



審計署署長
香港
金鐘道 66 號
金鐘道政府合署高座
六樓

Director of Audit
6th Floor
High Block
Queensway Government Offices
66 Queensway, Hong Kong

圖文傳真 Facsimile : 2583 9063

電話 Telephone : 2867 3390

4 April 2023

The President of the Legislative Council,
Legislative Council Complex,
Hong Kong.

Sir,

In accordance with the paper tabled in the Provisional Legislative Council on 11 February 1998 on the Scope of Government Audit in the Hong Kong Special Administrative Region — ‘Value for Money Audits’, I have the honour to submit my Report No. 80 on the results of value for money audits completed in accordance with the value for money audit guidelines laid down in the paper. These guidelines are also attached.

Yours faithfully,

Prof. LAM Chi Yuen Nelson

CONTENTS

The Director of Audit's Report No. 80 contains the following chapters:

Chapter (Note)	Subject
1	Administration of the Auxiliary Medical Service
2	Administration of the Equal Opportunities Commission
3	Construction Innovation and Technology Fund
4	Hong Kong Design Centre
5	Maintenance and improvement of school premises for aided schools
6	Management of public libraries
7	Provision of map products and spatial data services to the public by the Lands Department
8	Student Health Service

Note: *The chapter numbers are assigned in alphabetical order according to the titles of chapters in the English report.*

VALUE FOR MONEY AUDIT GUIDELINES

Value for money audit

Value for money audit is an examination into the economy, efficiency and effectiveness with which any bureau of the Government Secretariat, department, agency, other public body, public office, or audited organisation has discharged its functions. Value for money audit is carried out under a set of guidelines tabled in the Provisional Legislative Council by the Chairman of the Public Accounts Committee on 11 February 1998. The guidelines were agreed between the Public Accounts Committee and the Director of Audit and have been accepted by the Administration.

2. The guidelines are:

- firstly, the Director of Audit should have great freedom in presenting his reports to the Legislative Council. He may draw attention to any circumstance which comes to his knowledge in the course of audit, and point out its financial implications. Subject to the guidelines, he will not comment on policy decisions of the Executive and Legislative Councils, save from the point of view of their effect on the public purse;
- secondly, in the event that the Director of Audit, during the course of carrying out an examination into the implementation of policy objectives, reasonably believes that at the time policy objectives were set and decisions made there may have been a lack of sufficient, relevant and reliable financial and other data available upon which to set such policy objectives or to make such decisions, and that critical underlying assumptions may not have been made explicit, he may carry out an investigation as to whether that belief is well founded. If it appears to be so, he should bring the matter to the attention of the Legislative Council with a view to further inquiry by the Public Accounts Committee. As such an investigation may involve consideration of the methods by which policy objectives have been sought, the Director should, in his report to the Legislative Council on the matter in question, not make any judgement on the issue, but rather present facts upon which the Public Accounts Committee may make inquiry;
- thirdly, the Director of Audit may also consider as to whether policy objectives have been determined, and policy decisions taken, with appropriate authority;

- fourthly, he may also consider whether there are satisfactory arrangements for considering alternative options in the implementation of policy, including the identification, selection and evaluation of such options;
- fifthly, he may also consider as to whether established policy aims and objectives have been clearly set out; whether subsequent decisions on the implementation of policy are consistent with the approved aims and objectives, and have been taken with proper authority at the appropriate level; and whether the resultant instructions to staff accord with the approved policy aims and decisions and are clearly understood by those concerned;
- sixthly, he may also consider as to whether there is conflict or potential conflict between different policy aims or objectives, or between the means chosen to implement them;
- seventhly, he may also consider how far, and how effectively, policy aims and objectives have been translated into operational targets and measures of performance and whether the costs of alternative levels of service and other relevant factors have been considered, and are reviewed as costs change; and
- finally, he may also be entitled to exercise the powers given to him under section 9 of the Audit Ordinance (Cap. 122).

3. The Director of Audit is not entitled to question the merits of the policy objectives of any bureau of the Government Secretariat, department, agency, other public body, public office, or audited organisation in respect of which an examination is being carried out or, subject to the guidelines, the methods by which such policy objectives have been sought, but he may question the economy, efficiency and effectiveness of the means used to achieve them.

4. Value for money audit is conducted in accordance with a programme of work which is determined annually by the Director of Audit. The procedure of the Public Accounts Committee provides that the Committee shall hold informal consultations with the Director of Audit from time to time, so that the Committee can suggest fruitful areas for value for money audit by the Director of Audit.

CHAPTER 1

Security Bureau Auxiliary Medical Service

Administration of the Auxiliary Medical Service

**Audit Commission
Hong Kong
31 March 2023**

This audit review was carried out under a set of guidelines tabled in the Provisional Legislative Council by the Chairman of the Public Accounts Committee on 11 February 1998. The guidelines were agreed between the Public Accounts Committee and the Director of Audit and accepted by the Government of the Hong Kong Special Administrative Region.

Report No. 80 of the Director of Audit contains 8 Chapters which are available on our website at <https://www.aud.gov.hk>



Audit Commission
6th Floor, High Block
Queensway Government Offices
66 Queensway
Hong Kong

Tel : (852) 2867 3423
Fax : (852) 2824 2087
E-mail : enquiry@aud.gov.hk

ADMINISTRATION OF THE AUXILIARY MEDICAL SERVICE

Contents

	Paragraph
EXECUTIVE SUMMARY	
PART 1: INTRODUCTION	1.1 – 1.11
Audit review	1.12
Acknowledgement	1.13
PART 2: MANAGEMENT OF MEMBERS AND CADETS	2.1
Recruitment and retention of members	2.2 – 2.5
Audit recommendations	2.6
Response from the Government	2.7
Training provided to members	2.8 – 2.19
Audit recommendations	2.20
Response from the Government	2.21
The Auxiliary Medical Service Cadet Corps	2.22 – 2.32
Audit recommendations	2.33
Response from the Government	2.34

	Paragraph
PART 3: PROVISION OF SERVICES BY THE AUXILIARY MEDICAL SERVICE	3.1 – 3.2
Manning of methadone clinics	3.3 – 3.7
Audit recommendations	3.8
Response from the Government	3.9
Provision of first aid service for public events	3.10 – 3.12
Audit recommendation	3.13
Response from the Government	3.14
Provision of ambulance services	3.15 – 3.19
Audit recommendations	3.20
Response from the Government	3.21
Provision of service in country parks	3.22 – 3.23
Audit recommendations	3.24
Response from the Government	3.25
Performance reporting on service provisioning	3.26
Audit recommendation	3.27
Response from the Government	3.28
 PART 4: ADMINISTRATIVE ISSUES	 4.1
Pay and allowances	4.2 – 4.8
Audit recommendations	4.9
Response from the Government	4.10

	Paragraph
Utilisation of training venues	4.11 – 4.14
Audit recommendations	4.15
Response from the Government	4.16
Management of emergency supplies	4.17 – 4.20
Audit recommendations	4.21
Response from the Government	4.22

Appendices	Page
A : Auxiliary Medical Service volunteer force: Organisation chart (31 December 2022)	67
B : Auxiliary Medical Service Headquarters: Organisation chart (31 December 2022)	68
C : Locations of the Auxiliary Medical Service's training venues (31 December 2022)	69
D : Utilisation rates of the Auxiliary Medical Service's training venues (2017-18 to 2021-22)	70
E : Acronyms and abbreviations	71

ADMINISTRATION OF THE AUXILIARY MEDICAL SERVICE

Executive Summary

1. The Auxiliary Medical Service (AMS) was established in 1950 to augment the existing medical and health services for maintaining the healthcare and well-being of the territory, especially in times of emergency. As stipulated in the AMS Ordinance (Cap. 517), the Director of Health is the Commissioner of AMS. The Chief Staff Officer is the Controlling Officer of AMS and is responsible to the Commissioner for the efficient administration, planning, training and operation of AMS. AMS volunteer force is commanded by the Commissioner through AMS Headquarters, which is comprised of civil servants. As at 31 December 2022, AMS had 3,514 volunteer members (hereinafter referred to as members) and the establishment and strength of AMS Headquarters were 99 and 97 respectively. In 2021-22, the total expenditure of AMS was \$105.5 million. The Audit Commission (Audit) has recently conducted a review to examine the administration of AMS.

Management of members and cadets

2. *Need to closely monitor the declining trend in the number of members.* Any person who is 16 years of age or over and the holder of an identity card issued under the Registration of Persons Ordinance (Cap. 177) may apply to the Commissioner for enrolment as a member. From 2017 to 2022, the number of members decreased by 19% from 4,357 to 3,514. Notwithstanding AMS's recruitment efforts, there was no improvement in the number of applications for membership. In 2022, 501 applications were received, representing a 7% decrease compared with 538 applications in 2021 (paras. 2.2 and 2.3).

3. *Need to enhance monitoring of the efficiency requirement.* To ensure that members maintain their knowledge and skills in operations, a member shall obtain a specified number of training hours in any training year to meet the requirement for efficiency. According to the AMS Standing Order, AMS Headquarters will serve the first warning to a member if he fails to meet the requirements for efficiency and the final warning if he still fails to meet the required attendance rate in the training quarter

Executive Summary

immediately after the first warning. The member will be discharged if he fails to follow the instructions stated in the final warning without any reasonable excuse. Audit analysed the 510 first warnings and the 173 final warnings issued by AMS to members who did not meet the efficiency requirements for the training years from 2017-18 to 2021-22 and found that: (a) of the 510 first warnings, 471 (92.4%) were issued over 30 days after the end of the respective training years; and (b) among the 173 members receiving the final warnings, 38 (22%) had been discharged. On average, they were discharged 336 days after the first warnings were issued (ranging from 93 to 1,211 days) (paras. 2.9 to 2.11).

4. ***Performance targets on members' training manhours not met.*** AMS provides various training courses to members and includes the total manhours attended by members for each of the three major types of training (i.e. recruit training, regular training and centralised training) as key performance targets, which are reported in its Controlling Officer's Reports (CORs). Audit examined AMS's CORs from 2017 to 2021 and noted that the performance targets of all the three types of training had not been achieved throughout the five-year period except for the centralised training in 2019 (para. 2.14).

5. ***Need to segregate the training manhours of trainers and assistants from those attended by trainees.*** Audit analysed the training manhours by individual members recorded from October 2021 to September 2022 and noted that of the 3,135 members with training manhours recorded, 277 (9%) members had more than 100 training manhours. Audit sample checked 10 members with exceptionally high training manhours (totalling 20,101 manhours) and noted that 19,329 (96%) training manhours recorded were in fact manhours spent by the members as assistants. According to AMS, there are no separate codes in the management information system to distinguish the different roles of trainers, assistants and trainees. Audit also notes that the manhours of trainers and assistants have been included in the training manhours reported in AMS's CORs, which may overstate the training manhours reported in CORs (paras. 2.16 and 2.17).

6. ***Need to step up efforts in recruiting and retaining cadets.*** The Auxiliary Medical Service Cadet Corps (AMSCC) is a youth uniformed group founded in 2011 in accordance with the AMS Ordinance with cadets who are youngsters aged 12 to under 18. As at 31 December 2022, the number of cadets was 1,895. According to 2014 Policy Address, the Government would allocate additional resources to strengthen its networking and communication with young people at the district level

Executive Summary

and AMS targeted to recruit a force of 3,000 cadets by 2019. Nonetheless, the number of cadets had not met the target throughout the years. Audit analysed the turnover of cadets in the period from 2018 to 2022 and noted that: (a) while the number of cadets recruited increased from 639 in 2018 to 1,031 in 2019, the number decreased significantly from 2020 to 2022 due to the coronavirus disease (COVID-19) epidemic; (b) the number of cadets resigned each year ranged from 54 to 207 (averaging 151) and the top three reasons for resignation were “not interested”, “further studies” and “busy with other activities”; and (c) only 58 (3%) out of 1,827 cadets who retired upon reaching the age of 18 joined the AMS volunteer force (paras. 2.22 to 2.24).

7. ***Low participation rate of training, exercises and visits.*** AMSCC organises various group activities in which cadets foster their self-confidence, devotion to serving others, and leadership as well as acquire interpersonal and communication skills. Of the 2,293 and 1,895 cadets as at 31 December 2021 and 2022, only around half of cadets (i.e. 1,151 (50%) and 824 (43%) respectively) had participated in at least 2 activities (i.e. any training, exercises and visits) in the past 12 months and were considered to be active members (paras. 2.22 and 2.31).

8. ***Need to review key performance targets of training, exercises and visits attended by cadets.*** The numbers of manhours of training and exercises and visits attended by cadets are reported in AMS’s CORs as key performance targets. When cadets attend training, exercises and visits, they need to sign on an attendance sheet and the numbers of manhours will be input into the management information system by AMS Headquarters. However, Audit noted that there were differences between the records in the management information system and the figures reported in AMS’s COR (e.g. the number of manhours for regular training in 2021 was 145,773 per COR versus 23,570 per system records) (para. 2.32).

Provision of services by the Auxiliary Medical Service

9. In addition to the emergency duties, AMS liaises with other government departments and outside agencies to provide a variety of services, including manning of methadone clinics for the Department of Health, non-emergency ambulance transfer services, on-the-spot first aid coverage for public events and first aid or ambulance service in country parks and on cycling tracks. While the number of members decreased by 415 (10%) from 4,094 in 2019 to 3,679 in 2021, the total manhours spent on the provision of services by AMS increased by 309,742 (54%)

Executive Summary

from 578,469 to 888,211 during the period, mainly attributable to AMS's effort in combating the COVID-19 epidemic. In 2021, the COVID-19 operations and manning of methadone clinics accounted for 75% of manhours of services provided by AMS (paras. 1.3 and 3.2).

10. ***Need to review long-term manpower requirement.*** Methadone clinics are open for 4 to 15 hours every day and AMS deploys about 100 members on a daily basis for the routine duties. From November 2012 to June 2014, the Security Bureau, the Department of Health and AMS held meetings to explore the options of using manpower sources other than deploying members (e.g. outsourcing, recruiting non-civil service contract staff and civil servants), taking into consideration that a sufficient supply of manpower was crucial for the provision of consistent and steady services in methadone clinics. No conclusion had been reached in the meetings and no follow-up actions had been taken since the meeting in June 2014. Other than manning of methadone clinics, AMS also deploys members to perform administrative work (e.g. training assistants and store assistants) on a regular basis (paras. 3.6 and 3.7).

11. ***Low utilisation of non-emergency ambulances and town ambulances.*** As at 31 December 2022, AMS had a fleet of 17 ambulances, comprising 7 non-emergency ambulances for the provision of non-emergency ambulance transfer services, 5 town ambulances for the reinforcement of the ambulance services of the Fire Services Department and the provision of ambulance service in country parks, and 5 motorcycle ambulances for the provision of ambulance service in country parks. Audit's analysis revealed that, from 2018 to 2022 (up to September 2022), the utilisation rates of non-emergency ambulances and town ambulances ranged from 54% to 64% and from 56% to 69% respectively. Audit examined the number of non-emergency ambulance transfer requests from patients from 2013 to 2022 and noted that the number of requests decreased by 9,159 (57%) from 15,990 to 6,831 during the period. According to AMS, the decrease in number of non-emergency ambulance transfer requests from patients might be due to the adjustment of the Hospital Authority's non-emergency services in view of the fifth wave of the COVID-19 epidemic. During the outbreak of the epidemic, AMS also provided the conveyance services for confirmed cases and their close contacts, and supported the evacuation of buildings and institutions with confirmed cases (paras. 3.15, 3.16 and 3.18).

Executive Summary

12. ***Need to improve the service availability in country parks.*** As agreed with the Agriculture, Fisheries and Conservation Department (AFCD), AMS is responsible for providing first aid or ambulance service in 8 areas within country parks on Sundays and public holidays. Audit examined the provision of service during the period from 1 October 2021 to 30 September 2022 and noted that the service was not available at all times in 7 of the 8 areas, with availability rates ranging from 70% to 98%. Moreover, there was no documentary evidence showing that AMS had informed AFCD of the non-provision of service to facilitate the alternative arrangement of provision of first aid or ambulance service by other agencies (paras. 3.22 and 3.23).

Administrative issues

13. ***Room for improvement in disbursing pay and allowances to members.*** Members are subject to the provision of the Auxiliary Forces Pay and Allowances Ordinance (Cap. 254) and members who attend duty (including active service and voluntary duty) or training are eligible to be paid an hourly rate or a daily rate according to their ranks. According to the AMS Standing Order, Occurrence Book is an official record to log all events/occurrence and make available documentary evidence/records for accounting procedures. In order to claim pay and allowances in respect of duties/training, pay and allowances claim forms must be completed, certified and approved. Audit sample checked 50 pay and allowances claim forms with payments made in September 2022 involving 26 occurrences of duties/training and 250 members' claims and found that 25 occurrences (involving 248 members' claims) could not be verified against the records in the Occurrence Books. Audit also noted that of the 16 training venues for the period from April 2020 to September 2022: (a) the Occurrence Books of 2 training venues could not be located; and (b) for 12 of the remaining 14 training venues, the Occurrence Books had not been checked and verified by the Operations and Training Officers concerned and/or the management staff as required in the AMS Standing Order (paras. 1.5 and 4.3 to 4.6).

14. ***Low utilisation of some training venues.*** As at 31 December 2022, AMS had 16 training venues at its Headquarters and in various districts. Audit examined the utilisation reports for the period from 2017-18 to 2021-22 and noted that the 5-year average utilisation rates of 9 (56%) training venues were below 20%. According to the schedule of regular training for the period from September 2022 to June 2023, no

Executive Summary

regular training was held or scheduled to be held in the training venues located in Sai Kung, Mui Wo and Tung Chung (paras. 4.11 to 4.13).

