedures and processes meet all organisational policies, standards and requirements.[51]

Analysis of the four comparator institutions also shows that each draws on the services of recordkeeping specialists to provide advice, guidance and training to staff across governments, from those staff whose responsibilities include oversight of records and information management within their departments to those officers who must manage information and records as part of their day-to-day duties.

While GRS is actively involved in supporting records management across the Government, at present there appears to be limited involvement of archivist grade staff in this work. Feedback from interviewees suggest that archivists in the PRO remain focused on more traditional archival activities and tasks, while EO grade staff work separately to plan and develop recordkeeping strategies, policies and practices.

We believe there are opportunities for GRS to consider enhancing the role of archivists from the more narrowly focused traditional after-the-fact archival responsibilities to a role that also encompasses the provision of:

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[50] Recordkeeping specialists include the below two types of staff:
1. Records managers: They focus on providing day-to-day support for creating, using, managing and storing records within B/Ds. They include Departmental Records Officers who oversee all aspects of records and information management in their B/Ds.
2. Archivists: They focus on researching standards, setting policy, developing guidance, and providing support for the management of records and for acquiring, preserving and making those archives available as part of the holdings of an archival institution. These include Archivist grade staff as well as General grade and Curator grade staff who participate in various records and archival management duties.

[51] See, for example, the guidance provided in ISO 15489-2001, Parts 10 and 11.

- policies, standards and guidelines development (including for electronic records management)
- advice both to other GRS Offices and to B/Ds
- training for civil servants with recordkeeping responsibilities in B/Ds (e.g. Departmental Records Managers)
- engagement with stakeholders (e.g. users and external archival specialists)

We also note that the function in GRS is performed by various grades of staff. Regarding EO grade staff, while they have a deep knowledge of Government operations and take workshops on records management issues, due to regular job rotation requirement, EO staff faces steep learning curve in developing recordkeeping expertise, GRS also faces challenges in the retention of knowledge and expertise developed by these EO grade staff. We believe that there are also opportunities to strengthen the capacity of EO grade staff and to increase the sustainability of records operations across Government, by considering:

- increasing training opportunities in records and information management for EO staff, to support capacity building
- establishing and supporting team-based initiatives that allow EO grade staff and archivists to work together on Government information and records initiatives, increasing the recordkeeping expertise of the former and broadening the understanding of Government business for the latter

For Departmental Records Managers to be able to discharge their responsibilities effectively they need:

- To be given a span of responsibilities by the organisation that allow them sufficient time (and sufficient support by senior managers) to ensure that the desired quality of records management is being achieved and maintained;
- To have sufficient professional knowledge, preferably before they take up the post; and
- To be supported by a knowledge-sharing and capturing process that allows experience picked up across different agencies to be aggregated, assessed and converted into updated procedures or a knowledge base that preserves the insights gained even as individuals move in and out of the system.

D.4.2. Staff Numbers

As we see the recordkeeping specialist's role being strengthened, we expect there will be an increase in the overall number of such specialists across GRS. We anticipate an opportunity to redefine staff duties and responsibilities to ensure that staff with recordkeeping expertise is directly involved in all aspects of records and archives management planning, development and maintenance. This reorientation of staff duties would greatly enhance the ability of GRS to accomplish its core mission to support records, information and archives management across the Government. Our assessment of the operations of GRS suggest that the overall staff capacity within the organisation, particularly for recordkeeping staff, could be better aligned to the growing responsibility GRS faces for both records and archives management. This alignment could also support the development of a strong and sustainable framework for electronic records management for the Government.

At present, GRS has a staff strength of 112, of which 20 are EOs, 17 are archivists[52] (all of whom work within the PRO) and 75 are other grade staff.[53] Our analysis of GRS' current establishment, along with feedback from interviewees shows that GRS does not have in-house ERM and IT specialists to help facilitate digital initiatives. Further, archivists were not able to place sufficient effort and focus in the development of electronic recordkeeping systems due to limited resource and capacity (i.e. majority of their time is spent on the major duties of the Archivist Grade such as records appraisal, records description and arrangement, reference services as well as publicity programmes), albeit having participated in the Task Force on the Preliminary Study of Long-term Preservation of Electronic Records, revision of RM publications and guidelines, development of records management standard on metadata and implementation of ERKS. The design and development of electronic recordkeeping systems need to take into account the critical requirements for authenticity, reliability and protection of records as evidence, for present use and for long-term preservation as authentic archives. We

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[52] As of October 2014, in PRO, there is a total of 17 Archivist grade staff (1 Archivist, 5 Senior Assistant Archivists and 11 Assistant Archivists). There are also 2 Librarians seconded to PRO
[53] As of October 2014, there are 2 Librarian grade staff, 3 Curator grade staff and 70 other staff.

believe these tasks require the involvement of EOs, ERM and IT specialists and archivists. Given the important task of GRS to take the lead in the development of a trusted digital repository (TDR) and working together to support the preservation of digital records and archives by promoting digital information management tools such as ERKS wherever they are kept across the Government, closer collaboration between recordkeeping specialists and IT specialists will be critical to success.

We believe that there are opportunities to increase the establishment of GRS so that it has access to the necessary skills, knowledge and expertise (e.g. digital records management, recordkeeping policy development, information technology and monitoring and compliance, and to undertake effective and efficient recordkeeping responsibilities for both analogue and digital records. This change will allow GRS to follow the example of international best practice comparator institutions, who are all striving to re-orientate their own organisations and practices to address the challenges of the digital age.

D.4.3. Career Progression

As discussed above, GRS may be able to make better use of the talents and expertise of its professional records and archives staff by also considering the expansion of responsibilities of the Archivist grade. However, there are more limited career progression opportunities for the Archivist grade, which, as feedback from interviewees shows, makes it challenging to retain the more junior rank staff.

At present there are four ranks within the Archivist grade: Principal Archivist (currently vacant), Archivist, Senior Assistant Archivist (SAA) and Assistant Archivist (AA). On the other hand, five levels of Executive Officer grade staff exist within GRS.

Our analysis of the job descriptions within the Archivist grade highlights that these posts are narrowly defined and do not include the development of electronic records management policies and guidelines and the formulation of recordkeeping strategy for the Government.

We are also aware that there is a gap in promotion prospects. With the SAA rank, the maximum pay point is set at Master Pay Scale 33, followed by the Archivist rank, the minimum pay point of which is set at Master Pay Scale 45. Although there have been suggestions by interviewees to establishing a new rank (Master Pay Scale 34 to 44), we believe the issues are (i) the overall number of archival staff; and (ii) the scope of responsibilities of archival staff. GRS needs to take a more holistic approach by considering the expansion of the archivist role from focusing on being the custodian of historical archives to also play a key role in the protection of records and archives to support accountability, identity and memory across the Government.

Broadening the archival post to encompass the wider scope of recordkeeping will naturally lead to the expansion in the scale of the archival grade staff within GRS, which will then lead to a more diversified career path for archivists and hence increase career progression and mobility prospects. All these will help GRS take the forward-looking steps now being taken by similar archival institutions around the world, including in the comparator organisations examined for this Study.

We believe there are opportunities for GRS to consider how best to enhance career prospects within the Archivist grade through redefining their roles and responsibilities (e.g. giving them a role in planning and implementing ERKS) and empowering GRS' staff and leadership.

D.4.4. Inter-Disciplinary Teams

While EO grade staff understand how B/Ds operate and the types of records they create, and many have IT project management experience, it is challenging to require these staff to have specialist records and archives knowledge. They are neither trained in nor are expected to have prior knowledge of this specialist discipline.

Feedback from interviews indicates that EO grade staff face a steep learning curve when they join GRS. By the time they have started to understand some of the principles, concepts and requirements involved with records and archives management, they may well be rotated out of GRS and moved on to another B/D. While it is a benefit to the Government as a whole to have EO grade staff bring the records knowledge gleaned with GRS to

other areas of the Government, this rotation poses challenges in the retention by GRS of the corporate knowledge that has been acquired by these EOs.

As suggested already, we believe there are opportunities for GRS to consider ways to improve the retention of corporate knowledge, particularly within the RSDO and RMAO, by deploying Archivist grade staff more flexibly across the organisation and by having them work alongside their EO colleagues – creating inter-disciplinary teams and allowing all participants to share with and learn from each other.

D.4.5. Professional Qualifications and Continuing Education

When hiring new specialist records and archives staff, the four comparator institutions all identify formal recordkeeping qualifications as an asset (although the institutions must naturally work within the parameters of their government civil service structures to classify jobs and ranks).

- In Canada, for instance, expected pre-appointment qualifications for LAC normally include (i) a Bachelor's degree with a minor in archival studies or a university degree with a certificate in archival studies; or (ii) A Master's degree in archival studies, archival studies and information science, library science or history.
- In the UK, job postings within TNA may require proof of a post-graduate qualification in archives and/or records management that is recognised by the Archives and Records Association (the UK's national professional association for recordkeepers); or relevant working experience recommended by the Archives and Records Association.

These institutions actively encourage post-appointment professional development for the records and specialists staff. They also support the development of a wide range of specialist educational programmes in universities and colleges in their countries, and they play a leadership role in their respective national professional records and archives associations, which are quite robust in each jurisdiction.

