香港特別行政區政府
政務司司長辦公室轄下行政署

The Government of
The Hong Kong Special Administrative Region
Administration Wing,
Chief Secretary for Administration's Office

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1 June 2020
(by Email)

Mr Anthony CHU
Clerk to Public Accounts Committee
Legislative Council Complex
1 Legislative Council Road
Central
Hong Kong

Dear Mr CHU,

Public Accounts Committee
Consideration of Chapter 4 of the Director of Audit's Report No. 74
Government's efforts in implementing electronic recordkeeping system

Thank you for your letter of 22 May 2020 regarding the Public Accounts Committee's consideration of Chapter 4 of the Director of Audit's Report No. 74. The response of the Director of Administration to the matters set out in Part (II) of the Appendix of your letter is at the <u>Annex</u>.

We will provide you with the English translation as soon as possible.

Yours sincerely,

(Bobby Cheng)
for Director of Administration

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Secretary for Commerce and Economic Development(fax no. 2588 1421)
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Public Accounts Committee (PAC)
Consideration of Chapter 4 of the Director of Audit's Report No. 74
Government's efforts in implementing electronic recordkeeping system

The Response of the Director of Administration to Matters set out in Part (II) of the Appendix to the Letter of 22 May 2020 from the Clerk to PAC

Part 2: Planning for the service-wide implementation of electronic recordkeeping system

9)   In October 2011, the Audit Commission (Audit) published the Director of Audit's Report No. 57 which included a review of "Records management work of the Government Records Service". Audit examined issues related to development of electronic recordkeeping system (ERKS) in Part 5 of the report and identified some issues and made recommendations. However, the issues identified in 2011 such as slow progress in planning and development for records management standards, confidential records and preservation of electronic records were found again in the current audit:

(a)   According to paragraph 2.7, ERKS implementation plans from bureaux/departments (B/Ds) were not submitted on time. Up to 6 February 2020, of the 75 B/Ds, 17 (23%) had not yet submitted their implementation plans. Response from the Government (paragraph 2.12a(iii)) said that the Government would further liaise with the relevant bureaux to request for submission of the outstanding ERKS implementation plans by 15 April 2020. Have the 17 B/Ds mentioned above submitted the implementation plans? What are the reasons for not submitting the plans? Will there be any punishment if the plans are not submitted on time? and

(b)   According to paragraph 2.12(c)(i), the Government responded to Audit's recommendation and said that the Government would enhance senior management support on the service-wide implementation of ERKS and arrange briefings to senior management of B/Ds. However, it is noted in paragraph 2.10(b) that 59 (70%) of the 84 Electronic Information Management (EIM) coordinators had not attended the briefing sessions in person which indicated that senior management did not attach importance to ERKS. Could the Government provide the attendance records of the briefings conducted from July 2019 up to now, and the measures to seek support from senior management?

<u>Response from the Director of Administration</u>

In October 2011, the Audit published the Director of Audit's Report No. 57which included a review of "Records management work of the Government Records Service". Audit examined issues related to development of electronic recordkeeping system in Part 5 of the report. At that time, Audit noted that while further work to address issues relating to the implementation of ERKS in the Government was identified in October 2009, only the work on refining the functional requirements was completed in May 2011. The work on other issues was still at different stages of planning and development as summarised below:

(a) ***Records management standards.*** In December 2010, the Government Records Service (GRS) planned to complete the development of the records management standards on metadata by mid-2011, and those on import, export and transfer of records by late 2011. In May 2011, the GRS deferred the planned completion dates to late 2011 and the first quarter of 2012 respectively;

(b) ***Confidential records.*** In May 2011, the GRS indicated that it would, in collaboration with the Office of the Government Chief Information Officer (OGCIO), enhance the ERKS functionality so as to manage confidential records and records with digital signatures. The system functionality for managing confidential records would be delivered by December 2012 for use by one bureau; and

(c) ***Preservation of electronic records.*** According to the GRS's plan, it would conduct a preliminary study in August 2012 to define the scope of work and determine the expertise required of consultants. Based on the preliminary study results and with the assistance of consultants, it would commence a comprehensive study by the end of 2013, with a view to completing the development of strategies and solutions for long-term preservation of electronic records by December 2014.