Audit recommendations

15. **Audit recommendations are made in the respective sections of this Audit Report. Only the key ones are highlighted in this Executive Summary. Audit has *recommended* that the Chief Staff Officer of AMS should:**

Management of members and cadets

- (a) **closely monitor the declining trend in the number of members and step up its efforts in recruiting new members and retaining existing members (para. 2.6(a));**
- (b) **take measures to enhance the monitoring of compliance of the efficiency requirement by members and follow up with those members who have not met the efficiency requirement in a timely manner (para. 2.20(a) and (b));**
- (c) **take measures to boost up the training manhours in order to meet the performance targets (para. 2.20(c));**
- (d) **segregate the manhours for taking up the duties of trainers and assistants from the training manhours attended by members as trainees (para. 2.20(e));**
- (e) **continue to make efforts in recruiting new cadets and retaining existing cadets, and take measures to encourage the cadets who retired upon reaching the age of 18 to join as members of the AMS volunteer force (para. 2.33(a) to (c));**
- (f) **step up efforts in encouraging cadets to attend training and participate in exercises and visits (para. 2.33(e));**
- (g) **review the differences between the numbers of manhours of training, exercises and visits attended by cadets reported in AMS's COR and those recorded in the management information system and critically**

Executive Summary

assess whether the pertinent key performance targets can be achieved (para. 2.33(f) and (g));

Provision of services by the Auxiliary Medical Service

- (h) review the existing practice of deploying members in administrative work and, in collaboration with the Security Bureau and the Department of Health, continue to explore the feasibility of alternative source of manpower in view of the long-term need of operating methadone clinics (para. 3.8(b));
- (i) ascertain the reasons of the low demand of AMS's ambulance services and take measures to improve the utilisation of the non-emergency ambulances and town ambulances (para. 3.20(b) and (c));
- (j) secure sufficient manpower for the provision of the first aid or ambulance service in country parks as far as practicable and inform AFCD in advance when the service is not available from AMS (para. 3.24(a) and (b));

Administrative issues

- (k) strengthen internal controls on the members' claims of pay and allowances, such as requiring the certifying/approving officers of the claim forms to check against the records in Occurrence Books when certifying/approving the claims (para. 4.9(a));
- (l) take measures to ensure that regular random inspections and checks of the Occurrence Books are performed in accordance with the requirements set out in the AMS Standing Order, and that the pertinent inspections and checking results are properly documented (para. 4.9(b)); and
- (m) critically review the need of keeping AMS's training venues with low utilisation rates, taking into account of the training needs of members and cadets (para. 4.15(b)).

Executive Summary

Response from the Government

16. The Chief Staff Officer of AMS agrees with the audit recommendations.

PART 1: INTRODUCTION

1.1 This PART describes the background to the audit and outlines the audit objectives and scope.

Background

1.2 The Auxiliary Medical Service (AMS) was established in 1950 to augment the existing medical and health services for maintaining the healthcare and well-being of the territory, especially in times of emergency (Note 1). As stipulated in the AMS Ordinance (Cap. 517), the Director of Health is the Commissioner of AMS (the Commissioner). The Chief Staff Officer of AMS, a government official, is responsible to the Commissioner for the efficient administration, planning, training and operation of AMS. AMS is responsible for providing:

- (a) volunteer medical services to assist the Department of Health (DH), the Hospital Authority (HA) and the Fire Services Department (FSD) during emergency situations; and
- (b) supplementary volunteer medical services to government departments and outside agencies during peace time.

As at 31 December 2022, AMS had 3,514 volunteer members (hereinafter referred to as members).

Provision of services by AMS

1.3 The duties of AMS are divided into emergency and general duties:

- (a) ***Emergency duties.*** In times of emergency, AMS provides the following services:

Note 1: *AMS's work contributes to the Secretary for Security's policy area of internal security. In 1983, AMS became an independent government department under the Security Bureau.*

Introduction

- (i) if assistance is required at a site where an incident or disaster occurs, the Emergency Response Task Force (see para. 1.5(d)(i)) and/or members of other units will be deployed to the scene to provide medical assistance by giving paramedic care to the injured;
 - (ii) when typhoon signal No. 8 or above is issued, members will report to the Ambulance Depots/Stations of FSD and help set up first aid posts to provide first aid treatment for the public who are in need. AMS will also augment the ambulance service of FSD by providing additional ambulance crews at designated Depots/Stations; and
 - (iii) a town ambulance on stand-by at the New Territories East Regional Office will provide reinforcement for FSD at the scene of emergency whenever emergency calls are referred from the Fire Services Communication Centre between 3 p.m. and 11 p.m. daily; and
- (b) **General duties.** In addition to the emergency duties, AMS liaises with other government departments and outside agencies to provide a variety of services, including:
- (i) manning of methadone clinics for DH;
 - (ii) non-emergency ambulance transfer services (NEATS) for patients of DH, HA and private hospitals 7 days a week from 8 a.m. to 6 p.m.;
 - (iii) on-the-spot first aid coverage for public events (e.g. marathon races, fireworks displays and the New Year Eve Count-down Carnivals), in cooperation with other government departments;
 - (iv) first aid or ambulance service in country parks on Sundays and public holidays and on cycling tracks on Saturdays, Sundays and public holidays. First aid posts are set up at designated points assigned by the Agriculture, Fisheries and Conservation Department (AFCD) and the Leisure and Cultural Services Department respectively;

- (v) supplementary lifeguard services for the Leisure and Cultural Services Department;
- (vi) first aid coverage for non-profit-making organisations on request basis; and
- (vii) provision of first aid skills training for civil servants and employees of non-profit-making organisations.

1.4 During the coronavirus diseases (COVID-19) epidemic, AMS provided a large variety of services such as conveyance services for confirmed cases and their close contacts, provision of infection control training courses to the Security Bureau's Anti-epidemic Task Force, and assistance in the operation of quarantine facilities (Note 2) and public mortuaries. For the years 2020 and 2021 and the nine-month period ended 30 September 2022, the total service manhours provided by AMS volunteer force for the COVID-19 operations represented 34 %, 44 % and 53 % of total service manhours respectively.

Composition and organisation of AMS

1.5 ***AMS volunteer force.*** AMS volunteer force is commanded by the Commissioner through AMS Headquarters (see para. 1.6) which directs the operation of the following Columns and Wings:

- (a) ***Headquarters Column.*** It is one of the requirements for full-time staff of AMS Headquarters in the Operations and Training Officer (OTO) Grade to be enrolled as members when they are employed in their capacity as civil servants. They are appointed to different ranks of ex officio capacity in the volunteership in accordance with their posts, length of service, and performance in the OTO Grade. Operations officers of this Column will act as AMS Controllers at scenes of major incidents. Other full-time staff such as supplies personnel, foreman, artisan and workman will also be posted in this Column for logistics support;

Note 2: *Quarantine facilities include: (a) quarantine centres (e.g. designated quarantine hotels and the quarantine centres in Lei Yue Mun Park and Holiday Village) to accommodate close contacts of confirmed cases; and (b) community isolation facilities (e.g. the facility at Penny's Bay) to accommodate confirmed cases.*

Introduction

- (b) ***Operations Wings.*** There are two Operations Wings, with members organised into 72 teams under 18 districts of five regions to perform AMS operational duties. Members of the Operations Wings are the skeleton uniformed workforce responsible for performing all AMS operational duties and are mobilised during the times of emergency;
- (c) ***Training and Development Column.*** It provides and consolidates all sorts of skills training in order to facilitate the human resources development of AMS volunteer force;
- (d) ***Medical and Paramedic Column.*** It consists of:
 - (i) ***Emergency Response Task Force.*** It provides paramedical services at scenes of emergency and assists the Accident and Emergency Departments at the public hospitals which are affected by emergencies;
 - (ii) ***Health Protection Unit.*** It formulates operational plans and training programmes for AMS and the public in line with the direction of the Centre for Health Protection; and
 - (iii) ***Reserve Branch.*** It sets up temporary hospitals and convalescent hospitals in times of full emergency. It consists of medical professionals and paramedical/technological professionals;
- (e) ***Logistics and Support Column.*** It provides the technical know-how logistics in order to improve quality of services of AMS and supports members' welfare aspects; and
- (f) ***Cadet Corps Operations Wings and Training and Development Column.*** The Auxiliary Medical Service Cadet Corps (AMSCC), founded in 2011, is a youth uniformed group under AMS with youths aged 12 to under 18. The Wings and the Column supervise the cadets and organise relevant training and activities for them.

As at 31 December 2022, AMS had 3,514 members, comprising 1,016 officer rank and 2,498 non-officer rank members. Members are subject to the provision of the Auxiliary Forces Pay and Allowances Ordinance (Cap. 254 — AFPAO) and members

who attend active service, voluntary duty or training are eligible to be paid an hourly rate or a daily rate according to their ranks (Note 3). Appendix A shows the organisation chart of AMS volunteer force.

1.6 **AMS Headquarters.** As at 31 December 2022, the establishment and strength of AMS Headquarters were 99 and 97 respectively. These civil servants work in the following two Divisions:

- (a) **Operations and Training Division.** Headed by the Staff Officer, it provides support for the provision of services, recruitment and training of members and cadets; and
- (b) **Administration Division.** Headed by the Departmental Secretary, it is responsible for the personnel management, financial resources management and administration of AMS.

Appendix B shows the organisation chart of AMS Headquarters.

Training provided to members and cadets

1.7 AMS provides various training courses to the members to equip them with sufficient knowledge and skills to perform their duties. Types of training are categorised as follows:

- (a) **Recruit training.** Persons enrolled as members after the recruitment process must complete a training course according to their ranks;
- (b) **Regular training.** Members are required to attend the regular training according to their assigned units. Each unit organises training of around 2 to 10 hours monthly. Examples of training include first aid skills, nursing skills, disaster medical assistance training and foot drill training;

Note 3: *The pay rates are reviewed every two years by the Secretary for Security. The revised pay rates are then submitted to the Secretary for Financial Services and the Treasury for approval under delegated authority from the Finance Committee of the Legislative Council.*

Introduction

- (c) ***Obligatory service training.*** Each non-officer rank member of the Operations Wings is required to attend duty training of not less than 16 hours in every training year (i.e. from 1 April to 31 March of the next year) to practise the knowledge and skills acquired. Such training is necessary for members to gain practical duty experience which is essential as part of the preparedness for emergency mobilisation;
- (d) ***Centralised training.*** In order to enhance members' knowledge and skills to meet the service needs, AMS organises additional training courses/programmes such as Management and Leadership Course and Promotion Study Course; and
- (e) ***Other training.*** To meet the training objectives, there are a variety of other courses/programmes such as nursing course, instructorship training and attachments to Accident and Emergency Departments/ambulances of FSD.

1.8 AMSCC aims to equip its cadets with professional knowledge and skills of healthcare, hygiene and health, and cultivate their self-discipline and sense of responsibility. The cadets are organised into different units under 15 districts of five regions to attend various training courses and participate in exercises and visits:

- (a) ***Training courses.*** These include:
 - (i) ***Induction training.*** It is for new cadets to learn the AMS Standing Orders and AMSCC Standing Orders (see para. 1.10), discipline and team spirit, etc.;
 - (ii) ***Regular training.*** The training activities include medical, hygienic and first aid skills, foot drills and civic education. Generally, it is held on alternate Saturday afternoons; and
 - (iii) ***Centralised training.*** To encourage a diversified development, AMS also arranges a variety of courses for cadets to enrol voluntarily according to their own interests and competence such as leadership training; and

- (b) *Exercises and visits.* Examples of exercises are hiking, camping, mountaineering, rowing and windsurfing. AMSCC also arranges visits to government departments and organises social/community events.

1.9 In 2022, AMS set up the National Security Education Team which aims at formulating plans and activities for the promulgation and education of national security, such as preparing education materials and organising quizzes.

Guidelines and instructions

1.10 The Commissioner may, from time to time, subject to the AMS Ordinance and the AMS Regulation (Cap. 517A), issue orders for the administration, control and information of AMS. In this connection, the Commissioner issues the AMS Standing Orders, AMS Operation Orders and AMSCC Standing Orders, and reviews and updates them regularly. These orders cover different themes including organisation functions, conduct and discipline, training policy, operation procedures, finance and accounts, uniform and dress regulation, etc. AMS is also governed by relevant government regulations and guidelines including the Stores and Procurement Regulations and the Financial Circulars.

Expenditure of AMS

1.11 The Chief Staff Officer is the Controlling Officer of AMS. Table 1 shows the total expenditure of AMS from 2017-18 to 2021-22. In 2021-22, the expenditure of AMS was \$105.5 million, of which \$43.6 million (41%) and \$32.1 million (30%) was attributed to AMS staff and members' salaries/pay and allowances respectively (see Figure 1).

Table 1

**Total expenditure of AMS
(2017-18 to 2021-22)**

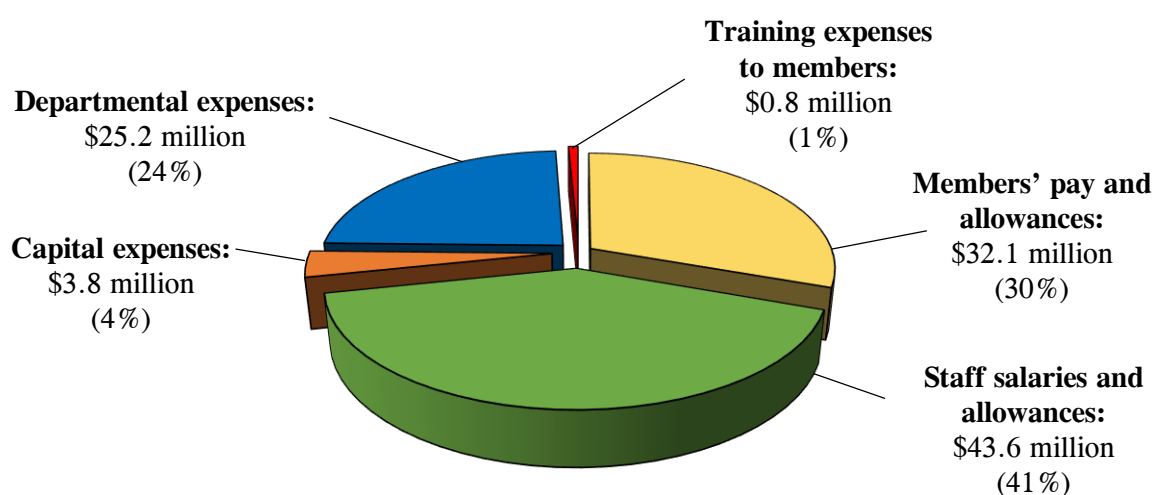
Year	Total expenditure (\$ million)
2017-18	94.3
2018-19	95.9
2019-20	98.1
2020-21	91.3
2021-22	105.5

Source: AMS records

Remarks: The revised estimated total expenditure for 2022-23 was \$104.5 million.

Figure 1

**Analysis of AMS's total expenditure of \$105.5 million
(2021-22)**



Source: AMS records

Audit review

1.12 In October 2022, the Audit Commission (Audit) commenced a review to examine the administration of AMS, focusing on:

- (a) management of members and cadets (PART 2);
- (b) provision of services by AMS (PART 3); and
- (c) administrative issues (PART 4).

Audit has found room for improvement in the above areas and has made a number of recommendations to address the issues.

Acknowledgement

1.13 Audit would like to acknowledge with gratitude the full cooperation of the staff of AMS during the course of the audit review.

PART 2: MANAGEMENT OF MEMBERS AND CADETS

2.1 This PART examines the management of members and cadets, focusing on:

- (a) recruitment and retention of members (paras. 2.2 to 2.7);
- (b) training provided to members (paras. 2.8 to 2.21); and
- (c) AMSCC (paras. 2.22 to 2.34).

Recruitment and retention of members

2.2 Any person who is 16 years of age or over and the holder of an identity card issued under the Registration of Persons Ordinance (Cap. 177) may apply to the Commissioner for enrolment as a member. Membership comprises 10 ranks (Note 4) and the ranks open for enrolment all year round are Grade I, Grade IV (nurse) and Senior Grade V (medical practitioner). An applicant applying for Grade I member has to pass the occupational task and physical fitness test (Note 5), interview and medical examination. Medical practitioners applying for Senior Grade V officers and nurses applying for Grade IV officers should be registered medical practitioners under the Medical Registration Ordinance (Cap. 161) and registered/enrolled nurses under the Nurses Registration Ordinance (Cap. 164) respectively. They are also required to pass the interview and medical examination.

Note 4: *The 10 ranks are Grades I, II, III, IV, Senior IV, V, Senior V, VI, VII and Senior VII. Grade IV or above are classified as officer ranks.*

Note 5: *The test items include: (a) at least 9 push ups for male (knee push ups for female) in 1 minute; (b) 100-metre run or walk with first aid rucksack in 1 minute; (c) at least 12 sit-ups in 1 minute; (d) placing equipment up about 193 centimetres; (e) at least 6 sets of squat thrust in 30 seconds; and (f) 800-metre run or walk in 6 minutes.*

Need to closely monitor the declining trend in the number of members

2.3 As at 31 December 2022, AMS had 3,514 members. Audit noted that from 2017 to 2022, the number of members decreased by 19% from 4,357 to 3,514 (see Table 2). According to AMS:

- (a) the drop in strength of AMS volunteer force from 2017 to 2022 was mainly due to the decrease in the number of new recruits attributable to the black-clad violence in 2019 and the COVID-19 epidemic since 2020;
- (b) noting the decreasing trend in the strength of AMS volunteer force, starting from early 2022, there has been a series of publicity activities aiming at increasing the recognition and reputation of AMS; and
- (c) it has actively communicated with universities to explore ways of closer collaboration, so as to recruit more university students to join AMS.