The pre-employment qualifications of the recordkeeping staff in GRS were mentioned in Section 2.5 of the Interim Report. For post-employment professional training, at present, the recordkeeping staff in GRS have undergone certain level of recordkeeping trainings at some point during their career. The EO grade staff are provided with records management training when they join the Government. At the rank of EO I and II, they are required to attend training that covers basic knowledge about records management, archival management, the preservation and conservation of records and ERKS.[54] Assistant Archivists are supported in their effort to acquire and expand their knowledge of records and archives management theories, principles, methodologies and practices through internal PRO training and by participating in courses offered through distance learning from the University of Dundee in Scotland (which has replaced the Association of Records Manager and Administrators (ARMA) course for new GRS recruits in the Archivist grade).

We recognise that there are certain limitations on professional records and archives education and training opportunities within Hong Kong and in some parts of Asia, and we commend GRS for supporting the education and professional development of its staff by investigating options for overseas and distance-based courses.[55] In order to further enhance their professional development, whenever possible, all GRS recordkeeping staff should be able to participate in courses, workshops and conferences offered by such organisations as the Society of American Archivists, the International Council on Archives and the Association for Information and Image Management. As GRS continues to enhance its services within Government, its heightened profile will allow it to play a similar leadership role not just in supporting quality recordkeeping within the Government but also in fostering a stronger and more vibrant professional records and archives environment throughout Hong Kong. In the future, this expansion in the recordkeeping role would also enhance the image of the discipline, encouraging more people in Hong Kong to pursue this important career path. Fostering the appointment of more recordkeeping specialists across Government would increase the potential for training programmes to support continuing education and professional advancement.

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[54] At the entry level of EO II, an induction course is provided while for EO I, a one-day training in records management is required.
[55] Based on information from interviews conducted with GRS staff between 18 and 20 November 2014.

In our Final Report, we will discuss in more detail the types of qualifications and requirements for new recordkeeping staff within GRS and our recommendation on expanding the range of continuing education opportunities in order to continue to enhance staff development.

In conclusion, as digital technologies are dramatically affecting recordkeeping and electronic records management in governments around the world, GRS is encouraged to take every opportunity to align the roles and responsibilities of its recordkeeping specialists with international best practice, in order to maximise the benefits that come with the knowledge, expertise and skills of staff with specialist education and qualifications in the field of records and archives management. This alignment would ideally include: increasing overall staff capacity, reconsidering staff deployment, increasing the presence of qualified records managers across the Government, enhancing collaboration across disciplines (including but not only between recordkeeping specialists and IT specialists) and playing a leadership role in the growth of the records profession across Hong Kong and throughout the region.

D.5. Modus Operandi

We have identified several improvement opportunities in relation to the modus operandi of GRS, which could enhance the reorientation of GRS so that it plays a much stronger role as the Government's leading agency in the establishment and enforcement of standards, principles and guidelines for effective and accountable electronic records management. If GRS is able to increase staff numbers, draw more fully and effectively on the skills and expertise of the recordkeeping specialists on its staff and integrate its operations more effectively, the impact of the many tasks undertaken by GRS could be increased. We detail each of the following improvement points in the paragraphs below under the following headings:

- Repositioning GRS' roles in ERKS;
- Re-engineering operations through strategic planning and prioritisation; and
- Developing strategies for digitisation.

D.5.1. Repositioning GRS' Roles in ERKS

As discussed earlier in Section 2 of the Interim Report, the RSDO is actively engaged in developing electronic recordkeeping systems and is currently working closely with B/Ds to implement a number of ERKS initiatives across the Government. While the lessons learnt from working with electronic records management is useful in forming GRS policies and priorities, ultimately, a more effective role for GRS may be to step back from this hands-on approach to recordkeeping, focusing instead on standards setting and guidance, which would be a more value-added role.

Similarly, the RSDO has also begun the task of implementing electronic recordkeeping system, and it is anticipated that once ERM strategies, standards and guidelines are in place, the main focus for the RSDO will be on assisting B/Ds with implementing their ERKS. Again, this intensive engagement in records operations by GRS may not be as effective in the long run as tasking the B/Ds with responsibility for their own day-to-day recordkeeping duties. In the long run, and pending the development of experience and expertise in B/Ds, this implementation work could be performed by recordkeeping specialists within B/Ds[56] who either have formal qualifications or have received adequate relevant training from GRS.

We believe there are opportunities for GRS to re-position its role within the ERKS initiative away from implementation activities to a role that emphasises recordkeeping leadership, oversight and standard setting.

D.5.2. Re-engineering Operations through Planning and Prioritisation

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[56] We believe that the role of Departmental Record Managers within each of the B/Ds will need to be repositioned into a more specialised role, and their capacity will need to be strengthened with the necessary training, in order to perform a higher level of recordkeeping function in a more sustainable manner for the B/Ds.

The paradigm shift brought by digital technologies posed great challenges to GRS. In order for GRS to make a better transition, there are opportunities for GRS to rethink and re-engineer its major business workflow by taking a more strategic approach to operations, which would also further align GRS with international best practice.

For example, we observed that the process of establishing retention and disposal schedules[57] of B/Ds, as well as the processes of appraising, accessioning, arranging and describing archives, are all significantly backlogged.

We believe that a more strategic approach to the entire process of planning (not only the process of retention and disposal activities but also the overall scope and workflow associated with all stages of archival management) by re-engineering its major operations will help reposition GRS as a standard setter, guide and advisor, thus reducing the potential for significant backlogs in future.[58] This can also ensure a more sustainable strategy for electronic records (where detailed micro-appraisal may not be effective).

Another example identified is around investigation of storage solutions for analogue and digital archives. The work underway to investigate different storage solutions is being carried out independently in different areas of GRS: the RSDO is studying the development of a trusted digital repository (TDR) to store not only digitised copies of analogue archives, but also born-digital records from across the Government; while the PSO is investigating requirements for physical and digital storage. We believe that the development of TDR should be a priority in GRS' planning and streamlining the workflow between the different offices will facilitate the development of a more effective TDR solution.

We believe that there are opportunities for GRS to re-engineer its workflow and reduce duplication of efforts; and to incorporate increased planning and prioritisation into its operations, in order to align with best practice and international standards and to make best use of the professional resources. Also, to further drive GRS towards achieving its vision and mission in the digital era, there are opportunities to agree a set of relevant and appropriate performance indicators which aligns with these plans and priorities.

D.5.3. Developing Strategies for Digitisation

Our international comparator research shows that most archival institutions aim to digitise only a small percentage of their analogue holdings – less than 10% in many cases – with their focus on digitising holdings in high demand or materials facing serious preservation requirements. The archival community around the world also places great emphasis on the development of partnerships and collaborative initiatives, a direction supported by GRS in its digitisation strategy.[59]

GRS is currently digitising holdings that are over 100 years old. For other holdings, the PRO decides which holding to be digitised. Feedback from interviews indicates that there are expectations for GRS to digitise more of its holdings than it has currently planned. GRS should make clear the reality, well-understood across the organisation but not as easily recognised by the general public and others outside of the institution itself, that it will never be possible or reasonable to digitise large portions of archival holdings.

We believe there are opportunities for GRS to consider:

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[57] Retention and disposal schedules identify categories of records with archival value and records that have no enduring value after a specified time. GRS will process those draft schedules and approve decisions about how long records can be kept and:
- which records ought to be kept permanently by PRO (coded as PP);
- which can be destroyed as obsolete (coded as D); and
- which should be reviewed by archivists in the PRO before a retention decision is made (coded as RP).
We understand that CSO issued a set of Mandatory Records Management Requirements to all B/Ds in 2009, requiring them to send draft disposal schedules to GRS for consideration among other requirements.

[58] We observed from our discussion with interviewees that a pressure to complete schedules quickly does not necessarily allow for timely input from archivists, and the tendency to select RP as an appraisal decision means that, as interviewees also pointed out, in the end, archivists have to perform detailed microappraisal reviews of records to decide if they have enduring value.

[59] Based on information from interviews conducted on 17 and 18 November 2014.

- aligning further its digitisation strategies with international practices; and
- engaging users by raising awareness and publicising its digitisation strategies.

Taken together, changes to the modus operandi of GRS, as suggested in the examples discussed above, should assist in equipping it to face the challenges brought by the paradigm shift. It is worth noting that any change in modus operandi will need to take into account the rising impact of digital technologies, which is driving archival institutions around the world to reorient their scope of service and the way in which they operate.

Appendix E. - *Bibliography*

E.1. Hong Kong

E.1.1. Websites

"Code on Access to Information." The Government of the Hong Kong Special Administrative Region. Web. 7 Nov. 2014. <http://www.access.gov.hk/en/code.htm>.

"Common Recruitment Examination and Basic Law Test (Degree / Professional Grades) (CRE and BLT)." Civil Service Bureau - The Government of the Hong Kong Special Administrative Region. Web. 17 Nov. 2014. <http://www.csb.gov.hk/english/recruit/cre/949.html>.

"Directorate Pay Scale." Civil Service Bureau - The Government of the Hong Kong Special Administrative Region. Web. 7 Nov. 2014. <http://www.csb.gov.hk/english/admin/pay/48.html>.

"Executive Officer Grade Grade Structure, Establishment and Career Prospects." Civil Service Bureau - The Government of the Hong Kong Special Administrative Region. Web. 7 Nov. 2014. <http://www.csb.gov.hk/english/grade/eo/437.html>.

"GRS: Home." The Government of the Hong Kong Special Administrative Region. Web. 27 Oct. 2014.

