

Government's efforts in implementing electronic recordkeeping system

The Audit Commission ("Audit") conducted a review to examine the Government's efforts in implementing electronic recordkeeping system ("ERKS"). A related audit review on the subject was previously conducted and reported in October 2011.¹

2. The implementation of ERKS is a Government initiative to pursue electronic records management. ERKS is an information/computer system to electronically collect, organize, classify and control the creation, storage, retrieval, distribution, maintenance and use, disposal and preservation of records throughout the life cycle of records. In 2009, an Electronic Information Management ("EIM") Steering Group comprising senior officials from the Office of the Government Chief Information Officer ("OGCIO"), the Administration Wing of the Chief Secretary for Administration's Office, and the Efficiency Office ("EffO") was established to steer the government-wide EIM strategy and implementation. According to the EIM Strategy and Framework promulgated by OGCIO in 2011, all bureaux/departments ("B/Ds") should adopt an ERKS which complies with the functional requirements developed by the Government Records Service ("GRS") under the Administration Wing.

3. Up to March 2019, 11 B/Ds (with about 5 500 users) had fully or partially implemented ERKS under an ERKS pilot programme at a cost of \$110 million. In early 2019, GRS, EffO and OGCIO jointly completed a review which confirmed that the adoption of ERKS could bring about intangible benefits (e.g. reduce risk of inadvertent loss of records) and financial benefits (e.g. reduced need for storage space for paper files). In October 2019, the Policy Address Supplement announced the Government's decision to roll out ERKS to all B/Ds by end 2025 at an estimated non-recurrent cost of \$1,234 million to enhance efficiency in preserving and managing government records.

4. The Committee noted the following findings from the Director of Audit's Report:

- up to February 2020, 17 (23%) of 75 B/Ds had not submitted their ERKS implementation plans though invitation was sent by EIM Programme Management Office under the EIM Steering Group for submission by end-December 2019;

¹ Chapter 10 of Director of Audit's Report No. 57 - "Records management work of the Government Records Service".

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- implementation work planned by 57 B/Ds would not be spread out evenly over the period ending 2025. There would be a large number of B/Ds (i.e. some 80% of B/Ds) commencing ERKS implementation from 2022 to 2024;
- non-directorate level staff were appointed by 10 (13%) of 75 B/Ds involved in the service-wide implementation of ERKS as their sole EIM coordinators, which did not meet the requirement according to the EIM Strategy and Framework.² 59 (70%) of 84 EIM coordinators for the 75 B/Ds had not attended in person the briefing sessions on ERKS implementation for directorate staff in July and August 2019;
- Audit had identified the following issues involved in planning service-wide implementation of ERKS:
 - (a) the Government Human Resources Management Service ("GovHRMS")³ was only for adoption by B/Ds on a voluntary basis with no plan of full implementation in all B/Ds;
 - (b) as ERKS did not support remote access to confidential records in light of the requirements stipulated in the Government Security Regulations (i.e. a user can only retrieve confidential records in ERKS when connected to government network in government offices), staff were unable to access confidential records when working at locations other than in government offices;
 - (c) the implementation of the new government email system was on a schedule different from the implementation of ERKS. The implementation of both systems should be synchronized as far as practicable to avoid duplication of efforts and facilitate the integration of both systems; and

² According to the EIM Strategy and Framework, an EIM coordinator at directorate level should be appointed in each B/D to liaise with the EIM Steering Group via the EIM Programme Management Office on policy issues and matters of EIM.

³ According to GRS, personnel records should best be handled by GovHRMS, which is a central IT system developed by OGCIO to handle human resources management operations.

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(d) wider use of workflow functions⁴ in ERKS should be promoted for automation of records management activities to reduce manual data input efforts;

- delays were found in 8 out of the 11 projects under the ERKS pilot programme;⁵

- Audit further examined the Marine Department ("MD")'s implementation of ERKS and found that the main reason for delay was the unsatisfactory performance of the Contractor. In particular, it was observed that:

(a) from September 2016 to June 2017, OGCIO issued seven warning letters to the Contractor on its unsatisfactory performance including severe schedule slippage, loose management and inadequate staff resources;

(b) a long time was taken to rectify errors identified in system testing (i.e. 92.4 days on average for urgent and high-priority cases). Out of the 765 test incidents reports identified by MD from September 2017 to October 2019, 246 (32%) failed the required testing one or more times, ranging from 1 to 14 times;

(c) specific legal advice was not sought by OGCIO about imposing liquidated damages (\$2 million) before approving extension of completion date despite unsatisfactory performance of the Contractor; and

(d) there were inadequacies in monitoring project progress by OGCIO and MD, e.g. Project Steering Committee meetings were not regularly held;

⁴ Workflow functions were optional requirements of an ERKS which may be adopted at the discretion of individual B/Ds. All B/Ds should develop their business rules to document decisions as to what records were to be created and kept by B/Ds. If a workflow facility was implemented under business rules with an ERKS, it would be useful for users to initiate workflows and facilitate the automation of records management activities.

⁵ The ERKS pilot programme included 11 B/Ds, comprising five early adopters (EffO, GRS, the Communications and Creative Industries Branch of the Commerce and Economic Development Bureau, the Drainage Services Department, and the Rating and Valuation Department), and six next-stage adopters (the Administration Wing, the Civil Engineering and Development Department, the Intellectual Property Department, the Architectural Services Department, the Marine Department and OGCIO).

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- print-and-file practice of email records⁶ had not yet been dispensed with in the Commerce and Economic Development Bureau and the Rating and Valuation Department five years after ERKS rollout;
- audit requirements were not taken into account in designing OGCI's ERKS for creating accounts with read-only rights for non-OGCIO users;
- low usage of some users was generally observed in the four B/Ds selected by Audit under the ERKS pilot programme, for example, as of January 2020, 306 (30%) of 1 025 ERKS users in OGCI were found not using ERKS for over one year;
- in the four B/Ds selected by Audit under the ERKS pilot programme, the time limit to capture a record into ERKS was not specified in their departmental guidelines. In 2019, 7 747 (22%) of 35 567 email records in OGCI and 3 792 (17%) of 22 700 email records in the Communications and Creative Industries Branch of the Commerce and Economic Development Bureau were captured over three months after the sent/received date;
- after a delay of about six years, a comprehensive study on long-term preservation of electronic records was not yet completed; and
- a long-term strategy and relevant guidelines for archiving of government websites and/or official social media accounts were not yet formulated.

5. The Committee did not hold any public hearing on this subject. Instead, it asked for written responses regarding the planning for the service-wide implementation of ERKS, implementation of ERKS pilot programme and archiving of electronic records. The replies from **Government Chief Information Officer, Director of Administration, Commissioner for Efficiency, Secretary for Commerce and Economic Development** and **Director of Marine** are in *Appendices 41 to 45* respectively.

⁶ According to General Circular No. 2/2009 "Mandatory Records Management Requirements" issued by the Director of Administration in April 2009, since the use of ERKS for keeping electronic records was being studied at that time, unless otherwise agreed by GRS, email correspondence should be "printed-and-filed" for record purposes, i.e. subject officers should arrange to print an email record directly from the email software for filing in an appropriate paper-based file similar to other records.

6. The Committee wishes to be kept informed of the progress made in implementing the various recommendations made by Audit.