Audit recommended that the Director of Administration should, in collaboration with the Government Chief Information Officer and the Head, Efficiency Unit (now known as Commissioner for Efficiency):

(a) step up efforts to address the issues relating to the implementation of an ERKS in B/Ds; and

(b) provide adequate support to B/Ds to facilitate their early implementation of an ERKS.

GRS has all along taken measures to follow up on issues and recommendations of Director of Audit's Report No. 57. From 2011 up to now, the Government has implemented the following measures to assist B/Ds in speeding up the implementation and adoption of ERKS:

(a)   as regards development of records management standards, in May 2012, GRS promulgated the "Recordkeeping Metadata Standard for the Government of the Hong Kong Special Administrative Region" and at the same time updated the "Functional Requirements of an Electronic Recordkeeping System" which was promulgated in May 2011.   B/Ds are required to comply with the functional requirements and metadata requirements when adopting or developing an ERKS.   As regards development of standard on import, export and transfer of records, GRS conducted three procurement exercises from May 2011 to January 2017 but still could not find a suitable consultancy service provider to assist in developing the standard.   It is probably due to the fact that at that time the archives around the world had not yet reached a unified standard and practice on related issues and hence no consultancy service provider was able to provide the required service.   Since the Government had not yet fully implemented ERKS in that point in time, there was no imminent need for transfer of records between systems or transfer of records with archival value from B/Ds to GRS.   As such, GRS and OGCIO suspended in 2017 the development of the standard for the time being and decided to ask the consultancy service provider for the comprehensive study on long-term preservation of electronic records to develop the standard when conducting the comprehensive study;

(b)   apart from records management standards, GRS developed four sets of ERKS implementation guidelines including "Guidelines on Mapping Out Implementation of an Electronic Recordkeeping System in the Context of Developing Organisational Electronic Information Management Strategies", "Guidelines on Implementation of an Electronic Recordkeeping System: Key Considerations and Preparation Work Required", "A Handbook on Records Management Practices and Guidelines for an Electronic Recordkeeping System" and "Manual on Evaluation of an Electronic Recordkeeping System" to assist B/Ds in implementing ERKS;

(c)   in March 2016, GRS also promulgated new guidelines to prescribe the relevant principles and best practices for managing non-electronic records and electronic records in a hybrid environment to ensure government records, regardless of their forms and media, are managed properly and effectively in a hybrid records management environment where an ERKS has not been implemented;

(d)   in April 2017, GRS updated the guidance document entitled "Disposal of Original Records (for records that have been digitised and stored in a digital form)" for compliance by B/Ds to assess the potential risks of early destruction of original copies of the records;

(e)   in December 2017, GRS updated "Guideline on the Management of Electronic Records" (formerly known as "Guideline on the Management of Electronic Mail") to help B/Ds identify, create, file and manage electronic message records so that adequate and accurate evidence of official business and activities will be retained for operational, policy, legal, financial and archival purposes;

(f)   regarding management of confidential records, GRS and OGCIO have enhanced functionalities of ERKS to manage and store records at confidential level. In 2016, GRS has updated the corresponding electronic records management standards and guidelines, including functional requirements of an ERKS and recordkeeping metadata standard;

(g)   as for implementation of ERKS, GRS launched its ERKS in May 2014 and enhanced the system functionality for management and storage of records at confidential level in September 2015. The project has enabled GRS to acquire practical experience on implementation of ERKS which can help speed up the implementation of ERKS in other B/Ds. Up to now, 11 B/Ds have fully or partially implemented ERKS. In October 2019, the Policy Address Supplement announced the Government's decision to roll out ERKS to all government B/Ds by end-2025 to enhance efficiency in preserving and managing government records; and

(h)   the Government has set up a task force, comprising members from GRS and OGCIO, on long-term preservation of electronic records. The task force had conducted a preliminary study on business, archival and technical requirements related to long-term preservation of electronic records and development of policy and strategies on preservation of electronic records from February 2012 to January 2013. Since the study on long-term preservation of electronic records involved complex issues and archives around the world were still exploring related issues at that time, it was anticipated that a comprehensive solution would not be available in a short time. As most B/Ds had not yet implemented ERKS at that time, there was no imminent need for long-term preservation of electronic records. As such, the Government decided not to commence the study before 2015 having regard to the need to concentrate resources and accord priority for implementation of the ERKS pilot projects. Although the Government had suspended the commencement of the comprehensive study, in order to enhance B/Ds' awareness of proper preservation of electronic records and to promote best practices in this regard to B/Ds, GRS promulgated a publication entitled "A Handbook on Preservation of Electronic Records" in July 2013. Currently, Phase 1 study of the comprehensive study has already commenced in 2019 with the plan to complete the study by mid-2021.