"GRS: Public Services and Information - Archival Records." *Public Services and Information*. Government Records Service, 27 Mar. 2014. Web. 09 Feb. 2015. <http://www.grs.gov.hk/ws/english/ps_online_cata_ar.htm>.

"John James O'Brien, CRM." *LinkedIn*. LinkedIn Corporation. Web. 7 Nov. 2014. <https://www.linkedin.com/in/johnjamesobrien>.

"Leisure and Cultural Services Department." The Government of the Hong Kong Special Administrative Region. Web. 7 Nov. 2014. <http://www.lcsd.gov.hk/>.

"Main Responsibilities." Administration Wing - Chief Secretary for Administration's Office, 20 Mar. 2014. Web. 7 Nov. 2014. <http://www.admwing.gov.hk/eng/about_us/policy.htm>.

"OGCIO Homepage." *Office of the Government Chief Information Officer*. The Government of the Hong Kong Special Administrative Region. Web. 7 Nov. 2014. <http://www.ogcio.gov.hk/en/>.

"Service Directory of CSTDI, CSB." Civil Service Training and Development Institute (CSTDI), Civil Service Bureau. Web. 7 Nov. 2014. <https://www.clcplus.cstdi.gov.hk/clcplus/static/portal/cstdiSD/html/header_link/hl_m_en.html>.

E.1.2. Job Descriptions

Entry Requirements for AA. Hong Kong Special Administrative Region: Government Records Service, 26 Nov. 2013. XPS.

Entry Requirements for ACII. Hong Kong Special Administrative Region: Government Records Service, 18 July 2012. XPS.

Entry Requirements for EOII. Hong Kong Special Administrative Region: Government Records Service, 10 Sept. 2014. XPS.

JD--A(PR). Hong Kong Special Administrative Region: Government Records Service, 14 Nov. 2014. PDF.

JD--CEO(RMA). Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

JD--CEO(RSD). Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

JD--C(PS). Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

JD--SAA(PR)1. Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

JD--SAA(PR)2. Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

JD--SAA(PR)3. Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

JD--SAA(PR)4. Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

JD--SAA(PR)5. Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

JD--SEO(Adm). Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

JD--SEO(RM)1. Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

JD--SEO(RM)2. Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

JD--SEO(RMR). Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

JD--SEO(RSD)1. Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

JD--SEO(RSD)2. Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

JD--SEO(RSD)3. Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

E.1.3. Interviews

"Interviews with EU." Interview. Print.
"Interviews with GRS Staff." Interview. Print.
"Interviews with Other Government Departments." Interview. Print.

E.1.4. GRS provided materials

Annex 10-1 - Job Requirement of Assistant Archivist. Hong Kong Special Administrative Region: Government Records Service, 26 Nov. 2013. XPS.

Annex 10-2 - Job Requirement of Assistant Curator II. Hong Kong Special Administrative Region: Government Records Service, 18 July 2012. XPS.

Annex 10-3 - Job Requirement of Assistant Librarian. Hong Kong Special Administrative Region: Government Records Service, 18 July 2012. XPS.

Annex 12-1 - Paper on Reorganisation of GRS Division (Extract). Hong Kong Special Administrative Region: Government Records Service, Sept. 2003. PDF.

Annex 13-1 - GRS Internal Training & Development Plan 2014-15. Hong Kong Special Administrative Region: Government Records Service, 22 Dec. 2014. DOC.

Annex 16-1 - Draft Digitization Strategy 2013-2018. Hong Kong Special Administrative Region: Government Records Service, Jan. 2014. PDF.

Annex 17-1 - Government-wide EIM Framework-AppG. Hong Kong Special Administrative Region: Government Records Service, 19 Dec. 2014. PDF.

Annex 2-1 - COR - Head142 (2013-14). Hong Kong Special Administrative Region: Government Secretariat: Offices of the Chief Secretary for Administration and the Financial Secretary. PDF.

Annex 2-2 - COR - Head142 (2014-15). Hong Kong Special Administrative Region: Government Secretariat: Offices of the Chief Secretary for Administration and the Financial Secretary, 23 Dec. 2014. PDF.

Annex 3-1 - Statement of VMV for GRS. Hong Kong Special Administrative Region: Government Records Service, 24 Dec. 2014. DOCX.

Annex 5-1 - GARDS_Guidelines (Oct_2013). Hong Kong Special Administrative Region: Government Records Service, 15 Dec. 2014. PDF.

Annex 6-1 - Handbook on Preservation of Electronic Records (July_2013). Hong Kong Special Administrative Region: Government Records Service, July 2013. PDF.

Appendix I - List of Countries with Access to Information. Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

Brief_on_the_Executive_Officer_Grade_v3. Hong Kong Special Administrative Region: Government Records Service, 14 Nov. 2014. DOCX.

Detailed Info about PRC ArchLaws & FOI. Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

Dissemination of Disposal and Retention Schedules in Other Jurisdictions. Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

ERKS_Functional_Requirements(May_2012). Hong Kong Special Administrative Region: Government Records Service, May 2012. PDF.

GRS - Further Information (v.3). Hong Kong Special Administrative Region: Government Records Service, 24 Dec. 2014. DOCX.

GRS Staff Pay Scale. Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

Organization Chart of GRS as at 3 October 2014. Hong Kong Special Administrative Region: Government Records Service, 10 Nov. 2014. XLS.

Records and Archives Legislation in PRC, UK, Australia USA & Sing (2013-02). Hong Kong Special Administrative Region: Government Records Service, 5 Nov. 2014. DOCX.

Records Management Manual. Hong Kong Special Administrative Region: Government Records Service, 2 May 2013. PDF.

RKMS(v1.0). Hong Kong Special Administrative Region: Government Records Service, 15 Oct. 2014. PDF.

E.1.5. Other sources

Archival Education Masters. Centre for Archives and Information Studies, 14 Oct. 2014. PDF.

Civil Service Bureau - Master Pay Scale. Hong Kong Special Administrative Region: Civil Service Bureau - The Government of the Hong Kong Special Administrative Region. PDF.

Courses for Continuing Professional Development by Distance Learning. Centre for Archive and Information Studies, 14 Oct. 2014. PDF.

Guide to Appointment_Archivist Grade. Hong Kong Special Administrative Region: Civil Service Bureau, Feb. 2011. PDF.

Guide to Appointment_Librarians. Hong Kong Special Administrative Region: Civil Service Bureau, Aug. 2002. PDF.

Public Records Management in Hong Kong. Rep. Hong Kong: Office of the Ombudsman, 2014. Print.

Records Management Work of the Government Records Service. Rep. Hong Kong: Administration Wing of the Chief Secretary for Administration's Office, 2011. Print.

E.2. Australia

E.2.1. Websites

"Archives Act 1983." *ComLaw*. Australian Government, 18 July 2014. Web. 10 Nov. 2014. <http://www.comlaw.gov.au/>.

"Australian Law Reform Commission." *Australian Law Reform Commission*. Australian Government. Web. 4 Dec. 2014. <http://www.alrc.gov.au/>.

The Australian National Audit Office. Commonwealth of Australia. Web. 14 Jan. 2015. <http://www.anao.gov.au/>.

Australian Public Service Commission. "2013 Summary." Australian Government. Web. 11 Nov. 2014. <http://www.apsc.gov.au/publications-and-media/current-publications/remuneration-surveys/aps-remuneration-report-2013/2013-summary>.

Australian Public Service Commission. "Section 4: Movements of Ongoing Employees." Australian Government. Web. 12 Nov. 2014. <http://www.apsc.gov.au/publications-and-media/current-publications/aps-statistical-bulletin/aps-statistical-bulletin-2013-14/section-four>.

Australian Public Service Commission. "Senior Executive Service: Selection, Mobility and Separation." Australian Government. Web. 11 Nov. 2014. <http://www.apsc.gov.au/publications-and-media/current-publications/the-senior-executive-service-selection,-mobility-and-separation>.

Australian Public Service Commission. "Table 2a: Non-ongoing Employees: Agency by Employment Status, Sex and Employment Category, 30 June 2014." Australian Government. Web. 13 Nov. 2014. <http://www.apsc.gov.au/publications-and-media/current-publications/aps-statistical-bulletin/aps-statistical-bulletin-2013-14/section-one/table-2a>.

Australian Public Service Commission. "Table 2b: All Employees: Agency by Employment Status, Sex and Employment Category, 30 June 2014." Australian Government. Web. 13 Nov. 2014. <http://www.apsc.gov.au/publications-and-media/current-publications/aps-statistical-bulletin/aps-statistical-bulletin-2013-14/section-one/table-2b>.

Australian Public Service Commission. "Table 40: Promotions by Agency and Classification, 2013–14." Australian Government. Web. 12 Nov. 2014. <http://www.apsc.gov.au/publications-and-media/current-publications/aps-statistical-bulletin/aps-statistical-bulletin-2013-14/section-four/table-40>.

Australian Public Service Commission. "Table 41: Promotions Within, from and to Other Agencies, 2013–14." Australian Government. Web. 12 Nov. 2014. <http://www.apsc.gov.au/publications-and-media/current-publications/aps-statistical-bulletin/aps-statistical-bulletin-2013-14/section-four/table-41>.

Australian Public Service Commission. "Table 42: Transfers from and to Other Agencies, 2013–14." Australian Government. Web. 12 Nov. 2014. <http://www.apsc.gov.au/publications-and-media/current-publications/aps-statistical-bulletin/aps-statistical-bulletin-2013-14/section-four/table-42>.