Notwithstanding AMS's recruitment efforts, there was no improvement in the number of applications for membership. In 2022, 501 applications were received, representing a 7% decrease compared with 538 applications in 2021. Audit considers that AMS needs to closely monitor the declining trend in the number of members and step up its efforts in recruiting new members and retaining existing members.

Table 2**Number of members
(2017 to 2022)**

Year	Number of members	Year on year decrease	
		(Number)	(Percentage)
2017	4,357		
2018	4,284	73	1.7 %
2019	4,094	190	4.4 %
2020	3,843	251	6.1 %
2021	3,679	164	4.3 %
2022	3,514	165	4.5 %

Source: Audit analysis of AMS records

Remarks: The numbers reflected the positions as at 31 December of the years.

Need to improve the attendance rates of recruitment exercises

2.4 For recruitment of Grade I members, the occupational task and physical fitness test cum interview is normally held every quarter at AMS Headquarters in Ho Man Tin on a weekend. For recruitment of Grade IV and Senior Grade V officers, eligible applicants will be invited for interview after the vetting of the application forms by AMS Headquarters. Audit analysed the attendance rates of the recruitment exercises (Note 6) conducted for the three ranks (Note 7) during the period from 2018 to 2022 (see Table 3) and noted that many applicants for Grade I members and Grade IV officers did not attend the recruitment exercises:

Note 6: *Recruitment exercises represent: (a) the occupational task and physical fitness test cum interview for applicants of Grade I members; and (b) the interview for applicants of Grade IV and Senior Grade V officers.*

Note 7: *Apart from these three ranks, members are also recruited via Potential Officer Programme. The Potential Officer Programme is for candidates without medical background and lasts for two years. Upon completion of the Programme and passing relevant assessments, the candidates will be appointed as Grade IV officers. According to AMS, the Programme has not been offered since 2019. In 2018, 33 members were recruited under the Programme.*

- (a) only 32% to 52% of the applicants applying for Grade I members attended the recruitment exercises; and
- (b) for applicants applying for Grade IV officers, the attendance rates of recruitment exercises were above 50% from 2018 to 2021 but decreased considerably to 30% in 2022.

Table 3

**Analysis of attendance rates of recruitment exercises conducted
for Grade I, Grade IV and Senior Grade V members/officers
(2018 to 2022)**

	2018	2019	2020	2021	2022
Number of applications received					
- Grade I	971	878	541	513	488
- Grade IV (Note)	29	22	21	23	10
- Senior Grade V	3	7	6	2	3
Number of applicants attending recruitment exercises					
- Grade I	453	381	283	234	156
- Grade IV (Note)	19	15	17	13	3
- Senior Grade V	3	7	6	2	3
Percentage of applicants attending recruitment exercises					
- Grade I	47%	43%	52%	46%	32%
- Grade IV	66%	68%	81%	57%	30%
- Senior Grade V	100%	100%	100%	100%	100%

Source: Audit analysis of AMS records

Note: The number of applications for Grade IV officer in the table did not include the candidates in the Potential Officer Programme (see Note 7 to para. 2.4).

2.5 Audit considers that AMS needs to ascertain the reasons for the low attendance rates of the recruitment exercises (especially for Grade I members) and take measures to improve the attendance rates.

Audit recommendations

- 2.6 **Audit has *recommended* that the Chief Staff Officer of AMS should:**
- (a) **closely monitor the declining trend in the number of members and step up efforts in recruiting new members and retaining existing members; and**
 - (b) **ascertain the reasons for the low attendance rates of the recruitment exercises (especially for Grade I members) and take measures to improve the attendance rates.**

Response from the Government

- 2.7 The Chief Staff Officer of AMS agrees with the audit recommendations. He has said that AMS:
- (a) has noticed the decreasing trend in the strength of AMS volunteer force. Starting from early 2022, a series of publicity activities aiming at improving public recognition of AMS has been arranged. AMS will further step up efforts in recruiting new members and retaining existing members; and
 - (b) will ascertain the reasons for the low attendance rates of the recruitment exercises (especially for Grade I members) and take necessary improvement measures, such as following up with the absentees and announcing the dates of the planned recruitment exercises in advance so that applicants can make arrangement to attend the recruitment exercises which fit their schedules.

Training provided to members

- 2.8 ***Training policy.*** In order to meet the increasing demands for both emergency and non-emergency services of the community, the training activities of AMS are required to meet the following objectives:
- (a) maintaining and enhancing members' knowledge and skills to improve their work efficiency and effectiveness;

- (b) assisting members to realise and develop their own potentials;
- (c) ensuring constant practices and revisions to enable members to maintain satisfactory performance; and
- (d) providing necessary training for those selected for promotion so as to facilitate them to take up additional responsibilities in the near future.

Need to enhance monitoring of the efficiency requirement

2.9 To ensure that members maintain their knowledge and skills in operations, the AMS Regulation and the AMS Standing Order stipulate that:

- (a) to meet the requirement for efficiency, a member (except for the members in the reserve unit — Note 8) shall obtain 60 hours of training in any training year (Note 9); and
- (b) if the regular training of a unit is less than 100 hours in total in a training year, a minimum of 60% training attendance in that training year will be regarded as meeting the requirement for efficiency (Note 10).

Note 8: *According to the AMS Regulation, the Commissioner may post a member to the reserve unit if the member: (a) is likely to be away from Hong Kong for 6 months or more; or (b) for any reason has been exempted from duty by the Commissioner.*

Note 9: *According to the AMS Regulation, the Commissioner may exempt any member from this requirement.*

Note 10: *According to AMS, due to the black-clad violence in 2019 and the COVID-19 epidemic since 2020, some training courses were cancelled. In this connection, different relaxations in the efficiency requirements were made in the training years for 2019-20, 2020-21 and 2021-22.*

Management of members and cadets

2.10 According to the AMS Standing Order:

- (a) in early April, each team in-charge should report to AMS Headquarters in writing any member who fails to meet the requirements for efficiency for the last training year. AMS Headquarters will serve the first warning in writing to such member;
- (b) if such member still fails to meet the required attendance rate in the training quarter immediately after the first warning, the team in-charge concerned should report the matter to AMS Headquarters in writing. AMS Headquarters, on receipt of such report, will issue the final warning to the member concerned; and
- (c) the member has to give a written explanation within 14 days. Any member, who without any reasonable excuse fails to follow the instructions stated in the final warning, will be discharged without going through any disciplinary proceedings.

2.11 Audit analysed the 510 first warnings and the 173 final warnings issued by AMS to members who did not meet the efficiency requirements for the training years from 2017-18 to 2021-22 and found that:

- (a) there was a long time lapse between the end of the training year and the date of issuance of the first warning. Of the 510 first warnings, 471 (92.4%) were issued over 30 days after the end of the respective training years (ranging from 35 to 268 days, averaging 105 days) (see Table 4); and
- (b) among the 173 members receiving the final warnings, 38 (22%) had been discharged. On average, they were discharged 336 days after the first warnings were issued (ranging from 93 to 1,211 days). Audit examined the 3 members discharged in 2022 and noted that 2 of them had not met the efficiency requirements since the training years 2018-19 and 2019-20 respectively.

Table 4

**Days lapsed between the end of a training year and
the issuance of first warning to members
(2017-18 to 2021-22)**

Number of days lapsed between the end of a training year and the date of issuance of first warning	Number of first warning issued for the training year					
	2017-18	2018-19	2019-20	2020-21	2021-22	Total
≤ 30	0	38	0	0	1	39 (7.6%)
> 30 to 60	16	38	4	0	3	61 (12.0%)
> 60 to 90	9	44	2	0	15	70 (13.7%)
> 90 to 120	135	33	80	0	16	264 (51.8%)
> 120 to 150	14	7	9	0	0	30 (5.9%)
> 150 to 180	1	0	0	0	3	4 (0.8%)
Over 180	1	7	0	1	33	42 (8.2%)
Total	176	167	95	1 (Note)	71	510 (100.0%)

Source: Audit analysis of AMS records

Note: A member who attended any training course or performed any duties in the training year of 2020-21 was considered as meeting the efficiency requirement in the year (see Note 10 to para. 2.9(b)).

2.12 Audit notes that AMS's prevailing practice of monitoring compliance of the efficiency requirement by members involves many manual procedures, and back and forth communication between AMS Headquarters and local units:

- (a) although the Auxiliary Medical Service Members and Cadet Corps Management System (AMACS) is used by AMS to capture the training hours attended by individual members, the records are not complete because AMACS is generally used to facilitate the payment of pay and allowances to members and the training hours may not be recorded when some members voluntarily waive their rights to claim the pay/allowance; and

Management of members and cadets

- (b) in order to monitor the compliance of the efficiency requirement by members, a spreadsheet showing members who may not fulfil the efficiency requirement will be generated from AMACS and passed to Senior OTOs of each individual unit for checking after the end of each training year. Senior OTOs have to verify each case, taking into account of the training hours not input into AMACS and the period of absence granted by the Commissioner to the members (Note 11).

2.13 In Audit's view, the prevailing practice may be one of the factors causing the delay in issuing warnings to the members not meeting the efficiency requirement. The manual assessments made by Senior OTOs are also prone to omissions and errors. As members should maintain sufficient knowledge for any emergency services, it is important for AMS to accurately identify members not meeting the efficiency requirement and remind them to take remedial action in a timely manner. Audit considers that AMS needs to take measures to enhance the monitoring of compliance of the efficiency requirement by members, for example, by making it a mandatory requirement that all training attended by members be input into AMACS. AMS also needs to follow up with those members who have not met the efficiency requirement in a timely manner.

Performance targets on members' training manhours not met

2.14 AMS provides various training courses to members and includes the total manhours attended by members for each of the three major types of training (i.e. recruit training, regular training and centralised training — see para. 1.7(a), (b) and (d)) as key performance targets, which are reported in its Controlling Officer's Reports (CORs). Audit examined AMS's CORs from 2017 to 2021 (see Table 5) and noted that:

- (a) the performance targets of all the three types of training had not been achieved throughout the five-year period except for the centralised training in 2019; and

Note 11: *According to AMS, a member may apply to the Commissioner for absence and the efficiency requirement will be proportionately reduced according to the period of absence granted.*

- (b) except for the recruit training and regular training in 2020 and 2021, no explanation was provided by AMS for not meeting the performance targets on training manhours.

Table 5

**Key performance targets on total training manhours
(2017 to 2021)**

Key performance target	Target manhour	2017	2018	2019	2020	2021
		Actual manhour (percentage variance compared to target)				
Recruit training (Note 1)	31,600	26,040 (-18 %)	24,949 (-21 %)			
	28,000			22,488 (-20 %)	6,431 (-77 %) (Note 3)	9,874 (-65 %) (Note 3)
Regular training	240,000	202,805 (-15 %)	199,415 (-17 %)	188,233 (-22 %)	88,892 (-63 %) (Note 3)	110,528 (-54 %) (Note 3)
Centralised training (Note 2)	35,000	28,696 (-18 %)	29,603 (-15 %)			
	30,000			35,842 (+19 %)		
	50,000				44,834 (-10 %)	47,805 (-4 %)

Source: Audit analysis of AMS records

Note 1: The target has been adjusted from 31,600 to 28,000 manhours from 2019 onwards in view of the decrease in the number of AMS new recruits.

Note 2: The target was adjusted from 35,000 to 30,000 manhours in 2019 since AMS has reorganised the contents of centralised training programme by re-categorising and re-arranging part of the training courses. From 2020 onwards, the target has been adjusted from 30,000 to 50,000 manhours in view of the increase in training commitments.

Note 3: According to AMS, the substantial increase in shortfall was due to the heavy involvement in the COVID-19 operations (see para. 1.4).

Management of members and cadets

2.15 Audit noted that from 2017 to 2019, there were shortfalls between the target and actual manhours of the three types of training (except for the centralised training in 2019), ranging from 15 % to 22 %. Audit considers that AMS needs to take measures to boost up the training manhours in order to meet the performance targets and provide explanations in its CORs to account for the non-achievement of performance targets on training manhours.

Need to segregate the training manhours of trainers and assistants from those attended by trainees

2.16 Audit analysed the training manhours by individual members recorded from October 2021 to September 2022 and noted that of the 3,135 members with training manhours recorded in the period, 277 (9%) members had more than 100 training manhours (see Table 6).

Table 6

Analysis of number of members' training manhours recorded (October 2021 to September 2022)

Number of training manhours attended	Number of members
>0 to 50	1,835
>50 to 100	1,023
>100 to 200	183
>200 to 300	33
>300 to 400	20
>400 to 500	5
Over 500	36 (Note)
Total	3,135

Source: Audit analysis of AMS records

Note: The maximum training manhours recorded for a member during the period is 2,371 manhours.

2.17 Among the 277 members, 36 members had exceptionally high training manhours (over 500 manhours). Of these 36 members, Audit sample checked 10 members (totalling 20,101 manhours) and noted that 19,329 (96%) training manhours recorded were in fact manhours spent by the members as assistants. According to AMS, there are no separate codes in AMACS to distinguish the different roles of trainers, assistants and trainees. In Audit's view, this is undesirable because trainers and assistants deliver training (teaching role) and other general support while trainees receive training (learning role). Audit also notes that manhours of trainers and assistants have been included in the training manhours reported in AMS's CORs (see Table 5 in para. 2.14), which may overstate the training manhours reported in CORs. Audit considers that AMS needs to segregate the manhours for taking up the duties of trainers and assistants from the training manhours attended by members as trainees.

Need to update the contents of AMS publications in a timely manner

2.18 As of January 2023, AMS had three departmental publications, namely Practical First Aid Handbook, Disaster Medical Assistant Training Manual, and Nursing Training Manual. These AMS publications served as training materials for members during regular training and were made available on AMS's website for free access by the public. Audit noted that two of the three publications were outdated:

- (a) ***Practical First Aid Handbook (2011 edition) (the handbook)***. The handbook provided guidance on how to respond appropriately in a first aid or medical emergency (e.g. cardiovascular emergencies, wounds and bleeding). For the procedures on cardiopulmonary resuscitation, the handbook made reference to an external association's related guidelines of 2010 edition. While the related guidelines from the external association had been updated twice in 2015 and 2020, the relevant content in the handbook had not been updated; and
- (b) ***Disaster Medical Assistant Training Manual (2012 edition) (the manual)***. The manual provided guidance on disaster medical assistance and emergency medicine. Audit's examination in October 2022 on the 63 reference Internet links provided in the manual revealed that:

Management of members and cadets

- (i) 41 (65%) Internet links were no longer reachable; and
- (ii) 4 (6%) Internet links were not reaching to relevant contents.

2.19 Audit noted that, the Training Review Committee (Note 12) had commenced reviewing the curriculum and training materials of AMS first aid training and disaster medical assistant training since December 2021 and that the review was still in progress as of January 2023. According to AMS, if there were essential updates on the contents of the training materials, it would disseminate the up-to-date supplementary information to members and students of first aid courses. In Audit's view, it is important to keep the contents of AMS publications, which are also made available for public access, accurate and up-to-date. Audit considers that AMS needs to expedite the review of AMS publications and update the contents of the publications in a timely manner.

Audit recommendations

2.20 Audit has *recommended* that the Chief Staff Officer of AMS should:

- (a) **take measures to enhance the monitoring of compliance of the efficiency requirement by members, for example, by making it a mandatory requirement that all training attended by members be input into AMACS;**
- (b) **follow up with those members who have not met the efficiency requirement in a timely manner;**
- (c) **take measures to boost up the training manhours in order to meet the performance targets;**
- (d) **provide explanations in AMS's CORs to account for the non-achievement of performance targets on training manhours;**

Note 12: *The Training Review Committee is an AMS internal committee comprising government staff and volunteers with professional medical and nursing background.*

- (e) segregate the manhours for taking up the duties of trainers and assistants from the training manhours attended by members as trainees; and
- (f) expedite the review of AMS publications and update the contents of the publications in a timely manner.

Response from the Government

2.21 The Chief Staff Officer of AMS agrees with the audit recommendations. He has said that AMS:

- (a) has made it a mandatory requirement that all training attended by members be input into AMACS irrespective of whether the members waive their rights to claim pay and allowances. Besides, a feasibility study for development of a new management system for processing members' application for operation duties and training sessions was completed in 2022. AMS aims at launching the new management system by the end of 2024 to streamline the administrative procedures in respect of training enrolment and confirmation, record keeping of attendance and related pay and allowances management;
- (b) commits to follow up with those members who have not met the efficiency requirement within 2 months. Furthermore, the new management system mentioned in (a) will be used to facilitate timely monitoring and follow-up actions. For the avoidance of doubt, although some members did not fulfil the efficiency requirement in the period of review, all members are required to attend and pass the Proficiency Examination before they can provide first aid services to members of the public. Hence, the quality of first aid service rendered by members would not be compromised;
- (c) will review the performance targets so that they will be more realistic and achievable. At the same time, efforts have been made to boost up training manhours. Starting from 2023, the frequency and the number of various kinds of relevant training have been increased;
- (d) will provide explanations in its CORs to account for any non-achievement of performance targets on training manhours in future;

Management of members and cadets

- (e) will segregate the manhours for taking up the duties of trainers and assistants from the training manhours attended by members as trainees by assigning separate codes to different kinds of activities; and
- (f) will expedite the review of training materials conducted by the Training Review Committee. It is expected that the review will be completed by the third quarter of 2023. Contents of the publications will be updated according to the review result. As an interim measure, any updates will be circulated to members.