GRS in collaboration with OGCIO and the Efficiency Office (EffO) will continue to take proactive measures to assist B/Ds in implementing ERKS.

As regards question (9)(a), all B/Ds have submitted their ERKS implementation plans by April 2020. The EIM Programme Management Office, comprising OGCIO, GRS and EffO, would hold meetings with the ERKS implementation teams of B/Ds to facilitate them to commence their implementation work.

As regards question 9(b), EIM Programme Management Office has been taking measures to enhance senior management support on the service-wide implementation of ERKS. As mentioned in paragraph 2.9 of the Director of Audit's Report, the Government conducted briefings for senior management, including a joint presentation by the Government Chief Information Officer and the Director of Administration on the proposal for full implementation of ERKS in the Government. The briefing was held in August 2019 where all the participants were heads of departments. OGCIO also conducted a presentation on the implementation roadmap of ERKS in the Government in the OGCIO Stakeholders' Engagement meeting in September 2019.

In addition, OGCIO, GRS and EffO have conducted a total of over 20 briefings cum meetings from July 2019 to May 2020 as well as briefings cum meetings on implementation of ERKS for senior/directorate officers of four B/Ds. The total attendance of these briefings cum meetings were over 5 000, in which over 150 were directorate officers. Following the announcement of full implementation of ERKS in the 2019 Policy Address Supplement, this initiative has received full support of the senior management of all B/Ds including directorate officers.

EIM Programme Management Office will continue with such efforts, which include conducting briefings cum meetings on ERKS implementation with senior/directorate officers of B/Ds and issuing guidelines advising B/Ds to establish a project governance structure. The project governance structure is recommended to be headed by a directorate officer who will steer the implementation of the project. EIM Programme Management Office will continue to take proactive measures to promote the service-wide implementation of ERKS.

10) **According to paragraph 2.15, a number of B/Ds do not have dedicated IT systems to manage their human resources processes and need to keep personnel records on paper files.**

   (a) **According to paragraph 2.15(b), at present, not all B/Ds had implemented ERKS. If an officer was transferred between B/Ds with and without ERKS implemented, the officer's**

personal records would have to be printed out from ERKS as paper records for use by B/Ds without ERKS, or the personnel records in paper form would have to be scanned into the receiving B/D's ERKS. This arrangement is cumbersome. Please state why some B/Ds could not use ERKS to manage personnel records; and

(b) According to paragraph 2.16, upon Audit's enquiry, OGCIO said that the Government Human Resources Management Services (GovHRMS) was a shared common service provided by OGCIO for adoption by B/Ds on a voluntary basis. In view of the service-wide implementation of ERKS, why the GovHRMS is still provided for adoption by B/Ds on a voluntary basis? If some B/Ds have not yet adopted GovHRMS, this may lead to incompatibility between systems or records and cause confusion. How would the Government handle this situation? How would the Administration fully implement GovHRMS in the Government?

Response from the Director of Administration

B/Ds can use ERKS to manage personnel records. However, as currently only 11 B/Ds have implemented ERKS while over 70 B/Ds have not yet adopted the system, GRS has not made it a mandatory requirement for these 11 B/Ds to store their personnel records in ERKS. These B/Ds are allowed to continue to manage personnel records in paper form temporarily so as to avoid unnecessary workload and the confusion that may arise when it is necessary to exchange records of some officers who are transferred between B/Ds with and without ERKS implemented. Upon the service-wide implementation of ERKS in 2025, GRS will require all B/Ds to store personnel records in ERKS. Since records stored in ERKS can be exchanged between B/Ds, there will not be any confusion when exchanging personnel records resulting from staff postings by then.