Australian Public Service Commission. "Table 53: Separations by Agency and Base Classification, 2013–14." Australian Government. Web. 11 Nov. 2014. <http://www.apsc.gov.au/publications-and-media/current-publications/aps-statistical-bulletin/aps-statistical-bulletin-2013-14/section-four/table-53>.

Australian Society of Archivists. "Education for Archivists in Australia." *Educational FAQs*. Australian Society of Archivists. Web. 13 Nov. 2014. <http://www.archivists.org.au/learning-publications/educational-faqs>.

Department of Education and Training. "Archivist (NSW/ACT)." Australian Government. Web. 13 Nov. 2014. <http://www.jobguide.thegoodguides.com.au/occupation/Archivist/NSW>.

"Government by Portfolio." *Australian Government*. Australian Government. Web. 11 Nov. 2014. <http://australia.gov.au/directories/australian-government-directories/government-by-portfolio>.

"National Archives of Australia." *Australian Government: National Archives of Australia*. National Archives of Australia. Web. 10 Nov. 2014. <http://www.naa.gov.au/>.

"OpenGov NSW." Government of New South Wales. Web. 18 Dec. 2014. <https://www.opengov.nsw.gov.au/main>.

"Portfolio Agencies." *Attorney-General's Department*. Australian Government. Web. 14 Jan. 2014. <http://www.ag.gov.au/About/Pages/Portfolioagencies.aspx>.

State Records Office of Western Australia. "Recordkeeping Policies and Standards." Government of Western Australia, 9 Oct. 2013. Web. 13 Nov. 2014. <http://www.sro.wa.gov.au/state-recordkeeping/recordkeeping-policies-and-standards>.

E.2.2. Job Descriptions

APS Jobs. *NAA PD - A-D Agency Capability*. Australian Government. PDF.

APS Jobs. *NAA PD - Manager Operations - 2008*. Australian Government. PDF.

APS Jobs. *NAA PD - Manager Preservation - NSW Office*. Australian Government. PDF.

APS Jobs. *NAA PD - Manager Preservation Storage & Lending - NSW Office*. Australian Government. PDF.

APS Jobs. *NAA PD - Manager Storage & Custody - NSW Office*. Australian Government. PDF.

E.2.3. News Articles / Press releases

Towell, Noel. "Three Public Service Department Heads Sacked by Abbott Government." *Canberra Times*. Fairfax Media, 18 Sept. 2013. Web. 11 Nov. 2014. <http://www.canberratimes.com.au/federal-politics/political-news/three-public-service-department-heads-sacked-by-abbott-government-20130918-2tykp.html>.

E.2.4. Reports

Australian Law Reform Commission. "Australia's Federal Record : A Review of Archives Act 1983: Report No 85." *Australian Law Reform Commission Reports*. Australasian Legal Information Institute. Web. 4 Dec. 2014. <http://www.austlii.edu.au/au/other/lawreform/ALRC/1998/85.html#app3Heading1>.

McPhee, Ian. *2011-12 ANAO Audit Report No53*. Australian National Audit Office, 27 June 2012. PDF.

NAA Annual Report 2013-14. National Archives of Australia. PDF.

E.2.5. Other sources

Ellis, Judith. *Qualitative Questions for Judith Ellis V2 -02-01-15 LM Inputs*. 6 Jan. 2015. DOCX.

NAA Organisation Chart. National Archives of Australia. PDF.

E.3. Canada

E.3.1. Websites

Banks, Sam, and Monique Hébert. "Bill C-8: The Library and Archives of Canada Act." *Parliament of Canada*. Parliament of Canada, 18 Feb. 2004. Web. 7 Nov. 2014. <http://www.parl.gc.ca/About/Parliament/LegislativeSummaries/bills_ls.asp?ls=C8&Parl=37&Ses=3>.

"Browse Organization." *Government Electronic Directory Services (GEDS)*. Government of Canada, 21 Aug. 2014. Web. 29 Oct. 2014. <http://geds-sage.gc.ca/en/GEDS?pgid=014&dn=ou%3DLAC-BAC%2C+o%3DGC%2C+c%3DCA>.

"Chief Information Officer Branch (CIOB)." *Treasury Board of Canada Secretariat*. Treasury Board of Canada Secretariat, 11 June 2012. Web. 5 Nov. 2014. <http://www.tbs-sct.gc.ca/cio-dpi/index-eng.asp>.

"Communications Policy of the Government of Canada." *Communications Policy of the Government of Canada*. Treasury Board of Canada Secretariat, 23 Sept. 2013. Web. 18 Dec. 2014. <http://tbs-sct.gc.ca/pol/doc-eng.aspx?id=12316&section=text>.

"Digital Preservation Policy Framework: Development Guideline Version 2.1." Canadian Heritage Information Network, 25 Apr. 2013. Web. 5 Nov. 2014. <http://www.rcip-chin.gc.ca/carrefour-du-savoir-knowledge-exchange/digital_preservation_policy_guidelines-ligne_directrice_strategique_preservation_numerique-eng.jsp>.

Heron, Craig. "CHA's Comment on New Directions for Library and Archives Canada." Canadian Historical Association, Mar. 2010. Web. 26 Nov. 2014. <http://www.cha-shc.ca/english/advocacy/chas-comment-on-new-directions-for-library-and-archives-canada.html#sthash.ri4sJS9d.ReA1agFV.dpbs>.

Home - Library and Archives Canada. Library and Archives Canada, 2 Oct. 2012. Web. 7 Nov. 2014. <http://www.bac-lac.gc.ca/eng/Pages/home.aspx>.

"Internal Digitization Standards." *Digital Initiatives at LAC*. Library and Archives Canada, 12 Aug. 2012. Web. 5 Nov. 2014. <http://circa.cs.ualberta.ca/AnnokiUploadAuth.php/a/a8/LAC_Internal_Digitization_Standards.pdf>.

Library and Archives Canada. *Library and Archives Canada Announces. Library and Archives Goes Digital*. Library and Archives Canada, 7 Dec. 2010. Web. 6 Nov. 2014. <http://www.collectionscanada.gc.ca/whats-new/013-503-e.html>.

Library and Archives Canada. *Notice Regarding Library and Archives Canada (LAC) Services Advisory Board (SAB)*. Library and Archives Canada, 13 Dec. 2007. Web. 4 Dec. 2014. <http://www.collectionscanada.gc.ca/whats-new/013-320-e.html>.

"Library and Archives of Canada Act." *Justice Laws*. Minister of Justice, 30 Sept. 2012. Web. 27 Oct. 2014. <http://laws-lois.justice.gc.ca/PDF/L-7.7.pdf>.

"Program Administration (PM) Classification Standard." *Office of the Chief Human Resources Officer*. Treasury Board of Canada Secretariat, 8 Mar. 2004. Web. 26 Nov. 2014. <http://www.tbs-sct.gc.ca/cla/def/PM-eng.asp>.

"Rates of Pay for Certain Excluded and Unrepresented Employees." *Compensation and Labour Relations*. Treasury Board of Canada Secretariat. Web. 26 Nov. 2014. <http://www.tbs-sct.gc.ca/pubs_pol/hrpubs/ratesofpay/rapaceexunem02-eng.asp#Toc476385563>.

"Salary Ranges and Maximum Performance Pay for 2012 for Governor in Council Appointees." *Privy Council Office*. Government of Canada, 12 June 2012. Web. 18 Dec. 2014. <http://www.pco-bcp.gc.ca/index.asp?lang=eng&page=secretariats&sub=spsp-psps&doc=sal/sal2012-eng.htm>.

"Staffing Crisis at Library and Archives Canada." *Bibliocracy*. Bibliocracy, 5 Sept. 2013. Web. 18 Dec. 2014. <http://bibliocracy-now.tumblr.com/post/60410423837/staffing-crisis-at-library-and-archives-canada>.

"Timeline: Library and Archives Canada Service Decline After 2004." Ex Libris Association, Nov. 2014. Web. 5 Nov. 2014. <http://exlibris.pbworks.com/w/page/63815458/Timeline%20on%20Library%20and%20Archives%20Canada%20Service%20Decline%20after%202004>.

Treasury Board of Canada Secretariat. "Directive on Recordkeeping." *Treasury Board of Canada Secretariat*. Treasury Board of Canada Secretariat, 18 July 2014. Web. 16 Dec. 2014. <http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=16552>.

Treasury Board of Canada Secretariat. "Management Accountability Framework." *Treasury Board of Canada Secretariat*. Treasury Board of Canada Secretariat, 11 June 2014. Web. 16 Dec. 2014. <http://www.tbs-sct.gc.ca/maf-crg/index-eng.asp>.

Treasury Board of Canada Secretariat. "Policy on Information Management." *Treasury Board of Canada Secretariat*. Treasury Board of Canada Secretariat, 1 Apr. 2012. Web. 26 Nov. 2014. <https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=12742&section=text>.

"Unit Group - 5113 Archivists." *Unit Group*. Human Resources and Skills Development Canada, 16 Dec. 2013. Web. 26 Nov. 2014. <http://www30.hrsdc.gc.ca/NOC/English/NOC/2006/ProfileAlphabetic.aspx?val=5&val1=5113&val10=H>.

"Unit Group - 5211 Library and Archive Technicians and Assistants." *Unit Group*. Human Resources and Skills Development Canada, 16 Dec. 2013. Web. 26 Nov. 2014. <http://www30.hrsdc.gc.ca/NOC/English/NOC/2006/ProfileAlphabetic.aspx?val=5&val1=5211&val10=H>.