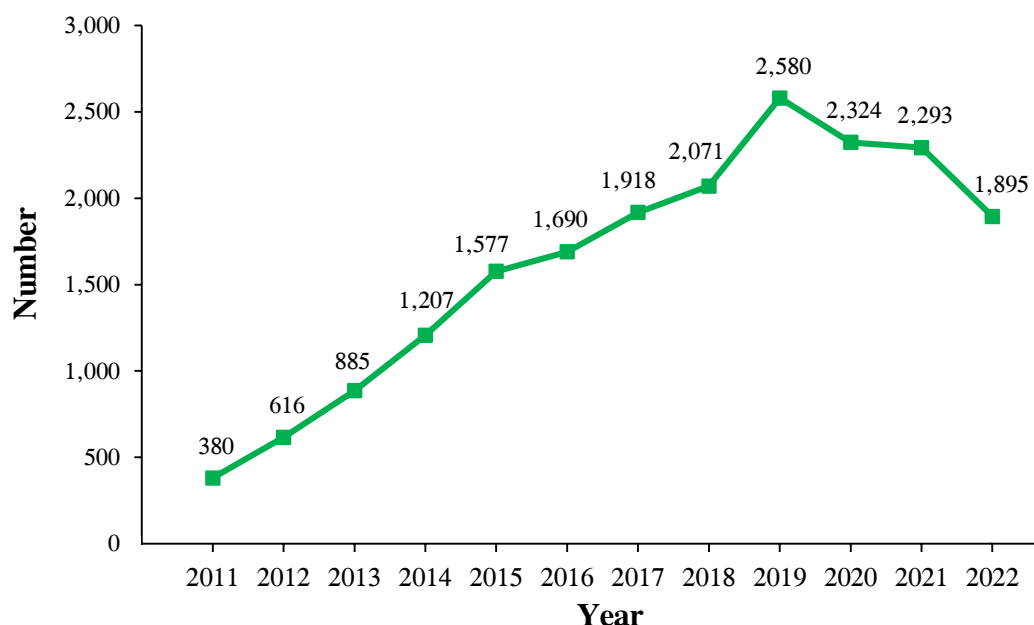
The Auxiliary Medical Service Cadet Corps

2.22 AMSCC is a youth uniformed group founded in 2011 in accordance with the AMS Ordinance with cadets who are youngsters aged 12 to under 18. AMSCC organises various group activities in which cadets foster their self-confidence, devotion to serving others, and leadership as well as acquire interpersonal and communication skills. There are five ranks under AMSCC, namely Rank I, Senior Rank I, Rank II, Rank III and Senior Rank III. Cadets are distributed in 15 districts under five regions (Note 13) and their numbers increased gradually from 380 in 2011 to the peak at 2,580 in 2019, and subsequently dropped by 27% to 1,895 as at 31 December 2022 (see Figure 2).

Note 13: *The five regions are Hong Kong, Kowloon East, Kowloon West, New Territories East and New Territories West with three districts in each region. Each region is headed by a Zone Commander and an Assistant Zone Commander who are Grade VI officers, while each district is headed by a Company Commander who is a Senior Grade V officer.*

Figure 2

**Number of cadets in AMSCC
(2011 to 2022)**



Source: AMS records

Remarks: The numbers reflected the positions as at 31 December of the years.

Need to step up efforts in recruiting and retaining cadets

2.23 In 2011, AMSCC was established with a target of recruiting 1,000 cadets in five years. As at 31 December 2014, the number of cadets was 1,207 and the recruitment target was attained. According to 2014 Policy Address, the Government fostered a culture of multi-faceted excellence and helped nurture young people through education, employment and whole-person development. The Government would allocate additional resources to strengthen its networking and communication with young people at the district level and AMS targeted to recruit a force of 3,000 cadets by 2019. Nonetheless, the number of cadets had not met the target throughout the years (see Figure 2 in para. 2.22). According to AMS, there was an increasing trend in the number of cadets from 2014 to 2019 but due to the black-clad violence in 2019 and the COVID-19 epidemic since 2020, the number of cadets decreased to 1,895 as at 31 December 2022, representing a shortfall of 1,105 cadets from the target.

Management of members and cadets

2.24 Audit analysed the turnover of cadets in the period from 2018 to 2022 (see Table 7) and noted that:

- (a) the number of cadets recruited each year ranged from 187 to 1,031 (averaging 511). In 2018 and 2019, about 50 publicity activities were held each year for recruitment of new cadets (e.g. setting up promotion booths in shopping malls and holding recruitment talks in schools) and the number of new recruits increased from 639 in 2018 to 1,031 in 2019. However, according to AMS, due to the COVID-19 epidemic, there were only 3, 23 and 15 publicity activities held in 2020, 2021 and 2022 respectively and the number of new recruits decreased significantly;
- (b) the number of cadets resigned each year ranged from 54 to 207 (averaging 151). According to AMS, although no formal exit interview was conducted for the resigned cadets, it would take immediate action to evaluate and understand the reasons behind and explore whether it could offer any kind of support, assistance and advice to both cadets and their parents. From 2018 to 2022, the top three reasons for resignation were “not interested” (34%), “further studies” (33%) and “busy with other activities” (15%); and
- (c) the number of cadets retired upon reaching the age of 18 ranged from 327 to 405 (averaging 365). During the period, a total of 1,827 cadets retired. Among these retired cadets, only 58 (3%) joined the AMS volunteer force.

Table 7

**Turnover of cadets in AMSCC
(2018 to 2022)**

	Number of cadets				
	2018	2019	2020	2021	2022
As of 1 January	1,918	2,071	2,580	2,324	2,293
Add:					
- new recruits	639	1,031	188	512	187
Less:					
- resigned	159	195	54	138	207
- retired (reaching the age of 18)	327	327	390	405	378
As of 31 December	2,071	2,580	2,324	2,293	1,895

Source: Audit analysis of AMS records

2.25 According to AMS, with a view to meeting the target number of cadets in AMSCC, it had taken the following measures:

- (a) in 2021, a new Cadet training programme, namely the Health Awareness and Promotion Programme for Youth, was launched. The aim of the programme was to equip cadets with fundamental health related knowledge and skills. Other training courses, such as morality, leadership, commitment to community and national security, would also be introduced;
- (b) it launched a publicity campaign in 2022 to raise public attention of AMS via online and offline channels (e.g. outdoor light-emitting diode wall, bus and taxi stickers on transportation); and
- (c) it had collaborated with a local university to let cadets gain early insight and knowledge on their continuing study and career prospects in different professional healthcare sectors.

2.26 In December 2022, the Government published the first edition of the Youth Development Blueprint with a vision to nurture a new generation of young people with an affection for the country and equipped with global perspective, aspiring mindset and positive thinking, as well as providing an enabling environment for young people to unleash their full potential in society and contribute to Hong Kong, the country and the world. According to AMS, AMSCC contributes to the youth development in resilience building, whole-person development, life planning and engagement in public affairs. In Audit's view, AMS needs to:

- (a) closely monitor the turnover of cadets and step up efforts in recruiting new cadets (e.g. holding more publicity activities and recruitment talks in schools);
- (b) critically examine why the resigned cadets have lost their interests and continue to take remedial measures to retain existing cadets, including reviewing the effectiveness of the Health Awareness and Promotion Programme for Youth at an opportune time; and
- (c) ascertain the reasons for the retired cadets not joining the AMS volunteer force upon reaching the age of 18 and take measures to encourage the cadets to join as members.

Significant number of vacancies of senior-rank cadets

2.27 Cadets are encouraged to fulfil their self-potential and shoulder more responsibilities through promotion to senior ranks. According to the AMSCC Standing Order, the promotion exercise is conducted half-yearly in April and October. The cadets should fulfil the following requirements in order to be nominated for promotion:

- (a) they have been in their existing ranks for at least 6 months and attended the required number of hours of regular training (Note 14);
- (b) they have completed the specified compulsory training courses;
- (c) they have accumulated 24 service credits (Note 15) in their existing ranks and participated in at least one major events held by AMSCC; and
- (d) there were no disciplinary records for the preceding six months.

2.28 Audit analysed the establishment and strength of AMSCC as at 31 December 2022 and noted that the vacancy rate of each rank (except for the entry rank) ranged from 80% to 100% (see Table 8). Audit further analysed the promotion of cadets in the period from 2018 to 2022 (see Table 9) and found that during the 5-year period:

- (a) only 49 and 10 cadets were promoted to Ranks II and III respectively; and
- (b) no cadets were promoted to Senior Rank III.

Note 14: *For promotion to Senior Rank I and Rank II, the required number of regular training hours is 30. For promotion to Rank III and Senior Rank III, the required number of regular training hours is 35.*

Note 15: *Generally speaking, a cadet can earn one service credit for each hour of participation of designated activities. A maximum of eight service credits can be earned in a day.*

Table 8

**Establishment and strength of AMSCC
(31 December 2022)**

Rank	Establishment (a) (Number)	Strength (b) (Number)	Surplus/(Shortfall)	
			(c) = (b) – (a) (Number)	(d) = $\frac{(c)}{(a)} \times 100\%$ (Percentage)
I	1,200	1,691 (Note)	491	41 %
Senior I	960	191	(769)	(80 %)
II	480	13	(467)	(97 %)
III	240	0	(240)	(100 %)
Senior III	120	0	(120)	(100 %)
Overall	3,000	1,895	(1,105)	(37 %)

Source: Audit analysis of AMS records

Note: Among the 1,691 Rank I cadets, 433 (26%) enrolled in 2022.

Table 9

**Number of cadets promoted
(2018 to 2022)**

Promotion to rank	2018	2019	2020	2021	2022	Total
Senior I	94	103	7	197	84	485
II	16	21	4	8	0	49
III	6	3	0	1	0	10
Senior III	0	0	0	0	0	0
Total	116	127	11	206	84	544

Source: Audit analysis of AMS records

2.29 Upon enquiry, in January 2023, AMS informed Audit that all cadets meeting the promotion requirements were promoted. This means that not many cadets could

Management of members and cadets

meet the promotion requirements as stipulated in the AMSCC Standing Order. As the situation has persisted for a long time, Audit considers that AMS needs to formulate action plans and encourage cadets to fulfil the promotion requirements with a view to filling the vacancies of senior-rank cadets.

Low participation rate of training, exercises and visits

2.30 To equip its cadets with professional knowledge and skills of healthcare, hygiene and health, AMSCC organised a variety of training, exercises and visits (see para. 1.8). According to AMS, Company Commanders (see Note 13 to para. 2.22) keep track of the participated hours of cadets under their districts. The relevant officers will contact the cadets or their parents to give encouragement in an attempt to improve the participation rate when necessary.

2.31 According to 2022 Policy Address, in pursuing youth development, the Security Bureau would enhance life planning and internship opportunities for members of youth uniformed groups under the disciplined services. In this connection, the Security Bureau formulated a series of indicators with regard to youth development such as active membership for cadets for all youth uniformed groups under the auxiliary and disciplined services (e.g. AMS and the Fire & Ambulance Services Teen Connect). Active membership is defined as “having participated in at least 2 activities in the past 12 months”. According to AMS, of the 2,293 and 1,895 cadets as at 31 December 2021 and 2022, only around half of cadets (i.e. 1,151 (50%) and 824 (43%) respectively) had participated in at least 2 activities (i.e. any training, exercises and visits) in the past 12 months and were considered to be active members. As AMSCC aims to foster cadets’ self-confidence, devotion to serving others and leadership as well as enable them to acquire interpersonal and communication skills through training and activities, Audit considers that AMS needs to step up efforts in encouraging cadets to attend training and participate in exercises and visits.

Need to review key performance targets of training, exercises and visits attended by cadets

2.32 The numbers of manhours of training and exercises and visits attended by cadets are reported in AMS’s CORs as key performance targets. According to AMS, when cadets attend training, exercises and visits, they need to sign on an attendance sheet and the numbers of manhours will be input into AMACS by AMS Headquarters. However, Audit noted that there were differences between the records in AMACS and

the figures reported in AMS's COR (see Table 10). This is less than satisfactory because the numbers of manhours of training, exercises and visits attended by cadets are set as AMS's key performance targets. In Audit's view, AMS needs to review the differences between the numbers of manhours of training, exercises and visits attended by cadets reported in AMS's CORs and those recorded in AMACS, and critically assess whether the key performance targets can be achieved.

Table 10

**Differences between the numbers of manhours reported in AMS's COR
and those recorded in AMACS for the training,
exercises and visits attended by cadets
(2021)**

Key performance target	Number of manhours			
	Target	Per COR (a)	Per AMACS (b)	Differences (c) = (a) – (b)
Induction training	23,000	16,384	11,059	5,325 (33%)
Regular training	130,000	145,773	23,570	122,203 (84%)
Centralised training	55,000	31,680	2,178	29,502 (93%)
Exercise and visit	5,000	30,159	284	29,875 (99%)

Source: Audit analysis of AMS records

Audit recommendations

2.33 Audit has recommended that the Chief Staff Officer of AMS should:

- (a) **closely monitor the turnover of cadets and step up efforts in recruiting new cadets (e.g. holding more publicity activities and recruitment talks in schools);**

Management of members and cadets

- (b) **critically examine why the resigned cadets have lost their interests and continue to take remedial measures to retain existing cadets, including reviewing the effectiveness of the Health Awareness and Promotion Programme for Youth at an opportune time;**
- (c) **ascertain the reasons for the retired cadets not joining the AMS volunteer force upon reaching the age of 18 and take measures to encourage the cadets to join as members;**
- (d) **formulate action plans and encourage cadets to fulfil the promotion requirements with a view to filling the vacancies of senior-rank cadets;**
- (e) **step up efforts in encouraging cadets to attend training and participate in exercises and visits;**
- (f) **review the differences between the numbers of manhours of training, exercises and visits attended by cadets reported in AMS's COR and those recorded in AMACS; and**
- (g) **critically assess whether the key performance targets on the number of manhours of training, exercises and visits attended by cadets can be achieved.**

Response from the Government

2.34 The Chief Staff Officer of AMS agrees with the audit recommendations. He has said that AMS:

- (a) has closely monitored the turnover of cadets and stepped up efforts in recruiting new cadets, for example, by arousing youth attention of AMS through a series of publicity campaign since 2022. AMS will also explore further measures in recruiting new cadets, including arrangement of more school-based promotional activities;
- (b) will enhance communication with cadets from time to time to address their needs in a timely manner and continuously arrange programmes which suit their needs. For example, the Health Awareness and Promotion Programme for Youth was launched in 2021 to equip cadets with fundamental health

related knowledge and skills. Feedbacks from participating cadets will be collected for timely review. Other training, such as morality, leadership, commitment to community and national security will be further strengthened. For those leaving AMSCC, exit interviews will be conducted to ascertain their reasons for leaving. If no exit interview can be arranged, AMS will invite the leaving cadet to complete a simple questionnaire for the same purpose;

- (c) will ascertain the reasons for the retired cadets not joining the AMS volunteer force upon reaching the age of 18. In 2021, a Cadet Conversion Programme was implemented to provide adult training to cadets, with a view to facilitating them to become an adult member;
- (d) will step up efforts in encouraging cadets to attend training and participate in exercises and visits to fulfil the promotion requirements with a view to filling the vacancies of senior-rank cadets;
- (e) will better utilise different applications of technology to cater for the interests of cadet in training and exercises;
- (f) will rectify the differences between the numbers of manhours of training, exercises and visits attended by cadets reported in its CORs and recorded in AMACS; and
- (g) will continuously assess whether the key performance targets on the numbers of manhours of training, exercises and visits attended by cadets can be achieved.

PART 3: PROVISION OF SERVICES BY THE AUXILIARY MEDICAL SERVICE

3.1 This PART examines the provision of services by AMS, focusing on:

- (a) manning of methadone clinics (paras. 3.3 to 3.9);
- (b) provision of first aid service for public events (paras. 3.10 to 3.14);
- (c) provision of ambulance services (paras. 3.15 to 3.21);
- (d) provision of service in country parks (paras. 3.22 to 3.25); and
- (e) performance reporting on service provisioning (paras. 3.26 to 3.28).

3.2 As mentioned in paragraph 1.2, AMS provides volunteer medical services to assist DH, HA and FSD during emergency situations and supplementary volunteer medical services to government departments and outside agencies during peace time. From 2019 to 2021, while the number of members decreased by 415 (10%) from 4,094 to 3,679 (see Table 2 in para. 2.3), the total manhours spent on the provision of services by AMS increased by 309,742 (54%) from 578,469 to 888,211 (see Table 11). Audit noted that the increase in manhours was mainly attributable to AMS's effort in combating the COVID-19 epidemic. According to AMS:

- (a) since the outbreak of the COVID-19 epidemic in January 2020, AMS has been requested by the Health Bureau (Note 16) to assist in carrying out the COVID-19 operations. The duties included:
 - (i) supporting the frontline operation and executing medical instructions at quarantine facilities;

Note 16: *With effect from 1 July 2022, the Food Branch of the then Food and Health Bureau has been transferred to the Environment and Ecology Bureau. The Health Branch of the then Food and Health Bureau has been revamped as the Health Bureau.*

Provision of services by the Auxiliary Medical Service

- (ii) conveying confirmed cases and their close contacts to quarantine facilities, supporting evacuation of buildings and institutions with confirmed cases (Note 17);
 - (iii) taking enforcement actions under the Prevention and Control of Disease (Compulsory Testing for Certain Persons) Regulation (Cap. 599J). Examples included serving Fixed Penalty Notices and Compulsory Testing Orders to non-compliance cases upon receiving referrals from the Centre for Health Protection or at the scene of Restriction-testing Declaration operations;
 - (iv) supporting mortuary work in two public mortuaries during the fifth wave of the COVID-19 epidemic in early 2022; and
 - (v) other duties such as dispatching anti-epidemic packs to persons under home quarantine, providing training to hotel staff working in designated quarantine hotels and the Anti-epidemic Task Force of the Security Bureau, etc.;
- (b) these operations were usually required within a short notice. AMS disseminated the relevant information to members by making use of an instant message application and managed to recruit adequate members to meet the service needs; and
- (c) the COVID-19 operations required a lot of manpower resources from AMS. At the service peak in early February 2022, AMS provided a variety of services, such as assistance in 13 quarantine facilities, and had to deploy over 300 members on a daily basis.