According to information provided by OGCIO, GovHRMS has all along been provided for adoption by B/Ds on a voluntary basis. The main consideration for this arrangement is that some B/Ds have already implemented their own dedicated IT systems for human resources management to meet their requirements. To avoid duplication and wastage of resources, OGCIO therefore allows B/Ds to adopt GovHRMS on a voluntary basis. In the long run, OGCIO will continue to adopt a proactive approach to promote wider adoption of GovHRMS, and recommend individual B/Ds to consider adopting the central system when their current dedicated IT systems for human resources management are due for upgrade or replacement so as to achieve service-wide implementation of GovHRMS.

11) **According to paragraphs 2.17 and 2.18, remote access to records at confidential level is not supported by ERKS being used by the 11 B/Ds under the pilot programme. A user can only retrieve confidential records in ERKS when connected to government network in government offices. This arrangement is different from the government e-mail system, which supports remote access to confidential e-mails. In view that the situation of the novel coronavirus infection unfolds, when will the Government consult the Security Bureau regarding remote access to confidential records so that special working from home arrangement could be implemented when necessary to reduce the risk of the spread of the novel coronavirus in the community?**

Response from the Director of Administration

OGCIO is discussing with the Security Bureau on the security design of ERKS including the necessary security measures for the purpose of remote access to confidential records. After seeking the views of the Security Bureau, OGCIO, GRS and EffO will include the security design and technical requirements in the tender document for the central ERKS being drafted and will suitably introduce corresponding security measures in the system so as to fulfil the requirements of remote access to confidential records.

Part 3: Implementation of electronic recordkeeping system pilot programme

12) **According to paragraph 3.37, Audit selected four B/Ds and two B/Ds under the ERKS pilot programme for examining the records management functionalities and practices in ERKS environment. According to paragraph 3.38(b), the issue of low usage of some users was generally observed in all four B/Ds. 306 (30%) ERKS users in OGCIO, which was responsible for promoting ERKS, were found not using ERKS for over one year. The response from the Government could not explain for the low usage. What are the reasons that the four selected B/Ds have not used the system? Are the users with low usage senior management or other working staff?**

Response from the Director of Administration

ERKS possess comprehensive records management functionalities. Apart from capturing records by themselves, users may delegate their ERKS filing work to other members of the team, the filing registries or personal secretaries. Users may delegate to other staff members the duty to capture e-mails or other

electronic records into ERKS through departmental e-mail system or ERKS. Users in the same team can also develop records capturing rules for assigning designated officers to file records into the ERKS so as to avoid duplicated filing. As regards use of records, individual users could search records on their own, or request other staff members to search records, thereafter downloading the records and sending them to the subject officers for reference through e-mails. In view of the above-mentioned reasons and the internal operation and division of responsibilities of B/Ds concerned, some users may not need to use ERKS personally on a frequent basis. Instead, they may use ERKS to store and retrieve records through the assistance from other staff members.

After implementation of its ERKS in 2014, GRS conducted a survey in January 2015 to review the usage rate of GRS ERKS users in the preceding two months (viz. November and December 2014). During such period, about 90% of ERKS users were found to have used the ERKS on monthly basis and on average, 45% of users used the ERKS every day. The statistics revealed that users of GRS used the ERKS frequently.

Part 4: Archiving of electronic records

13) **According to paragraph 4.5, according to the original plan submitted to the EIM Steering Group in 2011, the comprehensive study on long-term preservation of electronic records was scheduled to commence in May 2013 for completion in December 2014. Audit found that the progress of the comprehensive study was slow. Compared with the original target completion date of December 2014, the revised target completion date set by the EIM Programme Management Office as of October 2019 was May 2021, representing a delay of about 6 years. The Government said that the delay was attributable to deferral in commencement due to competing priorities, change in study approach and long time taken in preparatory work.**

   (a) **According to paragraph 4.9(b), no potential consultancy service provider had indicated interest in the Phase 2 study. Has the Administration asked the potential consultancy service providers the reasons for not submitting a bid? Subsequently, GRS and OGCIO set up a digital repository by themselves. Is the digital repository compatible with information systems of other B/Ds? Will there be a lack of support services from the software supplier for the self-developed digital repository? and**

   (b) **According to paragraph 4.21(a)(iii), the Government explained that it was decided not to commence the study before 2015**

having regard to the need to accord priority and concentrate resources for implementation of the ERKS pilot projects. Why the comprehensive study and ERKS pilot programme could not be implemented concurrently?