Wilson, Ian E. "Archives as Records." *Archives*. Historica Canada, 6 Feb. 2006. Web. 18 Dec. 2014. <http://www.thecanadianencyclopedia.ca/en/article/archives/>.

E.3.2. Job Descriptions

Archivist Research Officer II – Temporary, Part-time Position. Calgary: SAIT Polytechnic, 18 Dec. 2014. PDF.

"Job Title: Senior Records Team Lead." *Position Profile*. Government of Alberta, July 2014. Web. 22 Dec. 2014. <https://www.jobs.alberta.ca/pprofile/pp1025350.htm>.

"Librarian and Archivist of Canada (full-time Position)." *Canada Gazette*. Government of Canada, 12 Oct. 2013. Web. 22 Dec. 2014. <http://www.gazette.gc.ca/rp-pr/p1/2013/2013-10-12/html/notice-avis-eng.html#d109.>.

E.3.3. News Articles / Press releases

Abbott, Tony. "The Coalition Will Restore Strong, Stable and Accountable Government." *Department of the Prime Minister and Cabinet*. Prime Minister of Australia, 18 Sept. 2013. Web. 11 Nov. 2014.

<http://web.archive.org/web/20130920044911/http://www.pm.gov.au/media/2013-09-18/coalition-will-restore-strong-stable-and-accountable-government>.

"Guy Berthiaume Appointed as Librarian and Archivist of Canada." *Government of Canada*. Government of Canada, 14 Apr. 2014. Web. 28 Oct. 2014. <http://news.gc.ca/web/article-en.do?nid=838739>.

"Head of Library and Archives Resigns over Spanish Lessons." *CBC News Politics*. The Canadian Press, 15 Mar. 2013. Web. 29 Oct. 2014. <http://www.cbc.ca/news/politics/head-of-library-and-archives-resigns-over-spanish-lessons-1.1320308>.

"Portfolio Organizations." *Canadian Heritage*. Canadian Heritage, 10 Dec. 2014. Web. 18 Dec. 2014. <http://pch.gc.ca/eng/1266433674232/1266389969960>.

Scott, Marian. "Guy Berthiaume: Taking Libraries into the Digital Age." *Montreal Gazette*. Postmedia Network, 28 Apr. 2014. Web. 29 Oct. 2014. <http://www.montrealgazette.com/news/Berthiaume+Taking+libraries+into+digital/9788314/story.html>.

"Summary "US Federal Agencies Digitization Guidelines Initiative: Standards"" Canadian Heritage Information Network, 15 June 2013. Web. 5 Nov. 2014. <http://www.rcip-chin.gc.ca/GetForumRecord.do?type=sd&lang=en&id=FORUM_23126&ens=TnR0PWRpZ2l0aXphdGlvbiBzdGFuZGFyZCZydGxMYW5nPWVuJnJobFR5cGU9c2Q=>.

E.3.4. Reports

Glover, Shelly. *LAC Departmental Performance Report 2013-2014*. Library and Archives Canada. PDF.

Glover, Shelly. *LAC Report on Plans and Priorities 2014-2015*. Library and Archives Canada. PDF.

Governance and Recordkeeping Around the World. Rep. Library and Archives Canada, Sept. 2013. Web. 6 Nov. 2014. <http://www.bac-lac.gc.ca/eng/services/government-information-resources/information-management/Documents/september-2013.pdf>.

Internal Audit and Evaluation Directorate. *Formative Evaluation of the Digital Office Initiative*. Rep. Library and Archives Canada, 13 Sept. 2013. Web. 18 Dec. 2014. <https://www.bac-lac.gc.ca/eng/about-us/audits-evaluations/Documents/DOI%20Evaluation%20report.pdf>.

International Council on Archives Human Rights Working Group. *Basic Principles on the Role of Archivists in Support of Human Rights*. Working paper. International Council on Archives, 2014. Print.

LAC Business Plan 2013-2016. Library and Archives Canada. PDF.

Office of the Auditor General of Canada. *2013 Spring Report of the Auditor General of Canada*. Rep. Office of the Auditor General of Canada, 30 Apr. 2013. Web. 18 Dec. 2014. <http://www.oag-bvg.gc.ca/internet/English/parl_oag_201304_06_e_38191.html>.

Office of the Auditor General of Canada. *Chapter 7—Documentary Heritage of the Government of Canada—Library and Archives Canada*. Rep. Office of the Auditor General of Canada, 25 Nov. 2014. Web. 18 Dec. 2014. <http://www.oag-bvg.gc.ca/internet/English/parl_oag_201411_07_e_39965.html>.

Office of the Auditor General of Canada. "Electronic Health Records in Canada—An Overview of Federal and Provincial Audit Reports." *2010 April Report of the Auditor General of Canada*. Office of the Auditor General of Canada, 20 Apr. 2014. Web. 18 Dec. 2014. <http://www.oag-bvg.gc.ca/internet/English/parl_oag_201004_07_e_33720.html#hd3b>.

Office of the Auditor General of Canada. "Exhibit 5.9—Criminal Record Update Backlog Has More than Quadrupled since the 2005–06 Fiscal Year." *2011 June Status Report of the Auditor General of Canada*. Office of the Auditor General of Canada, 9 June 2011. Web. 18 Dec. 2014. <http://www.oag-bvg.gc.ca/internet/English/parl_oag_201106_05_e_35373.html#ex9>.

The Royal Society of Canada. *Royal Society of Canada Expert Panel Report: The Future Now - Canada's Libraries, Archives, and Public Memory*. The Royal Society of Canada, Nov. 2014. PDF.

E.3.5. Other sources

Department of Canadian Heritage Act C-17.3. Government of Canada. PDF.

ICA Universal Declaration on Archives 2012. International Council on Archives, 2012. PDF.

Salary Ranges and Maximum Performance Pay for 2012 for EX and GC Grades. Government of Canada, 12 June 2012. PDF.

Salary Ranges for Governor in Council Appointments. Government of Canada, 11 Dec. 2013. PDF.

Wilson, Ian E., and Sharon Henhoeffer. *Ian Wilson - Where's the Beef*. Nov. 2013. DOCX.]]

Wilson, Ian E. *CCA_TimeGuidelines.pdf*. PDF.]]

Wilson, Ian E. *Ian Wilson - Foreword to E-Government or Out of Government*. 19 Dec. 2013. DOCX.]]

Wilson, Ian E. *Ian Wilson - Response to Qualitative Questions V2 LM*. 8 Dec. 2014. DOCX.]]

E.4. The Netherlands

E.4.1. Websites

"Archief 2020." Archief 2020. Web. 17 Dec. 2014. <http://www.archief2020.nl/>.

"Archives Ordinance 1995." *Overheid.nl*. Web. 10 Nov. 2014.
    <http://wetten.overheid.nl/BWBR0007748/geldigheidsdatum_10-11-2014>.

"Archives Portal Europe." European Commission. Web. 17 Dec. 2014.
    <https://www.archivesportaleurope.net>.

"Atlas Van De Enterprise Architectuur Rijksdienst." Rijksoverheid. Web. 17 Dec. 2014.
    <http://www.earonline.nl/index.php/Atlas_van_de_Enterprise_Architectuur_Rijksdienst>.

"Charter for National Archives of the Netherlands." *Overheid.nl*. 3 Dec. 2014. Web. 17 Dec. 2014.
    <http://wetten.overheid.nl/BWBR0019832/geldigheidsdatum_03-12-2014>.

"The Cultural Heritage Inspectorate." *Erfgoedinspectie*. Ministry of Education, Culture and Science. Web. 17 Dec. 2014. <http://www.erfgoedinspectie.nl/english/about-us>.

"The Europeana Data Model for Cultural Heritage." Europeana. Web. 17 Dec. 2014.
    <http://pro.europeana.eu/c/document_library/get_file?uuid=ef2baffc-f078-41d9-be5f-76a3427f198f&groupId=51031>.

"GahetNA." *GahetNA*. Society for the Nationaal Archief. Web. 2 Dec. 2014. <http://www.gahetna.nl/en>.

"Koninklijke Bibliotheek En National Archives to Move Forward Together." *National Library of the Netherlands*. National Library of the Netherlands, 23 Dec. 2011. Web. 8 Dec. 2014.
    <http://www.kb.nl/en/news/2011/koninklijke-bibliotheek-en-national-archives-to-move-forward-together>.

"Legal Protection: Databases." *EUR-Lex - Access to European Law*. 6 Dec. 2005. Web. 19 Dec. 2014.
    <http://eur-lex.europa.eu/legal-content/EN/LSU/?uri=CELEX:31996L0009>.

"Ministerial Regulations 2010." *Overheid.nl*. Web. 10 Nov. 2014.
    <http://wetten.overheid.nl/BWBR0027041/geldigheidsdatum_10-11-2014>.

"Ministry of Education, Culture and Science." *Ministry of Education, Culture and Science*. Government of the Netherlands. Web. 8 Dec. 2014. <http://www.government.nl/ministries/ocw>.

"NARA Bulletin 2013-02." U.S. National Archives and Records Administration, 29 Aug. 2013. Web. 18 Dec. 2014. <http://www.archives.gov/records-mgmt/bulletins/2013/2013-02.html>.

"National Archives of the Netherlands." *National Archives of the Netherlands*. Web. 10 Nov. 2014.
    <http://en.nationaalarchief.nl/>.