Audit also noted that, in 2021, the COVID-19 operations and manning of methadone clinics accounted for 75% of manhours of services provided by AMS. The remaining services included the provision of NEATS, and first aid services for public events, in country parks and on cycling tracks.

Note 17: *From December 2020 to mid-February 2023, a collaboration network was established among various related government departments (e.g. FSD) and organisations to support the evacuation of buildings and institutions with confirmed cases (e.g. elderly nursing homes and homes for the disabled) and coordinate the ambulance conveyance service.*

Provision of services by the Auxiliary Medical Service

Table 11

**Manhours of services provided by AMS
(2019 to 2021)**

Type of services	2019	2020	2021
COVID-19 operations	0 (0%)	233,398 (34%)	390,306 (44%)
Manning of methadone clinics	269,177 (47%)	275,377 (40%)	271,950 (31%)
First aid service for public events	146,880 (25%)	50,673 (7%)	87,399 (10%)
NEATS	52,345 (9%)	55,567 (8%)	53,695 (6%)
First aid bicycle service	22,822 (4%)	21,890 (3%)	31,172 (3%)
Emergency stand-by and duties	19,249 (3%)	18,662 (3%)	17,663 (2%)
First aid or ambulance service in country parks	10,934 (2%)	5,952 (1%)	9,761 (1%)
Lifeguard service	4,814 (1%)	1,922 (0%)	3,577 (0%)
Others (Note)	52,248 (9%)	26,511 (4%)	22,688 (3%)
Total	578,469 (100%)	689,952 (100%)	888,211 (100%)

Source: Audit analysis of AMS records

Note: These included support duties such as AMS Open Day and other administrative duties.

Manning of methadone clinics

3.3 The use of methadone for treatment of drug abusers on an out-patient basis has been adopted in Hong Kong since late 1972. The methadone clinics, operated by DH, provide both maintenance and detoxification programmes. AMS is responsible for assisting DH in the provision of qualified personnel to operate the methadone clinics. As at 31 December 2022, there were 18 methadone clinics, with an average daily attendance of about 3,000 patients. Each clinic is required to be manned by

2 to 15 members (Note 18). An OTO of AMS's Training and Development Section is responsible for deploying members to methadone clinics and ensuring that duties are carried out by members effectively according to the Manual on Methadone Treatment Programme issued by DH. The duties include dispensing of methadone, collection of specimens, and administrative and accounting work.

Need to take measures to ensure compliance with DH's instructions

3.4 According to the Manual on Methadone Treatment Programme, members have to assist in performing reviews and tests of patients, as follows:

- (a) when there is a notification shown in the computer system of DH's Methadone Treatment Programme (the System) for half-yearly reassessment (Note 19) in a patient's treatment record, members should remind the patient to attend the reassessment; and
- (b) a patient is suggested to perform urine tests at least thrice a year. These comprise twice on a random schedule generated by the System (with an interval of one to four months between the tests) and an annual test under the Human Immunodeficiency Virus Antibody (Urine) Testing Programme. When there is a notification shown in the System, members should request the patient to leave specimen for testing.

3.5 On 30 November 2022, Audit visited a methadone clinic with AMS staff to observe the registration and dispensing procedures. Of the three patients observed, Audit noted that the notifications in the treatment records of two patients showed that their last reassessments and urine tests were performed in 2019 and 2015 respectively. However, the members had not asked the two patients to make appointment for reassessment or perform the urine test, at variance with the requirements laid down in the Manual on Methadone Treatment Programme. According to AMS, in order to avoid unnecessary embarrassment (which might lead to patients' non-attendance to methadone clinics) and maintain the rapport and mutual trust between the patients and

Note 18: *Due to different opening hours, the number of shifts varies between methadone clinics (usually 1 to 3 shifts) and the number of staff on duty varies between shifts (usually 1 to 6 staff).*

Note 19: *In order to review a patient's condition and facilitate the development of treatment plan, a medical officer needs to reassess the patient every six months.*

Provision of services by the Auxiliary Medical Service

members, members have been very cautious about making suggestions of reassessment and urine test. Nevertheless, members would try to motivate patients to perform reassessment and urine test as far as practicable. Audit considers that AMS needs to remind members to comply with the instructions on registration and dispensing procedures stipulated in the Manual on Methadone Treatment Programme as far as practicable when performing duties in methadone clinics.

Need to review long-term manpower requirement

3.6 Methadone clinics are open for 4 to 15 hours (Note 20) every day (including Sundays and public holidays) and AMS deploys about 100 members (Note 21) on a daily basis for the routine duties of manning methadone clinics. Members have to attend a 2-day practical training to understand the operation of methadone clinics. Audit notes that, as most of the duties are administrative work, medical knowledge is not a must for members performing duties in methadone clinics. From November 2012 to June 2014, the Security Bureau, DH and AMS held meetings to explore the options of using manpower sources other than deploying members (e.g. outsourcing, recruiting non-civil service contract staff and civil servants) for manning the methadone clinics, taking into consideration that a sufficient supply of manpower was crucial for the provision of consistent and steady services in methadone clinics. No conclusion had been reached in the meetings and no follow-up actions had been taken since the meeting in June 2014.

3.7 Other than manning of methadone clinics, Audit notes that AMS also deploys members to perform administrative work (e.g. training assistants and store assistants) on a regular basis, which indicates that there is a regular manpower need for these duties. Audit considers that AMS needs to review the existing practice of deploying members in administrative work and, in collaboration with the Security Bureau and DH, continue to explore the feasibility of alternative source of manpower in view of the long-term need of operating methadone clinics.

Note 20: *As at 31 December 2022, the daily opening hours were 4 hours for 10 clinics, 7 hours for 3 clinics, 8 hours for 1 clinic and 15 hours for 4 clinics.*

Note 21: *During the 365 days from 1 August 2021 to 31 July 2022, the total number of members who had participated in manning methadone clinics was 611 and their numbers of duty days varied from 1 to 297 days.*

Audit recommendations

- 3.8 **Audit has *recommended* that the Chief Staff Officer of AMS should:**
- (a) **remind members to comply with the instructions on registration and dispensing procedures stipulated in DH's Manual on Methadone Treatment Programme as far as practicable when performing duties in methadone clinics; and**
 - (b) **review the existing practice of deploying members in administrative work and, in collaboration with the Security Bureau and DH, continue to explore the feasibility of alternative source of manpower in view of the long-term need of operating methadone clinics.**

Response from the Government

3.9 The Chief Staff Officer of AMS agrees with the audit recommendations. He has said that:

- (a) members have been reminded to comply with relevant guidelines and manual in performing their duties in the methadone clinics while observing the needs and special circumstances of the patients; and
- (b) DH has been monitoring the services delivered under the Methadone Treatment Programme and the operation of the methadone clinics, including the service needs and resources deployed, and keeping the Security Bureau informed on a regular basis. DH will conduct a review of the workflow so as to minimise the administrative work taken up by members. AMS, in consultation with relevant government bureaux and departments (B/Ds), will continue to monitor its manpower situation, taking into account the audit recommendations and with a view to ensuring that the most appropriate source of manpower is deployed while balancing the actual operational needs of the clinics.

Provision of first aid service for public events

3.10 AMS provides first aid service for public events (e.g. marathon races, firework displays and the New Year Eve Count-down Carnivals), which is one of the major services provided by AMS. As shown in Table 11 in paragraph 3.2, in 2019, first aid service for public events accounted for 25% of manhours of services provided by AMS (Note 22).

Need to draw lessons from the 2018 marathon incident

3.11 According to AMS, among the different kinds of public events, marathon races are big events and it deploys massive number of members and equipment in providing the first aid service for such events. For example, in a marathon held in 2021, AMS deployed 681 members, 14 ambulances and motorcycle ambulances, and 24 first aid bicycles along the marathon track. Audit noted that:

- (a) during a marathon held in 2018, a runner fainted during the race and died a few days later. In May 2022, the Coroner's Court started an inquest into the incident; and
- (b) in June 2022, while the jury concluded that the deceased's death was due to natural causes, it made 8 recommendations to AMS as endorsed by the coroner, including:
 - (i) streamlining the logistic and administrative arrangements of handling injured people;
 - (ii) requiring all members who would perform duties during the marathon race to attend a briefing session; and
 - (iii) introducing case sharing into regular training courses in order to strengthen members' assessment skills and attitude on handling emergent cases.

Note 22: *According to AMS, the manhours spent on the provision of first aid service for public events decreased substantially in 2020 and 2021 because many public events were cancelled due to the COVID-19 epidemic.*

- 3.12 In December 2022 and February 2023, AMS informed Audit that:
- (a) it agreed with all the 8 recommendations and would take improvement measures during the provision of first aid service for future marathon races accordingly. For example, AMS would:
 - (i) deploy radio telecom devices and designated channels to facilitate communication;
 - (ii) introduce a mandatory briefing session before the event and an on-site final briefing session; and
 - (iii) strengthen the training of using automated external defibrillators; and
 - (b) it had proactively reviewed the quality of service provided to the public by assessing risks of individual events and providing specific preparation, training and deployment. For example, in the Hong Kong Cyclothon held in December 2022, taking into account that severe injuries such as spinal injuries and fractures might happen, AMS deployed members of the Emergency Response Task Force with nurses on board the ambulances to provide higher level of care in case of emergency.

Audit noted that many of the endorsed recommendations and the improvement measures to be implemented by AMS were generic in nature and could be applied to public events other than marathon races. As the community resumes normalcy, more public events will be held in the near future. Audit considers that AMS needs to draw lessons from the 2018 marathon incident and continue to improve the provision of first aid service for public events in future.

Audit recommendation

- 3.13 **Audit has *recommended* that the Chief Staff Officer of AMS should draw lessons from the 2018 marathon incident and continue to improve the provision of first aid service for public events in future.**

Response from the Government

3.14 The Chief Staff Officer of AMS agrees with the audit recommendation. He has said that:

- (a) right after the 2018 marathon incident, AMS had proactively reviewed the quality of its first aid service for public events. Since then, it has conducted wash-up on its service upon completion of large-scale operations; and
- (b) all staff in the Operations and Training Division have been instructed to critically assess the potential risk of individual events and draw up task specific operation plans for preparation, training and appropriate deployment.

Provision of ambulance services

3.15 AMS maintains an ambulance fleet for the provision of various ambulance services, as follows:

- (a) **Non-emergency ambulance.** AMS deploys non-emergency ambulances (see Photograph 1(a)) for the provision of free NEATS to patients who need medical care and attention at the out-patient clinics of DH or HA, or as referred by hospitals. NEATS is available from Monday to Sunday (including public holidays) from 8 a.m. to 6 p.m. An applicant should make a telephone appointment with AMS at least 24 hours in advance and, if service is available, complete an application form which should be endorsed by authorised staff (Note 23) of the clinics/hospitals. Each non-emergency ambulance is equipped with a set of basic medical equipment;
- (b) **Town ambulance.** AMS deploys town ambulances (see Photograph 1(b)) to reinforce the ambulance services of FSD at the scene of emergency in response to emergency calls and to provide ambulance service in country

Note 23: *Authorised staff include doctors, dentists, dietitians, registered nurses, enrolled nurses, midwives, physiotherapists, occupational therapists, prosthetist-orthotists, speech therapists, audiology technicians and medical social workers, etc.*

Provision of services by the Auxiliary Medical Service

parks on Sundays and public holidays from 9 or 10 a.m. to 4 or 5 p.m. Each town ambulance is equipped with a comprehensive set of medical equipment; and

- (c) **Motorcycle ambulance.** AMS deploys motorcycle ambulances (see Photograph 1(c)) for the provision of ambulance service in country parks on Sundays and public holidays from 10 a.m. to 4 p.m. Each motorcycle ambulance is equipped with first aid kits.

As at 31 December 2022, AMS had a fleet of 17 ambulances, comprising 7 non-emergency ambulances, 5 town ambulances and 5 motorcycle ambulances.

Photograph 1

(a) Non-emergency ambulance



(b) Town ambulance



(c) Motorcycle ambulance



Source: AMS records

Low utilisation of non-emergency ambulances and town ambulances

3.16 Non-emergency ambulances and town ambulances provide services daily whereas motorcycle ambulances provide services on Sundays and public holidays. Audit analysed the utilisation rates of non-emergency ambulances and town ambulances (usage includes ambulance services, transportation, training or exhibition, etc.) from 2018 to 2022 (up to September 2022) and found that:

- (a) the utilisation rates of non-emergency ambulances and town ambulances ranged from 54% to 64% and from 56% to 69% respectively (see Table 12); and

Table 12

**Utilisation rates of non-emergency ambulances and town ambulances
(2018 to 2022 (up to September))**

Year	Non-emergency ambulances	Town ambulances
2018	55%	56%
2019	54%	57%
2020	59%	69%
2021	58%	59%
2022 (up to September)	64%	56%

Source: Audit analysis of AMS records

- (b) the utilisation rate of town ambulances decreased from 69% in 2020 to 56% in 2022 (up to September). In particular, the utilisation rate of town ambulances during the peak of the fifth wave of the COVID-19 epidemic (i.e. February to April 2022) was 44% only.

3.17 According to AMS, to obtain the qualification of providing ambulance services, ambulance drivers have to obtain relevant driving licences and pass specified driving tests, and ambulance nurses/dressers have to complete specified training

courses to understand the ambulance services and how to use different equipment installed in the ambulances. During the outbreak of the COVID-19 epidemic, there might not always be sufficient members to provide ambulance services because many members were infected with COVID-19, put into quarantine, or already deployed to provide assistance in other COVID-19 operations. In order to improve the utilisation of town ambulances, Audit considers that strenuous efforts are required to maintain sufficient members for providing ambulance services in future.

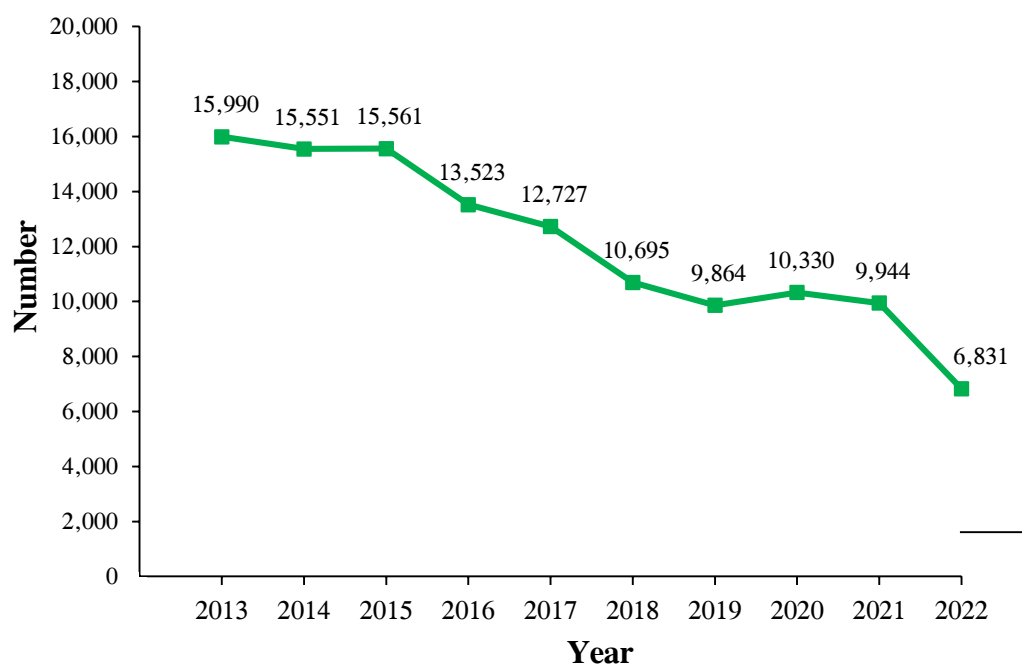
3.18 Audit further analysed the utilisation of non-emergency ambulances and town ambulances and revealed the following findings:

- (a) ***Decrease in non-emergency ambulance transfer requests.***
Non-emergency ambulances are used for providing NEATS. Patients who would like to use NEATS are required to make a non-emergency ambulance transfer requests to AMS in advance. Audit examined the number of non-emergency ambulance transfer requests from 2013 to 2022 and noted that there was a decreasing trend in the number of requests. As shown in Figure 3, the number of requests from patients decreased by 9,159 (57%) from 15,990 in 2013 to 6,831 in 2022. While the number of requests decreased by 3,113 (31%) from 9,944 in 2021 to 6,831 in 2022, the utilisation rate of non-emergency ambulances increased from 58% to 64% (up to September 2022). According to AMS:
 - (i) the decrease in number of requests from patients for NEATS might be due to the adjustment of HA's non-emergency services in view of the fifth wave of the COVID-19 epidemic; and
 - (ii) during the outbreak of the COVID-19 epidemic, AMS provided the conveyance services for confirmed cases and their close contacts, and supported the evacuation of buildings and institutions with confirmed cases (see para. 3.2(a)(ii)). Taking into account the job nature and the equipment installed in different types of ambulances (Note 24), the use of non-emergency ambulances was more than that of town ambulances during the fifth wave of the COVID-19 epidemic; and

Note 24: *For example, special equipment installed in non-emergency ambulances would facilitate the conveyance of bed-bound or wheelchair-bound persons and persons requiring walking aids.*

Figure 3

**Number of non-emergency ambulance transfer requests from patients
(2013 to 2022)**



Source: AMS records

- (b) ***Substantive use of town ambulances for purposes other than ambulance services.*** Audit performed an analysis on the usage of town ambulances from 1 October 2021 to 30 September 2022 (totalling 365 days) and noted that, as shown in Table 13:
- (i) for the 5 town ambulances, the number of days of which the ambulances were used for providing ambulance services ranged from 69 to 230 days (i.e. 19% to 63% out of 365 days); and
 - (ii) 4 of the 5 town ambulances were used for transportation purpose (e.g. transporting duty members, first aid equipment and materials between AMS Headquarters in Ho Man Tin and duty locations). In particular, the number of days of which the 4 town ambulances were used for transportation purpose ranged from 53 to 138 days (i.e. 15% to 38% out of 365 days).