Response from the Director of Administration

GRS has been working closely with OGCIO in planning for the comprehensive study on long-term preservation of electronic records. GRS and OGCIO conducted a request for information exercise in March 2017. While 65 potential consultancy service providers were invited, only four responded to the request for information exercise. The proposals from two local consultants were considered irrelevant, whereas the other two consultants from overseas only indicated interest in the Phase 1 study. One consultant from overseas clearly indicated in the response that only few digital preservation systems had been established at that time and the room for providing consultancy advice on digital preservation and related guidelines was limited. The consultant also indicated that the e-mail archiving system and preservation solution were still immature and they had therefore decided not to express interest in the Phase 2 study. Separately, three consultants from overseas indicated in their replies that either they did not possess sufficient manpower resources to participate in the study or the scope of study was too broad for them to provide information. Since no consultancy service provider had indicated interest in the Phase 2 study, GRS has taken into account overseas practice and procured an existing software product in 2019 to set up a digital repository as an interim solution. This is to prepare for long-term preservation of electronic records and to facilitate potential transfer of electronic records with archival values from B/Ds to GRS for permanent retention. The target completion date of the setting up of the digital repository is second half of 2020. The necessary software support and maintenance services will be provided by the software supplier.

GRS and OGCIO conducted a preliminary study on long-term preservation of electronic records from February 2012 to March 2013, examining the experience of overseas countries in dealing with preservation of electronic records. According to the experience of overseas countries, establishment of a digital repository generally had significant resources, manpower and time implications, and there was still no uniform international standard and practice to deal with the related issues. The study on long-term preservation of electronic records involved complex issues such as records management and information technology, requiring significant expertise and skilled manpower resources in records management, archival administration and IT. In addition, the archives around the world were still studying the issues and a desirable solution was not expected to be made available in a short time. As most B/Ds had not yet implemented ERKS at that time, there was no imminent need for long-term preservation of electronic records. As such, the Government

decided not to commence the study before 2015 so as to concentrate resources and accord priority for implementation of ERKS pilot projects. Resuming the preparation work in April 2016 for the exercises on request for information, funding application and procurement, GRS has commenced the Phase 1 study of the comprehensive study in 2019 with the plan to complete the study by mid-2021.

14) **According to paragraph 4.17 and 4.19, in Audit's view, as Hong Kong is lagging behind other overseas jurisdictions in archiving of government websites and social media accounts, there is a need to formulate a long-term strategy for web archiving in the Government. There is also a need to promulgate guidelines on management of electronic records in web environment. According to paragraph 4.21(c), the Government responded that as the archiving of government websites is technically complex and involves substantial investment on a long-term basis, it is necessary to carefully assess the prevailing technology for remote harvesting of websites and cost implication**

   (a) **Has the Government given up archiving of government websites and social media accounts, and remained to be lagging behind other overseas jurisdictions in this aspect;**
   (b) **Other than the pilot project on web archiving of government websites in accordance with paragraph 4.19(b), will the Government implement other measures in archiving government websites and social media accounts; and**
   (c) **Will the Government formulate a long-term strategy for web archiving and promulgate guidelines on management of electronic records in web environment taking into account experience of overseas jurisdictions?**

<u>Response from the Director of Administration</u>

According to experience of archives in overseas jurisdictions, archiving of records on government websites and social media accounts involves significant resources including engagement of service provider to conduct the related work on a regular basis and provision of large storage space for the archived web contents. As such, GRS adopted a prudent approach and conducted a pilot project on archiving of Government websites in 2018 to assess the effectiveness of the work and to identify areas requiring attention. GRS will consolidate the experience from the pilot project, keep abreast of the technology advancement and experience of overseas jurisdictions on archiving of website and social media contents and formulate long-term strategy for web archiving and social media archiving. In working out the long-term strategy,

GRS will consider all relevant options including engagement of qualified service provider to archive the Government websites and social media accounts on a regular basis. In addition, GRS will also promulgate guidelines on management of electronic records in web environment taking into account experience of overseas jurisdictions.