"National Coalition on Digital Preservation." National Coalition on Digital Preservation. Web. 17 Dec. 2014.
    <http://ncdd.nl/>.

The Netherlands. Council of State. *Public Records Act 1995*. National Archives of the Netherlands. Web. 10 Nov. 2014. <http://en.nationaalarchief.nl/sites/default/files/docs/wetten-regels/Dutch_Public_Records_Act_1995.pdf>.

"The Netherlands Institute for Sound and Vision." The Netherlands Institute for Sound and Vision. Web. 8 Jan. 2015. <http://www.beeldengeluid.nl/en/about>.

"The Open Preservation Foundation." The Open Preservation Foundation. Web. 18 Dec. 2014.
    <http://openpreservation.org/>.

"What Is Provenance." *W3C*. 18 Nov. 2010. Web. 18 Dec. 2014.
    <http://www.w3.org/2005/Incubator/prov/wiki/What_Is_Provenance>.

E.4.2. Job Descriptions

Collection Dept_ Staff for Project Extension of Repository_Maps and Drawings. National Archives of the Netherlands. DOCX.

Collection Dept_Senior Staff Acquisition. National Archives of the Netherlands. DOCX.

Collection Dept_Staff Acquisition. National Archives of the Netherlands. DOC.

National Archivist. National Archives of the Netherlands. PDF.

Preservation Advisor. National Archives of the Netherlands. DOCX.

Preservation Researcher. National Archives of the Netherlands. DOC.

Public Services. National Archives of the Netherlands. DOC.

Reader Advisor. The National Archives. DOC.

Senior Staff_Retention Schedules. National Archives of the Netherlands. DOC.

E.4.3. Journal Articles

Hofman, Hans. "The Dutch Experience in the Field of Electronic Records." *Electronic Records Research 1997: Resource Materials*. Archives & Museum Informatics. Web. 29 Oct. 1996.
    <http://www.archimuse.com/erecs97/PPR-HH.HTM>.]]

Horsman, Peter. "Digital Longevity: Policies on Electronic Records in the Netherlands." *Archives and Museum Informatics* 11.3-4 (1997): 235-40. *Springer*. Web. 3 Dec. 2014. <link.springer.com/article/10.1023%2FA%3A1009073026554>.

E.4.4. Reports

Hofman, Hans. *National Archives of the Netherlands Report*. Rep. National Archives of the Netherlands. Web. 20 Nov. 2014. <http://www.interpares.org/book/interpares_book_g_part4nether.pdf>.]]

E.4.5. Other sources

Hofman, Hans. *HH Additional Comments on DTR Funding and Staffing Numbers 12012015*. 12 Jan. 2015. PDF.]]

Hofman, Hans. *HH Answers to LM Questions 09012015*. 9 Jan. 2015. PDF.]]

Hofman, Hans. *HH Comments on Staff Numbers and Competency Requirements*. 19 Jan. 2015. PDF.]]

Hofman, Hans. *HH Responses to Questions January 2015 LM Inputs*. 7 Jan. 2015. DOCX.]]

Hofman, Hans. *Hofman_presentation_Bogota-August2014-1*. 17 Dec. 2014. PPTX.]]

Hofman, Hans. *Overview of Documents That Have Relevant Information about the Dutch NA*. 19 Dec. 2014. DOCX.]]

Hofman, Hans. *Qualitative Questions for Hans Hofman LM Inputs*. 19 Dec. 2014. DOCX.]]

Hofman, Hans. *Qualitative Questions_Responses to LM Comments 22122014*. 22 Dec. 2014. DOCX.]]

Hofman, Hans. *Sources about the Dutch NA*. 17 Dec. 2014. DOCX.]]

Strategic Freedom of Information. National Archives of the Netherlands. DOC.

E.5. United Kingdom

E.5.1. Websites

"Archivist." National Careers Service. Web. 3 Nov. 2014. <https://nationalcareersservice.direct.gov.uk/advice/planning/jobprofiles/Pages/archivist.aspx>.

"Careers in Record Management." Archives & Records Association UK & Ireland. Web. 3 Nov. 2014. <http://www.archives.org.uk/careers/careers-in-record-management.html>.

"Chief Executive Oliver Morley." *Gov.uk*. UK Government. Web. 4 Dec. 2014. <https://www.gov.uk/government/people/oliver-morley>.

"Civil Service Recruitment." Civil Service Commission. Web. 3 Nov. 2014. <http://civilservicecommission.independent.gov.uk/civil-service-recruitment-2/>.

"Clem Brohier." LinkedIn Corporation. Web. 3 Nov. 2014. <https://www.linkedin.com/pub/clem-brohier/9/51/baa>.

"DeepStore Manages Public Records for The National Archives." *Deepstore Records Management*. DeepStore Ltd. Web. 4 Nov. 2014. <http://www.deepstore.com/national-archive.aspx>.

"Departments, Agencies and Public Bodies." *Gov.uk*. UK Government. Web. 4 Nov. 2014. <https://www.gov.uk/government/organisations>.

"Government Digital Service." *Gov.uk*. UK Government. Web. 22 Dec. 2014. <https://www.gov.uk/government/organisations/government-digital-service>.

"Internet Memory Foundation." Web. 18 Dec. 2014. <http://internetmemory.org/en/>.

"The Lord Chancellor." UK Parliament. Web. 3 Nov. 2014. <http://www.parliament.uk/about/mps-and-lords/principal/lord-chancellor/>.

"Ministry of Justice." *Data.gov.uk*. UK Government, 30 Sept. 2014. Web. 4 Dec. 2014. <http://data.gov.uk/organogram/ministry-of-justice>.

"Natalie Anna Ceeney." Debretts. Web. 9 Dec. 2014. <http://www.debretts.com/people-of-today/profile/24652/Natalie-Anna-CEENEY>.

"Natalie Ceeney." *Wikipedia*. Wikimedia Foundation. Web. 9 Dec. 2014. <http://en.wikipedia.org/wiki/Natalie_Ceeney>.

"The National Archives." UK Government. Web. 3 Nov. 2014. <http://www.nationalarchives.gov.uk/>.

"Public Records Act 1958." *Legislation.gov.uk*. The National Archives. Web. 3 Nov. 2014. <http://www.legislation.gov.uk/ukpga/Eliz2/6-7/51/introduction>.

"Public Records (Scotland) Act 2011." National Records of Scotland. Web. 19 Dec. 2014. <http://www.nrscotland.gov.uk/record-keeping/public-records-scotland-act-2011>.

"The Public Records (Transfer to the Public Record Office) (Transitional and Saving Provisions) Order 2012." *Legislation.gov.uk*. The National Archives. Web. 19 Dec. 2014. <http://www.legislation.gov.uk/uksi/2012/3028/article/2/made>.

"Recruitment Freeze." Government Communication Service. Web. 4 Nov. 2014.
<https://gcn.civilservice.gov.uk/recruitment-freeze/>.
"Statutory Instruments Act 1946." *Legislation.gov.uk*. The National Archives. Web. 4 Dec. 2014.
<http://www.legislation.gov.uk/ukpga/Geo6/9-10/36>.
Straw, Jack, MP. "Executive Agency Framework Agreement." The National Archives, 10 Dec. 2009. Web. 4
Dec. 2014. <http://www.nationalarchives.gov.uk/documents/executive-agency-framework-
agreement.pdf>.

E.5.2. Job Descriptions

CBD Director JD. DOCX.
Chief Executive and Keeper JD. UK Civil Service. DOCX.
Finance Director JD. DOCX.
Head of Cataloguing April 2010. The National Archives, Apr. 2010. PDF.
Head of Digital Preservation JD Jan 2008. The National Archives, Jan. 2008. DOCX.
Head of Digital Services. The National Archives. DOC.
Head of IMP External JD. The National Archives. DOC.
Head of Public Services. The National Archives. DOC.

E.5.3. News Articles / Press releases

Blackmore, Nicole. "FOS Appoints Natalie Ceeney as Chief Ombudsman." *Money Marketing*. Centaur
Communications Ltd., 11 Jan. 2010. Web. 18 Dec. 2014. <http://www.moneymarketing.co.uk/fos-
appoints-natalie-ceeney-as-chief-ombudsman/1004732.article>.
Brinded, Lianna. "Financial Ombudsman Boss Natalie Ceeney Joins HSBC as Head of Customer Services."
International Business Times. IB Times Co., Ltd., 31 Jan. 2014. Web. 4 Dec. 2014.
<http://www.ibtimes.co.uk/financial-ombudsman-boss-natalie-ceeney-joins-hsbc-head-customer-
services-1434636>.