Provision of services by the Auxiliary Medical Service

According to AMS, town ambulances were sometimes used to transport medical equipment (e.g. stretchers which could be stabilised by the locking system in the town ambulances). Besides, since other types of vehicles were not available, town ambulances might be used to transport tools and equipment. In Audit's view, while town ambulances are equipped with a comprehensive set of medical equipment, it may not be the most effective way of using them for purposes other than ambulance services.

Table 13

Usage of town ambulances (1 October 2021 to 30 September 2022)

	Number of days				
	Ambulance A	Ambulance B	Ambulance C	Ambulance D	Ambulance E
Ambulance services	230 (63 %)	121 (33 %)	102 (28 %)	69 (19 %)	69 (19 %)
Transportation	0 (0 %)	53 (15 %)	69 (19 %)	138 (38 %)	77 (21 %)
Repair and maintenance	68 (19 %)	70 (19 %)	35 (10 %)	49 (13 %)	117 (32 %)
Stand-by	49 (13 %)	96 (26 %)	132 (36 %)	104 (29 %)	79 (22 %)
Others (Note)	18 (5 %)	25 (7 %)	27 (7 %)	5 (1 %)	23 (6 %)
Total	365 (100 %)	365 (100 %)	365 (100 %)	365 (100 %)	365 (100 %)

Source: Audit analysis of AMS records

Note: These included deployment for training and exhibitions such as AMS Open Day.

3.19 Audit considers that AMS needs to take measures to improve the utilisation of the non-emergency ambulances and town ambulances. AMS also needs to ascertain the reasons of the low demand of its ambulance services (e.g. the decrease in non-emergency ambulance transfer requests) and take action to optimise the size of its ambulance fleet.

Audit recommendations

- 3.20 **Audit has *recommended* that the Chief Staff Officer of AMS should:**
- (a) **make strenuous efforts to maintain sufficient members for providing ambulance services in future;**
 - (b) **take measures to improve the utilisation of the non-emergency ambulances and town ambulances; and**
 - (c) **ascertain the reasons of the low demand of AMS's ambulance services (e.g. the decrease in non-emergency ambulance transfer requests) and take action to optimise the size of AMS's ambulance fleet.**

Response from the Government

3.21 The Chief Staff Officer of AMS agrees with the audit recommendations. He has said that:

- (a) during the outbreak of the COVID-19 epidemic:
 - (i) resources and manpower of hospitals/clinics had been drawn to fight the virus, and some out-patient services and non-emergency follow-up provided by hospitals/clinics were seriously affected. In addition, with reference to FSD's information on ambulance calls published on website, the overall demand of ambulance services had dropped since 2020. Similarly, the demand for AMS ambulance services had also dropped; and
 - (ii) provided that the provision of emergency ambulance service was not affected, AMS had mobilised its ambulances to support 104 evacuations of buildings and institutions with confirmed cases, conducted more than 1,700 trips and conveyed more than 3,900 close contacts and confirmed cases mainly from elderly nursing homes or homes for the disabled to quarantine facilities, as well as their return trips upon recovery; and

Provision of services by the Auxiliary Medical Service

- (b) as the community resumes normalcy, AMS will continuously and closely monitor the utilisation of its ambulances, strengthen existing patient conveyance services and explore new service initiatives as far as practicable, including:
 - (i) training up more members to become qualified ambulance drivers and ambulance nurses/dressers. Basic Ambulance Aid training has been included into recruit training programme for new members starting from 2023 so that they can be deployed to the provision of NEATS;
 - (ii) exploring the feasibility of widening service scope to improve the utilisation of both non-emergency ambulances and town ambulances, such as providing conveyance services at the major Boundary Control Points to designated hospitals and augmenting inter-hospital transfer service; and
 - (iii) exploring the feasibility of extending the provision of NEATS during weekends and public holidays, such as conveying disabled and elderly residents from their homes to district health centres for health screening or follow-up.

Provision of service in country parks

3.22 As agreed with AFCD, AMS is responsible for providing first aid or ambulance service in 8 areas within country parks on Sundays and public holidays (from 9 or 10 a.m. to 4 or 5 p.m.). AMS deploys 1 to 5 members to each area based on the first aid needs.

Need to improve the service availability in country parks

3.23 Audit examined the provision of first aid or ambulance service in the 8 areas within country parks during the period from 1 October 2021 to 30 September 2022 (see para. 3.22) and noted that the service was not available at all times in 7 of the 8 areas, with availability rates ranging from 70% to 98% (see Table 14). In particular, the availability rates of 3 areas were less than 80%, namely Pat Sin Leng Country Park to Bride's Pool (70% or 33 out of 47 duty days),

Provision of services by the Auxiliary Medical Service

Nai Chung to Pak Tam Chung (76% or 38 out of 50 duty days) and Bride's Pool to Tai Mei Tuk (76% or 38 out of 50 duty days). Moreover, there was no documentary evidence showing that AMS had informed AFCD of the non-provision of service to facilitate the alternative arrangement of provision of first aid or ambulance service by other agencies. In Audit's view, AMS needs to:

- (a) secure sufficient manpower for the provision of the first aid or ambulance service in country parks as far as practicable; and
- (b) inform AFCD in advance when the service is not available from AMS to facilitate the drawing up of a contingency plan where necessary.

Provision of services by the Auxiliary Medical Service

Table 14

**Availability of first aid or ambulance service in country parks
(1 October 2021 to 30 September 2022)**

Areas	Service type	Number of duty days (Note) (a)	Number of days in which service was available (b)	Number of days in which service was not available (c) = (a) – (b)
Aberdeen Country Park	First aid or ambulance service	47	45 (96%)	2 (4%)
Pat Sin Leng Country Park to Bride's Pool	First aid or ambulance service	47	33 (70%)	14 (30%)
Plover Cove Country Park to Tai Mei Tuk	First aid or ambulance service	47	47 (100%)	0 (0%)
Sai Kung Country Park to Nai Chung	First aid or ambulance service	47	46 (98%)	1 (2%)
Sai Kung Country Park to Pak Tam Chung	First aid or ambulance service	47	46 (98%)	1 (2%)
Shing Mun Country Park to Tai Mo Shan	Motorcycle ambulance service	50	49 (98%)	1 (2%)
Nai Chung to Pak Tam Chung	Motorcycle ambulance service	50	38 (76%)	12 (24%)
Bride's Pool to Tai Mei Tuk	Motorcycle ambulance service	50	38 (76%)	12 (24%)

Source: Audit analysis of AMS records

Note: Due to the fifth wave of the COVID-19 epidemic, AMS agreed with AFCD to suspend first aid or ambulance service from 13 January 2022 to 30 April 2022 and motorcycle ambulance service from 4 February 2022 to 30 April 2022 respectively. As a result, during the period from 1 October 2021 to 30 September 2022, there were 47 and 50 duty days for the 5 areas with first aid or ambulance service and the 3 areas with motorcycle ambulance service respectively.

Audit recommendations

- 3.24 **Audit has *recommended* that the Chief Staff Officer of AMS should:**
- (a) **secure sufficient manpower for the provision of the first aid or ambulance service in country parks as far as practicable; and**
 - (b) **inform AFCD in advance when the service is not available from AMS to facilitate the drawing up of a contingency plan where necessary.**

Response from the Government

3.25 The Chief Staff Officer of AMS agrees with the audit recommendations. He has said that AMS will:

- (a) secure sufficient manpower for the provision of service in country parks as far as practicable through training more members in ambulance driving, motorcycle driving, and ambulance aid skills. Furthermore, manpower engaged in anti-epidemic duties will be released to take up more other duties including the duties in country parks; and
- (b) serve a written notice to AFCD 72 hours in advance when the committed service of AMS is not available.

Performance reporting on service provisioning

Room for improvement in reporting performance indicators

3.26 AMS reports a number of performance indicators in its CORs, including responses to ambulance calls, coverage at public functions, cases treated on country park duty and responses to non-emergency ambulance transfer requests. Audit noted that there was room for improvement in reporting the performance indicators:

- (a) ***Responses to non-emergency ambulance transfer requests.*** Audit noted that the reported number of responses to non-emergency ambulance transfer requests included the number of requests cancelled by the patients. From

Provision of services by the Auxiliary Medical Service

2018 to 2021, the annual number of cancelled requests ranged from 1,300 to 2,314, representing 13% to 22% of the total number of requests reported in CORs (see Table 15). According to AMS, the number of cancelled requests was included in performance reporting since it had already arranged the manpower and reserved the ambulances for these requests; and

Table 15

**Number of responses to non-emergency ambulance transfer requests
(2018 to 2021)**

Year	Number of requests completed (a)	Number of requests cancelled (b)	Total number reported in CORs (c) = (a) + (b)
2018	8,955 (84%)	1,740 (16%)	10,695 (100%)
2019	8,564 (87%)	1,300 (13%)	9,864 (100%)
2020	8,016 (78%)	2,314 (22%)	10,330 (100%)
2021	8,378 (84%)	1,566 (16%)	9,944 (100%)

Source: Audit analysis of AMS records

- (b) **Cases treated on country park duty.** Audit analysed the number of cases treated on country park duty in 2020 and 2021 and noted that:
- (i) the numbers reported in CORs included both the number of cases treated in country parks and on cycling tracks. Among the 3,361 cases and 4,054 cases reported in CORs of 2020 and 2021 respectively, only 4% and 7% of cases were related to country park duty while more than 90% of cases were related to cycling track duty; and
 - (ii) the number of cases reported was not accurate. For example, in 2021, the number of cases treated in country parks did not include the cases of four months (i.e. March, October, November and December 2021).

Provision of services by the Auxiliary Medical Service

In order to improve public accountability, Audit considers that AMS needs to take measures to ensure the accuracy of the performance indicators on service provisioning reported in its CORs.

Audit recommendation

3.27 **Audit has *recommended* that the Chief Staff Officer of AMS should take measures to ensure the accuracy of the performance indicators on service provisioning reported in AMS's CORs.**

Response from the Government

3.28 The Chief Staff Officer of AMS agrees with the audit recommendation. He has said that AMS will:

- (a) better define the performance indicators reported in its CORs regarding the responses to non-emergency ambulance transfer requests and the actual number of patients conveyed; and
- (b) take measures to ensure the accuracy of the performance indicators reported in its CORs regarding the cases treated on country park duty and on cycling track duty, and rectify the difference in its CORs and report to the Security Bureau.

PART 4: ADMINISTRATIVE ISSUES

4.1 This PART examines administrative issues of AMS, focusing on:

- (a) pay and allowances (paras. 4.2 to 4.10);
- (b) utilisation of training venues (paras. 4.11 to 4.16); and
- (c) management of emergency supplies (paras. 4.17 to 4.22).

Pay and allowances

4.2 AFPAO makes provision for the granting of pay, pensions, gratuities, allowances and other benefits in respect of the auxiliary forces (e.g. AMS). According to AFPAO:

- (a) ***Pay.*** Every member shall, while attending duty (including active service and voluntary duty) or training, be eligible to be paid:
 - (i) in respect of continuous attendance for 8 hours or more in any period of 24 hours, at the appropriate daily rate of pay; and
 - (ii) in respect of attendance for less than 8 hours, at the appropriate hourly rate of pay; and
- (b) ***Ration allowance.*** In respect of attendance for 8 hours or more during which he is not provided with free meals or rations, every member who attends for duty or training shall, in addition to his pay, be eligible to receive a daily ration allowance.

4.3 ***Occurrence Book.*** Occurrence Book is an official record used at AMS units/out-posts such as training venues to log all events/occurrence taking place at the location and make available documentary evidence/records for accounting procedures (e.g. claims of pay and allowances) and auditing purposes. According to the AMS Standing Order:

Administrative issues

- (a) all training received and duties performed by members should be recorded in the Occurrence Books with their AMS membership numbers;
- (b) the officers in charge of each unit/post must inspect the Occurrence Books and submit them to the AMS Headquarters for routine inspection. OTOs concerned must conduct regular random inspections of the Occurrence Books collected by the AMS Headquarters; and
- (c) management staff such as Team Officers and District Commanders in districts must regularly pay visits to the venues to check and verify the information being recorded in the Occurrence Books is correct and proper.

4.4 ***Pay and allowances claim forms.*** In order to claim pay and allowances in respect of duties/training, a member must indicate his/her reporting and departure time and sign on the pay and allowances claim forms, which would then be certified by a certifying officer (at the rank of Grade IV or above, or being the most senior officer on duty) and approved by an approving officer (at the rank of Senior Grade V or above, or corresponding officers of the Headquarters Column). According to the AMS Standing Order, unit/team in-charge must send the completed pay and allowances claim forms to the Accounts Office of AMS Headquarters within one week following the end of each month. The Accounts Office would input the details on the pay and allowances claim forms into AMACS. Pay and allowances are normally paid to members one month in arrears. Audit noted that there was room for improvement in disbursing pay and allowances to members, as detailed in paragraphs 4.5 to 4.8.

Room for improvement in disbursing pay and allowances to members

4.5 ***Attendance claimed for pay and allowances not properly documented in Occurrence Books.*** Although the pay and allowances claim forms submitted by members are separately certified and approved by senior officers, Occurrence Books are important documents in the disbursement of pay and allowances as they are official records used at AMS units/out-posts serving as documentary evidence/records for accounting procedures and auditing purposes (see para. 4.3). Audit sample checked 50 claim forms with payments made in September 2022 involving 26 occurrences of duties/training and 250 members' claims. Audit examination found that 25 occurrences (involving 248 members' claims) could not be verified against the records in the Occurrence Books:

- (a) in 14 (56%) occurrences (involving 17 members' claims), the relevant duties/training were not recorded in the Occurrence Books. Of the 14 occurrences, 13 occurrences (involving 15 members' claims) were instead recorded in the attendance books for AMS Headquarters' staff;
- (b) in 6 (24%) occurrences (involving 206 members' claims), AMS membership numbers of the members concerned were not recorded in the Occurrence Books;
- (c) in 1 (4%) occurrence (involving 5 members' claims), the AMS membership numbers on the claim forms did not match with those recorded in the Occurrence Book; and
- (d) in 4 (16%) occurrences (involving 20 members' claims), the corresponding Occurrence Books could not be located.

4.6 Audit noted that of the 16 training venues for the period from April 2020 to September 2022, the Occurrence Books of 2 training venues could not be located. For the remaining 14 training venues, Audit noted that:

- (a) for 2 (14%) training venues, OTOs concerned had conducted regular random inspections of the Occurrence Books and management staff had checked and verified the information of the Occurrence Books;
- (b) for 6 (43%) training venues, only the management staff had checked and verified the information of the Occurrence Books; and
- (c) for the remaining 6 (43%) training venues, neither OTOs concerned had conducted any regular random inspections of the Occurrence Books nor management staff had checked and verified the information of the Occurrence Books.

Audit considers that AMS needs to strengthen internal controls on the members' claims of pay and allowances, such as requiring the certifying/approving officers of the claim forms to check against the records in Occurrence Books when certifying/approving the claims. There is also a need for AMS to take measures to ensure that the regular random inspections and checks of the Occurrence Books are performed by OTOs and management staff respectively in accordance with the

Administrative issues

requirements set out in the AMS Standing Order, and that the pertinent inspections and checking results are properly documented.

4.7 ***Ineligible claims of ration allowance.*** From October 2021 to September 2022, ration allowance of \$11.0 million was paid to members with respect to 100,364 rations claimed. However, Audit examination revealed that among these 100,364 rations claimed, 475 rations (0.5%) with an amount of \$51,684 were related to duties of more than 7 hours but less than the prescribed requirement of 8 hours, at variance with the criteria promulgated in AFPAO. Audit considers that AMS needs to take measures to ensure that the ration allowance is paid in accordance with the criteria set out in AFPAO.

4.8 ***Delay in submission of claim forms to Accounts Office.*** For the 50 claim forms examined by Audit (see para. 4.5), Audit noted that:

- (a) there was delay (i.e. later than one week following the previous month-end) in submission of 31 (62%) claim forms to the Accounts Office (an average delay of 54 days, ranging from 53 to 83 days); and
- (b) the remaining 19 (38%) claim forms did not indicate the dates of receipt by the Accounts Office. Therefore, it could not be ascertained whether the claims had been timely submitted.

Audit considers that AMS needs to take measures to ensure that the pay and allowances claim forms are submitted to Accounts Office in a timely manner, and remind its staff to record the dates of receipt by the Accounts Office on the claim forms.