E.5.4. Reports

Allan, Alex. *Records Review*. Rep. UK Government. Web. 22 Dec. 2014.
<https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/370930/RECORD
S_REVIEW_-_Sir_Allex_Allan.pdf>.
Annual Report 2013-14. The National Archives. PDF.
Archives for the 21st Century in Action: Refreshed 2012-15. Rep. The National Archives. Web. 3 Nov. 2014.
<http://www.nationalarchives.gov.uk/documents/archives/archives21centuryrefreshed-final.pdf>.
United Kingdom. Cabinet Office. Agencies and Public Bodies Team. *Executive Agencies: A Guide for
Departments*. Cabinet Office, Oct. 2006. Web. 4 Dec. 2014.
<https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/80076/exec_agenc
ies_guidance_oct06_0.pdf>.
United Kingdom. Civil Service Human Resources. *Civil Service Competency Framework 2012 - 2017*. UK
Government, Feb. 2013. Web. 18 Dec. 2014. <http://www.civilservice.gov.uk/wp-
content/uploads/2012/07/Civil-Service-Competency-Framework-Feb2013.pdf>.
United Kingdom. Ministry of Justice. *Lord Chancellor's Code of Practice on the Management of Records
Issued under Section 46 of the Freedom of Information Act 2000*. Ministry of Justice, 2009. Web. 22
Dec. 2014. <http://www.justice.gov.uk/downloads/information-access-rights/foi/foi-section-46-
code-of-practice.pdf>.
United Kingdom. Review Body on Senior Salaries. *Report No. 82 Thirty-Sixth Annual Report on Senior
Salaries 2014*. By Bill Cockburn. Review Body on Senior Salaries, Mar. 2014. Web. 4 Dec. 2014.
<https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/288644/Senior_Sa
laries_36th_Report.pdf>.

E.5.5. Other sources

Collins, Tim. *UK Digitisation Preservation*. The National Archives, 2009. PDF.
Management Board Salary Numbers 2011-12. Ministry of Justice. XLS.
Ministry of Justice Workforce Management August 2014. Ministry of Justice, Aug. 2014. XLS.
Organisation Chart. The National Archives. PPT.
Payscale Data. The National Archives. XLS.
The Public Records System - The National Archives. The National Archives. PDF.
Thomas, David. *Qualitative Questions 11 Dec Version*. 17 Dec. 2014. DOCX.]]
Thomas, David. *Response to UK Factual Questions*. 20 Dec. 2014. DOCX.]]

TNA Acquisition and Disposition Strategy. The National Archives, Mar. 2007. PDF.
TNA Best Practice Appraising and Selecting. The National Archives, 15 Mar. 2013. PDF.
TNA Business Plan 2014-15. The National Archives. PDF.
TNA Departments and Employees Breakdown. The National Archives. XLS.
TNA Disposal Schedule. The National Archives, 2012. PDF.

E.6. Additional sources

"ISO 16175-1:2010 -- Information and Documentation -- Principles and Functional Requirements for Records in Electronic Office Environments -- Part 1: Overview and statement of principles." International Organization for Standardization. Web. 06 Feb. 2015. <http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=55790>.

"ISO 15489-1:2001 -- Information and Documentation -- Records Management -- Part 1: General." International Organization for Standardization. Web. 06 Feb. 2015. <http://www.iso.org/iso/catalogue_detail?csnumber=31908>.

"ISO 23081-1:2006 -- Information and Documentation -- Records Management Processes -- Metadata for Records -- Part 1: Principles." International Organization for Standardization. Web. 06 Feb. 2015. <http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=40832>.

Pearce-Moses, Richard. "Janus in Cyberspace: Archives on the Threshold of the Digital Era." *SAA: Presidential Address (Pearce-Moses, 8/26/06)*. Society of American Archivists. Web. 09 Feb. 2015. <http://www.archivists.org/governance/presidential/pearce-moses.asp>.

"Universal Declaration on Archives." *ICArchives : Universal Declaration on Archives : Universal Declaration on Archives*. 26 July 2012. Web. 06 Feb. 2015. <http://www.ica.org/13343/universal-declaration-on-archives/universal-declaration-on-archives.html>.

Appendix F. - *Indicative Skills Matrix*

For the long term GRS organisation structure presented in Section 4.3.1.1. of our recommendations, we have recommended indicative skills that each department should have. For the indicative skills we focused mainly on high levels skills that each department should possess. Ultimately, the Strategic Transition Office should validate and/or adapt our high level recommended skills in order to develop detailed skills that will be required by GRS.

We first developed these initial recommended skillsets by compiling, summarising and analysing the job descriptions we collected from different international institutions. Then together with our international SMEs we identified the relevant skillsets and adapted those skillsets to the GRS and Hong Kong contexts. Finally, we assigned the skillsets to its relevant department in the GRS long term organisation structure and presented the data as a skills matrix below:

Legend for the indicative skills matrix:

- Relevant skills to the specific department

- Irrelevant skills to the specific department

Skills/Departments	Strategic Research and Planning			Government Records and Information Services		Collections Management		
	Operational Excellence	Policy and Planning	Coordination and Integration	Records Management Training and Guidance	Government Records Support	Evaluation Appraisal and Accessioning	Arrangement and Description	Digital Content Services
Strategic and Operational Planning	●	●	-	-	-	-	-	-
Innovation and Transformation	●	-	-	-	-	-	-	-
Vision, Mission and Performance Indicator	●	-	-	-	-	-	-	-
Performance Evaluation	●	-	-	-	-	-	-	-
Records and Archives Management Policy Setting	-	●	-	-	-	-	-	-
International Benchmarking	●	●	-	-	-	-	-	-
Staff Management and Communications	●	-	●	-	-	-	-	-
Workflow Analysis	-	-	●	-	-	-	-	-
Change Management	●	-	●	-	-	-	-	-
Knowledge Transfer	-	-	●	-	-	-	-	-
Training, Awareness and Capacity Development	-	-	-	●	-	-	-	-
Best Practice and Guidance Resources	-	-	-	●	●	●	-	-
Records Management Advisory Services	-	-	-	●	●	●	-	-
Electronic Records Management Advice and Support	-	-	-	-	●	-	-	-
Electronic Information Management Advice and Support	-	-	-	-	●	-	-	-
Archive Appraisal Strategy and Application	-	-	-	-	-	●	-	-
Acquisition and Accession Planning	-	-	-	-	-	●	-	-
Arrangement	-	-	-	-	-	-	●	-
Description	-	-	-	-	-	-	●	-
Descriptive Systems and Finding Aids	-	-	-	-	-	-	-	●
Digitisation Planning and Administration	-	-	-	-	-	-	-	●

Our SMEs have provided an explanation/definition of all the skills mentioned in the indicative skills matrix, in the table below. The skills are presented in the same order as the indicative skills matrix:

Skills	Description
Strategic and Operational Planning	Ability to defining organisation strategy or direction, and making decisions on allocating its resources to pursue the strategy
Innovation and Transformation	Working strategically to maintain continuous improvement and develop leading edge operations and practices for all aspects of records and archival management
Vision, Mission and Performance Indicator	Proactively adjust performance indicators in order to adapt to the changing external environment and the GRS's objectives
Performance Evaluation	Assesses organisation, departments and staff performance and productivity in relation to pre-established criteria
Records and Archives Management Policy Setting	Researching, developing and implementing wide range of policies to guide records and archives management, for all materials regard less of form or medium across GRS and as appropriate across the government
International Benchmarking	Researching and identifying international best practice standards and principles for all aspects of records and archives management, regardless of form of medium, and adapting and adopting as appropriate to the needs of GRS and the Government of Hong Kong
Staff Management and Communications	Planning, developing and implementing internal methods, system, processes in order to enhance collaboration, integration, effective operations and staff capacity enhancement across the organisation
Workflow Analysis	Conduct business system analysis in order to optimise GRS operation and services, through streamline and effective workflows
Change Management	Application of a structured process and set of tools for leading the people side of change to achieve a desired outcome
Knowledge Transfer	Ensuring the widest possible communication and information exchange across GRS in order to support staff capacity, collaboration, integration and effective operations
Training, Awareness and Capacity Development	Bettering the performance of individuals and groups in GRS settings, through use of different training and development tools
Best Practice and Guidance Resources	Planning and developing resources on records and archives management based on international best practice, standard san principles
Records Management Advisory Services	Providing advisory services to other government B/Ds on best practice in records management, including electronic records management
Electronic Records Management Advice and Support	Provide advisory and support services to other government B/Ds in relation to electronic records management

Skills	Description
Electronic Information Management Advice and Support	Provide advisory and support services to other government B/Ds in relation to broad information records, content and knowledge management requirements, priorities and practices in the digital age
Archive Appraisal Strategy and Application	Planning, developing and applying strategic approaches to the selection of records for permanent preservation based on their evidential, informational, financial, legal, administrative and intrinsic value
Acquisition and Accession Planning	Developing strategic and operational plans for acquiring archives and for bringing them into legal and administrative control and custody within the archival institution
Arrangement	Applying best practice principles to the physical and intellectual organisation of archives
Description	Providing the intellectual control of archival holdings based on best practice principle and standards
Descriptive Systems and Finding Aids	Planning, developing and implementing best practice approaches to the creation and maintenance of archival descriptive tools such as finding aids, indexes and catalogues
Digitisation Planning and Administration	Developing strategic and long term goals for electronic records management and digital repository management and digital migration
Strategic Planning for Collections Management	Identifying requirement and establishing priority and plans for the appropriate storage and preservation of physical and digital material, based on best practice standards and principles
Emergency Planning	Developing strategies, priority and plans for protecting records in the event of an emergency or disaster
Vital Records Protection	Identifying records essential to the continuous operation to the government, ensuring that they are protected at all times
Physical and Digital Records and Archives Security	Safeguarding records and archives to protect confidentiality and privacy, in order to avoid breaches of access
Strategic Planning for Facilities and Holdings Management	Identifying requirement and establishing priority and plans for the protection and storage of all records and archives and the appropriate condition of facilities
Records Facility Management	Protecting and storing all records and archives to ensure preservation, security and ease of access
Trusted Digital Repository (TDR) Planning and Management	Identifying requirements and establishing priority and plans for the development of technologies, systems and standards to acquire, preserve and make available records in electronic format
Migration of Electronic Records into Archival Custody	Developing and implementing processes for transferring electronic records from storage systems within B/Ds into the TDR, with their integrity and authenticity intact