Audit recommendations

4.9 ***Audit has recommended that the Chief Staff Officer of AMS should:***

- (a) **strengthen internal controls on the members' claims of pay and allowances, such as requiring the certifying/approving officers of the claim forms to check against the records in Occurrence Books when certifying/approving the claims;**

- (b) **take measures to ensure that:**
 - (i) **regular random inspections and checks of the Occurrence Books are performed by OTOs and management staff respectively in accordance with the requirements set out in the AMS Standing Order; and**
 - (ii) **the pertinent inspections and checking results are properly documented;**
- (c) **take measures to ensure that the ration allowance is paid in accordance with the criteria set out in AFPAO;**
- (d) **take measures to ensure that the pay and allowances claim forms are submitted to Accounts Office in a timely manner; and**
- (e) **remind AMS staff to record the dates of receipt by the Accounts Office on the claim forms.**

Response from the Government

4.10 The Chief Staff Officer of AMS agrees with the audit recommendations. He has said that AMS will:

- (a) strengthen internal controls on the members' claims of pay and allowances. Occurrence Books records will be checked against members' claims of pay and allowances, such as requiring the certifying/approving officers of the claim forms to check against the records in Occurrence Books when certifying/approving the claims. As mentioned in paragraph 2.21(a), a new system is being developed for application, approval and inspection of operation duties, training, and pay and allowances so as to replace the paper-based system. AMS aims at launching the new management system by the end of 2024;
- (b) in the interim, take measures to ensure that regular inspections and random checks of the Occurrence Books are performed by OTOs and management staff respectively in accordance with the requirements as set out in the AMS

Standing Order, and that the pertinent inspections and checking results are properly documented; and

- (c) take measures to ensure that the ration allowance is only paid to members in respect of attendance for 8 hours or more, during which he is not provided with free meals or rations in accordance with the criteria set out in AFPAO. Briefings on the eligible criteria governing conditions for similar claims have been given to the relevant units to avoid misinterpretation in future. AMS will rectify the relevant records in the past 7 years and report to the Security Bureau.

Utilisation of training venues

4.11 As at 31 December 2022, AMS had 16 training venues at its Headquarters and in various districts (see Appendix C). Training venues are located in various districts not only in urban areas but also in the New Territories and the outlying islands for easy access by members and cadets living in different parts of Hong Kong (Note 25).

Low utilisation of some training venues

4.12 AMS compiles a monthly utilisation report for each training venue (Note 26). Audit examined the utilisation reports for the period from 2017-18 to 2021-22 (see Appendix D) and noted that the utilisation rates were low in some training venues:

Note 25: *Most AMS's training venues include classrooms and simulated wards but not provided with playground for conducting foot drill (see Appendix C). Therefore, AMS has to rent school premises with playground at district level for foot drill training from time to time.*

Note 26: *The utilisation rate of a training venue is calculated by dividing the number of training sessions used by the total number of training sessions available in a particular month. For each day, three training sessions are available (i.e. morning, afternoon and evening). Thus, for example, the number of training sessions available in December was 93 (3 sessions × 31 days). According to AMS, given that its members are volunteers and many have other work/family commitments, training sessions are generally held during weekends/public holidays and in the evening session during weekdays.*

- (a) the 5-year average utilisation rates of 9 (56%) out of 16 training venues were below 20%. In particular, the utilisation rates of the three venues located on outlying islands (Cheung Chau, Mui Wo and Tung Chung) were below 10%; and
- (b) the utilisation rate of the training venue located at the Sai Kung Office decreased from 28% in 2017-18 to 7% in 2021-22.

According to AMS, in order to better utilise the government resources, it has shared 14 training venues (except for AMS Headquarters and the New Territories East Regional Office) with other B/Ds by including them in the list of “Auditorium and Conference Facilities Available for Booking by B/Ds” on the government intranet. However, AMS has not compiled other B/Ds’ utilisation rates of AMS’s training venues.

4.13 Audit noted that, according to the schedule of regular training for the period from September 2022 to June 2023, no regular training was held or scheduled to be held in the training venues located in Sai Kung, Mui Wo and Tung Chung. On 17 January 2023, Audit conducted a site visit with AMS staff to the Tung Chung Office and noted that only a classroom was provided on the ground floor (49 square metres) (see Photograph 2 — Note 27), and that the upper floor was used as an emergency store (see para. 4.17).

Note 27: *According to AMS, a typical classroom setting with desks and chairs is not always required, for example, when conducting foot drill training and first aid practical training.*

Photograph 2

(a) Exterior view of Tung Chung Office



(b) Classroom in Tung Chung Office



Source: AMS records

4.14 In Audit's view, AMS needs to take measures to ensure that the conditions of its training venues are fit for training purposes with a view to improving their utilisation. AMS also needs to critically review the need of keeping the training

venues with low utilisation rates, taking into account of the training needs of its members and cadets.

Audit recommendations

4.15 **Audit has *recommended* that the Chief Staff Officer of AMS should:**

- (a) **take measures to ensure that the conditions of AMS's training venues are fit for training purposes with a view to improving their utilisation; and**
- (b) **critically review the need of keeping AMS's training venues with low utilisation rates, taking into account of the training needs of members and cadets.**

Response from the Government

4.16 The Chief Staff Officer of AMS agrees with the audit recommendations. He has said that AMS will:

- (a) take measures to ensure that the conditions of its training venues are fit for training purposes; and
- (b) critically review the need of keeping its training venues with low utilisation rates, taking into account of the training needs of members and cadets. Under-utilised venues will either be open for use to other B/Ds or appropriate parties, or returned to the government for other deployment.

Management of emergency supplies

4.17 According to the AMS Operation Order, emergency supplies are stock-piled over the territory at operation and emergency stores in order to ensure availability of sufficient logistic supports for AMS operations. These stocks cover a wide range of items and are grouped into standard packages. All or part of them could be sent for emergency operations when necessary. Emergency supplies include:

Administrative issues

- (a) *Forward supplies.* These are first aid/ambulance aid equipment;
- (b) *Supplementary field supplies.* These are rescue equipment, mechanical equipment and items for setting up of Casualty Collecting Points and Casualty Treatment Centres; and
- (c) *Medical/hospital supplies.* These are used to set up Dressing Stations, Casualty Clearing Hospitals or Convalescent Units.

As at 31 July 2022, there were 20 operation stores which stored forward supplies and/or supplementary field supplies and 20 emergency stores which stored medical/hospital supplies.

4.18 In August 2022, a Working Group on Review of Emergency Supplies (the Working Group) was set up by AMS in order to review the need of existing emergency supplies and stores:

- (a) the Working Group had proposed to cease the operation of the 20 emergency stores, taking into consideration that:
 - (i) Dressing Stations, Casualty Clearing Hospitals or Convalescent Units were not required to be set up for any emergency incidents in the past thirty years; and
 - (ii) the list of medical/hospital supplies might be obsolete, taking into account the needs and standards of medical and surgical equipment comparing with nowadays infection controls and medical standards (Note 28); and
- (b) up to 31 December 2022, the Working Group was in the progress of drafting a revised list of forward supplies and supplementary field supplies and considering which operation stores would be maintained for keeping these supplies.

Note 28: *For example, stainless steel forceps must be properly autoclaved before being used in any aseptic/sterile surgical procedure. However, the existing autoclaves in the list of medical/hospital supplies were procured in the 1990s and could not meet the current sterilisation requirement of surgical equipment.*

4.19 ***Need to complete the review on the need of maintaining the operation stores.*** In performing stock verification exercises, AMS follows the requirements stipulated in the Stores and Procurement Regulations, including a comparison of the ledger balances with the actual stocks and an examination of the conditions of the stock and the storage place. Audit examined AMS's stocktaking reports for emergency stores from 2017-18 to 2021-22 and noted that AMS did not identify any exceptions during the stock verification exercises. According to the stocktaking reports, the conditions of the supplies in the emergency stores were considered as "very good and showed no sign of deterioration". However, Audit noted that as revealed in the review conducted in August 2022 by the Working Group, the medical/hospital supplies were considered obsolete as they practically failed to meet current infection controls and medical standards despite that they were still in good conditions (see para. 4.18(a)). As of December 2022, the review of operation stores was still in progress. According to AMS, it aimed to complete the review of the need of maintaining the operation stores by March 2023. Audit considers that AMS needs to complete the review on the need of maintaining the operation stores and update the list of forward supplies and supplementary field supplies as soon as possible.

4.20 ***Need to expedite the evacuation of emergency stores.*** According to the Working Group's proposal of the review of emergency supplies in September 2022, AMS aimed to cease the operation of the 20 emergency stores (Note 29). However, with a lapse of four months and up to 31 December 2022, only 4 of the 20 emergency stores had been evacuated. Audit considers that AMS needs to take action to expedite the evacuation of emergency stores.

Audit recommendations

4.21 **Audit has *recommended* that the Chief Staff Officer of AMS should:**

- (a) **complete the review on the need of maintaining the operation stores and update the list of forward supplies and supplementary field supplies as soon as possible; and**
- (b) **take action to expedite the evacuation of emergency stores.**

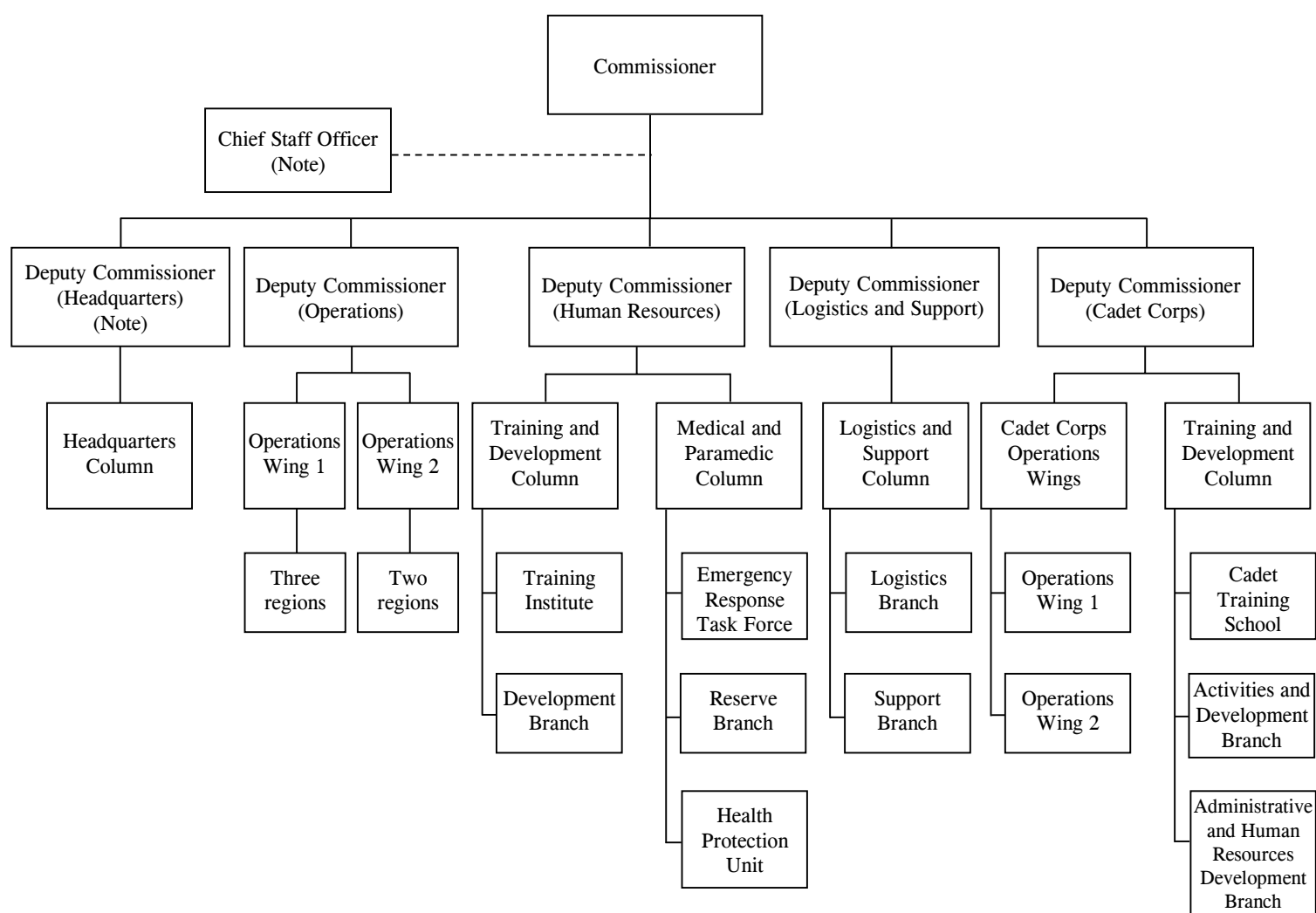
Note 29: *Of the 20 emergency stores, 14 emergency stores are located within the hospitals or clinics.*

Response from the Government

4.22 The Chief Staff Officer of AMS agrees with the audit recommendations. He has said that AMS:

- (a) has completed the review on the need of maintaining the operation stores and updated the list of forward supplies and supplementary field supplies in late March 2023; and
- (b) will expedite the evacuation of emergency stores. Four of them had already been vacated as at 31 December 2022. Evacuation action for the remaining 16 emergency stores is in progress and will be completed by the second quarter of 2024.

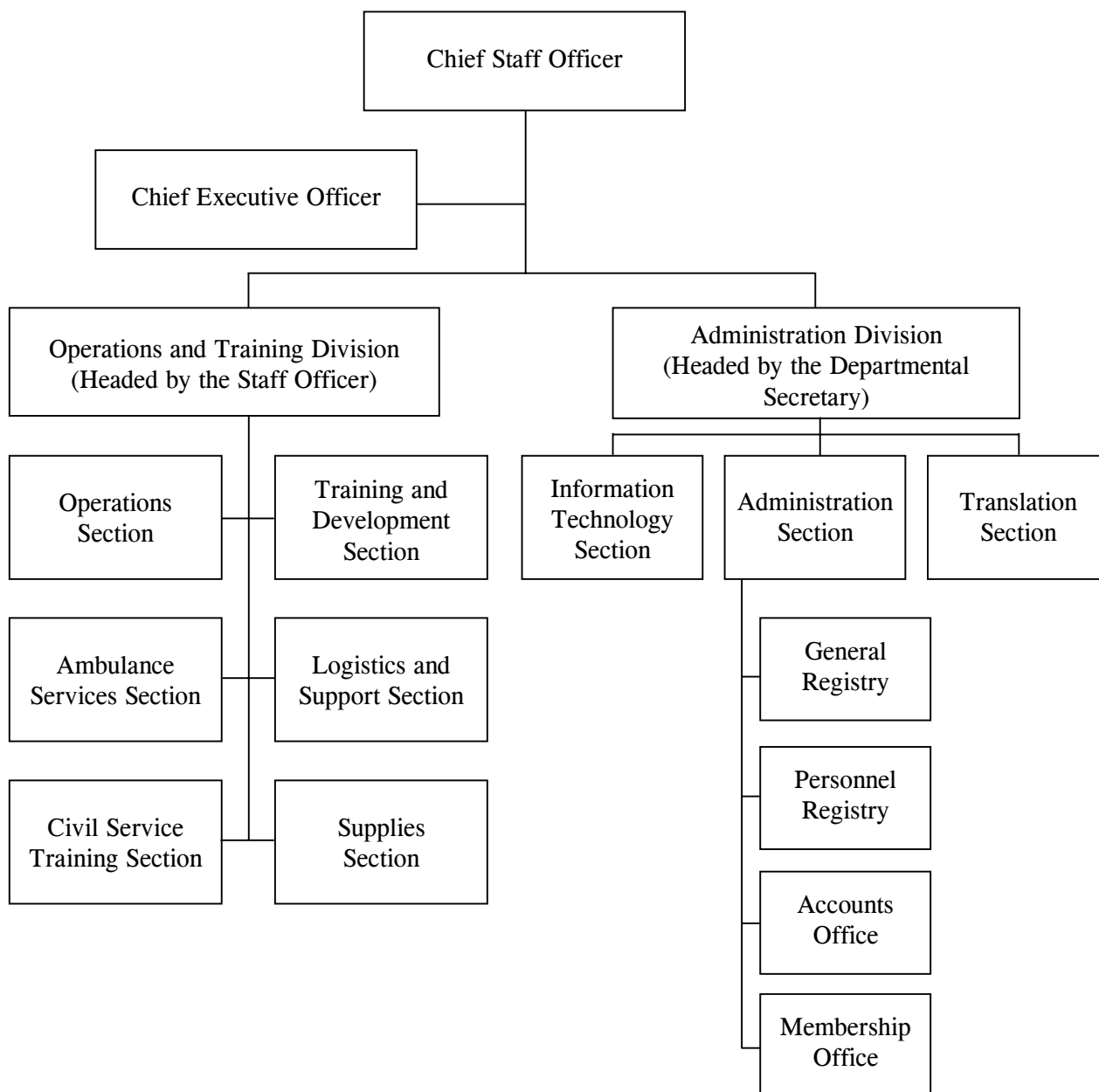
**Auxiliary Medical Service volunteer force:
Organisation chart
(31 December 2022)**



Source: AMS records

Note: The Chief Staff Officer is a government official who is responsible to the Commissioner for the efficient administration, planning, training and operation of AMS. He also assumes the post of Deputy Commissioner (Headquarters).

**Auxiliary Medical Service Headquarters:
Organisation chart
(31 December 2022)**



Source: AMS records

**Locations of the Auxiliary Medical Service's training venues
(31 December 2022)**

Location of training venue	Training facility	Area of training facility (square metres)
<i>Headquarters and Regional Offices</i>		
1. AMS Headquarters	3 classrooms, 1 simulated ward and 1 hall	665
2. Hong Kong Regional Office	2 classrooms and 1 simulated ward	163
3. Kowloon East Regional Office	1 classroom and 1 simulated ward	80
4. Kowloon West Regional Office	2 classrooms and 1 simulated ward	140
5. New Territories East Regional Office (Note)	Nil	Nil
6. New Territories West Regional Office	1 classroom and 1 simulated ward	84
<i>District training centres</i>		
7. Aberdeen Training Centre	1 classroom and 1 simulated ward	92
8. Cheung Chau Training Centre	1 classroom	36
9. Mui Wo Office	1 classroom	33
10. Sai Kung Office	1 classroom	49
11. Sham Shui Po Training Centre	1 classroom and 2 music practice rooms for the AMS Band	116
12. Tai Po Training Centre	1 classroom	24
13. Tung Chung Office	1 classroom	49
14. Yuen Long District Office	1 classroom and 1 simulated ward	92
<i>Outdoor training centres and training camp</i>		
15. Tsam Chuk Wan Canoe Training Centre	Canoe training centre	790
16. Tsuen Wan Training Camp	1 classroom, outdoor training centre and camp	548

Source: Audit analysis of AMS records

Note: There are no classrooms or simulated wards at the New Territories East Regional Office but the lobby of the office shall be used as training facility when necessary.