Skills	Description
Digital Records Preservation Advisory Services	Developing and delivering advice, guidance and training on best practice standards, principles and practices in all aspects of digital records preservation
Reference Resources and Tools	Plan, develop and implement reference and access tool to support the widest possible use by government and the public of the holdings of GRS
On-site Reference Services	Plan, develop and implement in person reference and access operations such as maintenance of the reading room, access to reference tools and responses to reference queries
Privacy and Security Requirement	Develop and implement processes for ensuring that personal privacy and government security are protected and respected when providing access to records and archives within the GRS
Intellectual Property Requirement	Supporting the identification of copy right and intellectual property conditions to archival holdings and ensuring those conditions are respected
Outreach Initiatives and Public Programs	Plan, develop and deliver programs, initiative and events to disseminate information about the GRS and its holdings, to raise awareness of the role scope and services of GRS, and to foster greater understanding for and appreciation for the value of records and archives of Hong Kong
Client Relationships and Stakeholder Engagement	Foster an environment of support and collaboration across government and with organisations and individual across Hong Kong in order to foster stronger relationships between GRS the government and Hong Kong society
Marketing and Licensing Arrangements	Respond to requests for or interest in public use of records and archives and support the widest possible use while respecting legal, intellectual property and other conditions that may influence use
Human Resources Support	Providing support to all staffing related initiatives including hiring, supervising, evaluation, training and deploying staff
Finance Support	Providing support for all budget related initiatives including development of strategic and operational budget, financial plans and reports, cost estimates and other necessary financial reporting activities
Resource Management Support	Providing support for the effective management of all other resources of the GRS including facilities, material goods, travel and logistics requirements

Appendix G. - *Assumptions for Additional Personnel Remuneration Costs*

G.1. Basic Salary for Head of the STO

Our research on the remuneration of overseas comparator organisations suggested that potential international candidates for Head of the STO with the right experience are paid at a similar level as an Archivist rank staff in GRS (MPS 45-49). Detailed information is shown in Table 1.

Table 1 – Annual salary for candidates in other comparator organisations

Comparator Organisations	Position of candidate	Rank of candidate	Annual salary per head (HK dollars)
TNA	Director of Information Policy and Services[60]	SCS1 (Senior Civil Service 1)	$710k to $1.39mn[61]
LAC	Assistant Deputy Minister (Corporate Services) and Chief Financial Officer[62]	EX-04 (Executive 04)	$950k to $1.11mn[63]

In order to attract these international experts to be committed to stay in Hong Kong for at least three years, we recommend that the basic salary for Head of the STO must be significantly above their current pay scale for them to consider the opportunity. Having reviewed the pay scale of the Government civil servants in the rank of Archivist to D2/3 level, we consider that the basic salary of an Archivist rank staff is aligned to that of comparable positions in the overseas jurisdictions. However, to attract these high calibre talent into Hong Kong, we recommend that the basic salary of the Head of the STO to be equivalent to that of a D2/D3 directorate level staff in the Government, translating to annual salary of HK$2.0mn to HK$2.3mn.

G.1.1. Basic Salary for STO Officers

Since the STO Officers will report to Head of the STO whose basic salary is equivalent to that of a D2/D3 rank staff, we recommend that the basic salary for STO Officers to be equivalent to that of an Archivist / CEO grade, which is currently the highest grade within the GRS except for the GRS Director. The annual basic salary will be HK$1.3mn per person.

G.1.2. Housing Benefit

We assume that the housing benefit provided to an expatriate is the same as that provided to eligible civil servants.

According to the Non-accountable Cash Allowance (NCA) Scheme, a fully non-accountable monthly allowance is payable to eligible civil servant officers. Since the proposed ranks of Head of the STO and STO Officers are D1 at minimum and Archivist (MPS45-49) correspondingly, we assume that candidates can enjoy the same

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[60] The responsibilities of this position include overseeing standards setting, information policy establishment, legislation services and business co-ordination. The information is based on organisational structure provided on the website of The National Archives, http://www.nationalarchives.gov.uk/about/our-staff.htm;

[61] Source: Thirty-Sixth Annual Report on Senior Salaries 2014, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/288644/Senior_Salaries_36th_Report.pdf.

[62] The responsibilities of this position include strategic planning, innovation and digital transformation. The information is based on the organisational structure provided by subject matter experts.

[63] Source: Rates of Pay for Certain Excluded and Unrepresented Employees, Treasury Board of Canada Secretariat, https://www.tbs-sct.gc.ca/pubs_pol/hrpubs/ratesofpay/rapaceexunem02-eng.asp#Toc476385558.

housing benefits as civil servant officers at rank on or above MPS34[64]. They will be provided with the cash allowance as a condition of service.

According to "Annual Report of the Hong Kong Senior Government Officers Association 2015", officers at rank D2 – D5 can be granted with NCA rates of HK$35.5k per month and officers at rank MPS45 to D1 can be granted with NCA rates of HK$31.6k per month, with effect from 1 April 2015[65].

We thus recommend that the housing benefits for Head of the STO to be HK$426k per year and each of the STO Unit Heads to be HK$379k per year.

G.1.3. Retirement Benefit

We assume that the retirement benefits provided to an expatriate is the same as that provided to eligible civil servants[66].

Expatriates will be provided with mandatory provident fund benefits (MPF) under the Mandatory Provident Fund Schemes Ordinance (MPFSO), provided they are not exempted from the Hong Kong MPF system. Government, as employer, is required to contribute HK$1,500 per month to the MPF of each expatriate, since the monthly relevant income is over the maximum level of HK$30k[67]. Thus, the annual retirement benefit per head is HK$18k.

If the expatriates are members of a provident, pension, retirement or superannuation schemes established outside Hong Kong, they will be exempted from the Hong Kong MPF system[68]. From our experience, employers in commercial corporations would usually contribute to the expatriates' retirement schemes in their home countries. Given different countries' retirement schemes are different in terms of the amount of contribution, we have assumed for now that the Government will pay an amount equivalent to the employers' contribution in the Hong Kong MPF schemes. The annual contribution is thus assumed to be HK$18k per head; however, such amount will be finally determined by the mutual agreement and negotiation between the Government and the expatriate.

G.1.4. Education Allowance

Our assumptions for education allowance for expatriates are based on the policy of education allowances provided to an eligible civil servant (Local Education Allowance)[69].

We assume that an expatriate may claim the Allowance at any one time for up to four dependent children. Eligible children should attend schools included in the Approved Schools List ("the List") issued by the Permanent Secretary for Education. Only school fees for primary or secondary education can be claimed.

Due to the complexity caused by various policies on school debentures (e.g. whether they are refundable or non-refundable) and capital levy, we assume that the government will only pay for the tuitions of the eligible children.

Given that the GRS office is located in Kowloon side, we assume that the expatriate's eligible children will attend international schools in the Kowloon area. We thus studied the tuitions for four international schools located in Kowloon (with both primary and secondary education) which are included in the List. Detailed information is illustrated in Table 2.

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[64] Website on Non-accountable Cash Allowance (NCA) Scheme, Fringe Benefits, Civil Service Bureau, http://www.csb.gov.hk/english/admin/benefits/760.html.
[65] Source: http://www.hksgoa.org/files/annualreport2015.pdf.
[66] The policies of retirement benefits are illustrated in the retirement benefits website for civil servants, http://www.csb.gov.hk/english/admin/retirement/183.html.
[67] Source: http://www.mpfa.org.hk/eng/mpf_system/system_features/contributions/index.jsp.
[68] Source: http://www.csb.gov.hk/english/admin/retirement/123.html.
[69] Information about Local Education Allowance is available at http://www.csb.gov.hk/mobile/english/admin/benefits/81.html.

Table 2 – Range of annual tuitions per head in selected schools[70]

School with primary and secondary education	Range of annual tuitions per head (HK dollars)
Kellet School	$130k to $178k
Christian Alliance International School	$94k to $134k
American International School	$68k to $125k
Australian International School	$123k to $184k
Average annual tuition per head is HK$130k	

The amount of education allowance will be based on the number of dependent children the expatriate has. For example, if the expatriate does not have any eligible children, he or she would not be eligible to claim any education allowance. In our cost estimation, we have assumed that each expatriate has two dependent children, i.e. he or she will be eligible to claim an annual average tuition of HK$260k for the children.

G.1.5. Non-cash Allowances

From our previous project experience in commercial corporations, expatriates are normally granted with medical and dental insurances during their terms of service in Hong Kong.

We assume that expatriates will be granted with the same medical and dental benefits as civil servants. That is, they are entitled to medical and dental treatment and services that are provided by the Department of Health (DH) or the Hospital Authority (HA) free of charge save for the charges applicable to hospital maintenance, dentures and dental appliances as provided for in the Civil Service Regulations[71].

If GRS decides not to grant the expatriates with free treatment and services in the public hospitals, it has to increase the basic salary of the expatriates to a level equivalent to a D2 grade officer to cover the cost of private health insurance.

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[70] Tuition information of all schools are abstracted from the official websites of schools.
[71] Policies on Civil Service Medical and Dental Benefits,
http://www.csb.gov.hk/english/admin/benefits/64.html#Introduction.