Utilisation rates of the Auxiliary Medical Service's training venues (2017-18 to 2021-22)

Location of training venue	Utilisation rate (%)					
	2017-18	2018-19	2019-20	2020-21	2021-22	5-year average
Headquarters and Regional Offices						
AMS Headquarters	67	70	60	84	96	75
Hong Kong Regional Office	70	62	58	52	53	59
Kowloon East Regional Office	19	27	27	18	40	26
Kowloon West Regional Office	38	43	37	16	13	29
New Territories East Regional Office	84	85	86	83	86	85
New Territories West Regional Office	45	46	50	38	16	39
District training centres						
Aberdeen Training Centre	8	25	6	15	16	14
Cheung Chau Training Centre	6	7	7	5	5	6
Mui Wo Office	2	4	3	1	1	2
Sai Kung Office	28	18	16	8	7	15
Sham Shui Po Training Centre	22	34	28	21	25	26
Tai Po Training Centre	19	19	16	16	16	17
Tung Chung Office	5	12	12	9	7	9
Yuen Long District Office	6	16	6	11	12	10
Outdoor training centres and training camp						
Tsam Chuk Wan Canoe Training Centre	10	13	15	1	2	8
Tsuen Wan Training Camp	16	17	16	1	1	10

Source: Audit analysis of AMS records

Remarks: The utilisation rate of a training venue is calculated by dividing the number of training sessions used by the total number of training sessions available in a particular month. For each day, three training sessions are available (i.e. morning, afternoon and evening). Thus, for example, the number of training sessions available in December was 93 (3 sessions × 31 days). According to AMS, given that its members are volunteers and many have other work/family commitments, training sessions are generally held during weekends/public holidays and in the evening session during weekdays.

Acronyms and abbreviations

AFCD	Agriculture, Fisheries and Conservation Department
AFPAO	Auxiliary Forces Pay and Allowances Ordinance
AMACS	Auxiliary Medical Service Members and Cadet Corps Management System
AMS	Auxiliary Medical Service
AMSCC	Auxiliary Medical Service Cadet Corps
Audit	Audit Commission
B/Ds	Government bureaux/departments
CORs	Controlling Officer's Reports
DH	Department of Health
FSD	Fire Services Department
HA	Hospital Authority
NEATS	Non-emergency ambulance transfer services
OTO	Operations and Training Officer

CHAPTER 2

Constitutional and Mainland Affairs Bureau Equal Opportunities Commission

Administration of the Equal Opportunities Commission

**Audit Commission
Hong Kong
31 March 2023**

This audit review was carried out under a set of guidelines tabled in the Provisional Legislative Council by the Chairman of the Public Accounts Committee on 11 February 1998. The guidelines were agreed between the Public Accounts Committee and the Director of Audit and accepted by the Government of the Hong Kong Special Administrative Region.

Report No. 80 of the Director of Audit contains 8 Chapters which are available on our website at <https://www.aud.gov.hk>



Audit Commission
6th Floor, High Block
Queensway Government Offices
66 Queensway
Hong Kong

Tel : (852) 2867 3423
Fax : (852) 2824 2087
E-mail : enquiry@aud.gov.hk

ADMINISTRATION OF THE EQUAL OPPORTUNITIES COMMISSION

Contents

	Paragraph
EXECUTIVE SUMMARY	
PART 1: INTRODUCTION	1.1 – 1.14
Audit review	1.15
General response from the Equal Opportunities Commission	1.16
Acknowledgement	1.17
PART 2: COMPLAINT HANDLING AND PROVISION OF LEGAL ASSISTANCE	2.1
Complaint handling	2.2 – 2.13
Audit recommendations	2.14 – 2.15
Response from the Equal Opportunities Commission	2.16
Response from the Government	2.17
Provision of legal assistance	2.18 – 2.25
Audit recommendations	2.26
Response from the Equal Opportunities Commission	2.27

	Paragraph
PART 3: COMMUNITY PARTICIPATION AND PUBLICITY	3.1
Public awareness of equal opportunities	3.2 – 3.8
Audit recommendations	3.9
Response from the Equal Opportunities Commission	3.10
Community Participation Funding Programme on Equal Opportunities	3.11 – 3.20
Audit recommendations	3.21
Response from the Equal Opportunities Commission	3.22
School drama performances on equal opportunities	3.23 – 3.29
Audit recommendations	3.30
Response from the Equal Opportunities Commission	3.31
 PART 4: LEGAL STUDIES AND RESEARCH PROJECTS	 4.1
Legal studies	4.2 – 4.11
Audit recommendations	4.12
Response from the Equal Opportunities Commission	4.13
Research projects	4.14 – 4.31
Audit recommendations	4.32
Response from the Equal Opportunities Commission	4.33
 PART 5: OTHER ADMINISTRATIVE ISSUES	 5.1 – 5.2
Transaction of Board and Committee meetings	5.3 – 5.9
Audit recommendations	5.10

	Paragraph
Response from the Equal Opportunities Commission	5.11
Staff training	5.12 – 5.16
Audit recommendation	5.17
Response from the Equal Opportunities Commission	5.18
Procurement of goods and services	5.19 – 5.21
Audit recommendation	5.22
Response from the Equal Opportunities Commission	5.23

Appendices	Page
A : Equal Opportunities Commission: Organisation chart (extract) (31 December 2022)	84
B : Acronyms and abbreviations	85

ADMINISTRATION OF THE EQUAL OPPORTUNITIES COMMISSION

Executive Summary

1. The Government is committed to promoting equal opportunities for all and eliminating all forms of discrimination. Four ordinances, namely the Sex Discrimination Ordinance (SDO — Cap. 480), the Disability Discrimination Ordinance (DDO — Cap. 487), the Family Status Discrimination Ordinance (FSDO — Cap. 527) and the Race Discrimination Ordinance (RDO — Cap. 602), have been enacted in order to prohibit the most common discrimination on the grounds of sex, marital status, pregnancy, breastfeeding, disability, family status and race in prescribed areas of activities. The Equal Opportunities Commission (EOC) is an independent statutory body tasked with the implementation and enforcement of the four anti-discrimination ordinances. The Constitutional and Mainland Affairs Bureau (CMAB) is the housekeeping bureau of EOC. In 2022-23, the estimated recurrent expenditure of EOC was \$137.4 million. The Audit Commission (Audit) has recently conducted a review to examine the administration of EOC.

Complaint handling and provision of legal assistance

2. *Room for improvement in investigation and reporting of case progress.* The procedures for handling complaints are set out in the Internal Operating Procedures Manual (IOPM). EOC has set a performance pledge of concluding 75% of complaint cases within six months. From 2018 to 2022, EOC received 5,014 complaint cases and it met the performance pledge with actual achievements ranging from 80% to 86% (paras. 2.3 to 2.5). Audit found that:

- (a) as at 30 September 2022, of the 2,800 complaint cases received since 2018 and concluded between 1 January 2020 and 30 September 2022, there were 128 (5%) cases which took more than 365 days to conclude. The average time required to conclude the 128 cases was 551 days, ranging from 369 to 1,064 days (para. 2.6); and

Executive Summary

- (b) of the 25 complaint cases which took a long time to conclude/investigate examined by Audit, the following irregularities were noted:
 - (i) ***Investigation Plan not prepared.*** According to IOPM, when EOC decides to investigate a complaint, the case officer should prepare an Investigation Plan, specifying details of the complaint (including the handling factors requiring priority action and source of further evidence that may be required) for supervisor's endorsement. However, Investigation Plans were only prepared in 4 (16%) of the 25 cases, contrary to the requirement in IOPM; and
 - (ii) ***Reporting to Legal and Complaints Committee (LCC) on progress of complaint handling not always comprehensive.*** The status of all complaints, including the reasons for lengthy process of complaints remaining active after six months and complaints for follow-up actions, would be reported to LCC. Notwithstanding this, in 5 (20%) of the 25 cases, the reporting to LCC on progress of complaint handling was not comprehensive (para. 2.8).
- 3. ***Need to improve customer satisfaction level.*** EOC has engaged external consultants to conduct customer satisfaction survey to gauge feedback from users on the complaint handling and enquiry services biennially. Audit noted that:
 - (a) the overall customer satisfaction level remained stable at 69% in 2017 and 68% in 2019 but dropped to 62% in 2021;
 - (b) the customer satisfaction levels of complainants (ranging from 51% to 57%) were lower than that of respondents (ranging from 79% to 81%) in the three surveys conducted in 2017, 2019 and 2021. However, the customer satisfaction levels were not reported separately for complainants and respondents in CMAB's Controlling Officer's Reports (CORs); and
 - (c) the customer satisfaction levels of enquirers in 2017, 2019 and 2021 were 68%, 68% and 63% respectively, which were also not reported in CMAB's CORs (paras. 2.11 and 2.12).

Executive Summary

4. ***Decrease in number of applications for legal assistance.*** Pursuant to the anti-discrimination ordinances, when a complaint has been lodged but not settled, the complainant may apply to EOC for legal assistance to bring legal proceedings against the respondent. From 2018 to 2022, a total of 127 legal assistance applications were received. Audit's analysis found that the number of applications received decreased from 54 in 2018 to 10 in 2022. Moreover, the number of legal assistance applications as a percentage to the number of complaint cases with unsuccessful conciliation was on a decreasing trend, from 79% in 2018 to 50% in 2022 (paras. 2.19 and 2.20).

Community participation and publicity

5. ***Public awareness of equal opportunities.*** From time to time, EOC commissions consultancy firms to conduct surveys on public perceptions about equal opportunities awareness and EOC's work. The most recent round of survey was conducted in 2021 (para. 3.2). Audit's examination of the report of the survey revealed the following areas for improvement:

- (a) ***Need to enhance public awareness of EOC's educational, promotional and publicity activities.*** The total awareness level of EOC's educational, promotional and publicity activities during the 12 months before enumeration was only 60%, representing a decrease of over 20 percentage points as compared with those of the previous two rounds of surveys conducted in 2012 and 2015 respectively (para. 3.3(a)); and
- (b) ***Need to step up efforts in raising awareness of FSDO.*** Among the four anti-discrimination ordinances in Hong Kong, the awareness of FSDO remained the lowest, ranging from 25.8% in 2021 to 30% in 2012 (para. 3.6).

6. ***Community Participation Funding Programme on Equal Opportunities.*** According to EOC, through the Community Participation Funding Programme on Equal Opportunities launched in September 1996, EOC has supported different projects carried out by non-governmental organisations, community groups and schools to promote public understanding of equal opportunities, and the principles and applications of SDO, DDO, FSDO and RDO (para. 3.11). Audit's examination revealed the following areas for improvement:

Executive Summary

- (a) ***Need to consider developing marking scheme.*** Audit reviewed the assessment of 37 applications by the Community Participation and Publicity Committee at its meeting held in April 2022 and noted that there was no documentary evidence showing that all the criteria for funding (e.g. the expenditure and cost-effectiveness of the project) had been duly considered, and that no score was assigned to individual projects for determining the funding priority (paras. 3.12 and 3.13); and
 - (b) ***Need to improve evaluation of funded organisations' performance.*** Audit's sample check of the application forms and final reports of 10 completed projects approved from 2019-20 to 2021-22 revealed that there was room for improvement in EOC's evaluation of the funded organisations' performance, as follows:
 - (i) ***No measurable targets set.*** In the application form of the Funding Programme, an applicant is required to specify the expected results and effects of the proposed project, and explain the evaluation methods to be adopted. Audit noted that in 2 (20%) projects, the funded organisations only specified the evaluation methods without proposing any measurable targets; and
 - (ii) ***No evaluation of effectiveness against expected results and effects mentioned in application form.*** Audit noted that among the 8 projects with measurable targets set, the funded organisations of 6 (75%) had not included in their final reports the level of achievement of all the expected results and effects mentioned in their application forms. In particular, 3 had not made any report (para. 3.19).
7. ***Need to consider setting requirements on topics of school drama performances.*** According to EOC, from 2017/18 to 2021/22 school years, three local theatrical troupes were engaged to stage plays and puppet shows on equal opportunities and diversity values at schools. According to EOC's letters engaging Troupe C, while Troupe C was required to stage at least 100 Chinese and 50 English performances for schools in each school year, there was no requirement on the topics of performances to be staged. Audit noted that during the above-mentioned period, the topics of 230 (34%) of the 681 Chinese performances and 212 (64%) of the 332 English performances staged by Troupe C were not related to equal opportunities or disability issues (paras. 3.24 and 3.25).

Legal studies and research projects

8. ***Legal studies.*** In March 2016, EOC made its submissions to the Government on the discrimination law review. The submissions contained some relatively complex and sensitive issues which EOC had suggested further consultation, research and education thereon (para. 4.3), including:

- (a) ***Discrimination between Chinese people in Hong Kong.*** In June 2020, EOC undertook a legal study to examine the possible legal provisions for tackling discrimination, harassment and vilification between Chinese people in Hong Kong (i.e. between Hong Kong Chinese and Mainland Chinese). In March 2021, EOC submitted the study report to CMAB. As of March 2023, the discussion between EOC and CMAB was on-going (paras. 4.4 to 4.6);
- (b) ***Enhancing protection from sexual harassment under SDO.*** In November 2020, EOC commenced to conduct a holistic review of the current legal protection against sexual harassment under SDO. In October 2021, EOC submitted the study report to CMAB. In view of the sensitivity and complexity of the issue, CMAB was examining the submission of EOC. EOC needs to keep in view the latest development of sexual harassment while maintaining close dialogue with CMAB on the way forward in enhancing legal protection against sexual harassment (para. 4.8);
- (c) ***Discrimination on grounds of sexual orientation, gender identity and intersex status.*** In December 2019, EOC embarked on a follow-up study to explore the possible options for providing legal protections from discrimination on the grounds of sexual orientation, gender identity and intersex status based on the existing framework of the anti-discrimination laws, which was expected to be completed by June 2021. In May 2022, the Chairperson, EOC informed the Legislative Council Panel on Constitutional Affairs that given the contentious and controversial nature of the issue, EOC would handle it with care (para. 4.10); and
- (d) ***Age discrimination.*** In addressing the issue of age discrimination, EOC considered it appropriate to conduct further exploratory legal studies, focusing on the scope of protections against age discrimination in other jurisdictions. Such work was included in EOC's 2020 to 2022 strategic

Executive Summary

plan. Up to March 2023, the preliminary study was in progress (para. 4.11).

9. ***Research projects.*** Research projects may be conducted by EOC's in-house resource or out-sourced to third parties (referred to by EOC as commissioned research projects) (para. 4.15). Audit found that:

- (a) ***Room for improvement in conducting in-house research projects.*** From 2013 to 2020, 12 in-house research projects were determined. All the 12 research projects only covered the issues relating to SDO but not the other three anti-discrimination ordinances. While 11 projects were completed in about one year, the remaining one took more than two years to complete. There were no documentary records showing the objectives and scopes of the projects as well as the work plan and timeframe for completing in-house research projects (paras. 4.17 and 4.18); and
- (b) ***Delays in completing commissioned research projects.*** From 2016-17 to 2021-22, EOC had commissioned 12 research projects. While 2 projects involving only out-sourcing of data collection were completed by May 2022, there were delays in completing all the remaining 10 projects, with delays (up to 31 December 2022) ranging from 2.4 to 27 months, averaging 10.9 months. For the 3 projects still in progress as of December 2022, only the findings of 1 project were published as of March 2023 (paras. 4.19, 4.20 and 4.22).

10. ***Need to maintain a pool of experienced staff engaging in research work.*** Among the 5 staff engaged in research related work, the Senior Research Manager (SRM) was the only officer who carried out research work on a full-time basis. Audit noted that EOC placed heavy reliance on SRM in conducting research work and the resignation of SRM in August 2022 had a negative impact on EOC's research work (paras. 4.30 and 4.31).

Other administrative issues

11. ***Transaction of Board and Committee meetings.*** Audit's examination found that:

Executive Summary

- (a) ***Issue of meeting minutes.*** According to the Notes for Guidance for Members on Procedures for Meetings and Related Matters (NGPM), meeting minutes should be issued as soon as possible after each meeting and one month has been set as a target. From 2018 to 2022, there were cases in which meeting minutes were issued more than 1 month after the meetings. For example, for the meetings of LCC, the average time required to issue all the 20 meeting minutes was 81 days (ranging from 42 to 294 days) (para. 5.7); and
 - (b) ***Declaration of interests.*** As stipulated in NGPM, EOC adopted a “two-tier” reporting system on declaration of interests. From 2018 to 2022, for the 85 occasions in which the Members were required to declare interests, no declaration forms were found in the records in 19 (22%) occasions and there were no signatures on the submitted declaration forms in 2 (2%) occasions. Moreover, the declaration mechanism for the co-opted Members deviated from the requirements of the “two-tier” reporting system (paras. 5.8 and 5.9).
12. ***Procurement of goods and services.*** Audit sample checked 20 procurement of values above \$50,000 from 2018 to 2022 and found room for improvement in 2 cases:
- (a) ***Office renovation.*** Procurement of renovation services amounted to \$180,270 and three subsequent additional renovation works totalling \$88,870 were approved by the Division Head. While the final value amounted to \$267,070 exceeded the purchase authority of the Division Head (up to \$250,000), there were no documentary records showing that the approval from the next higher authority as stipulated in the Procurement of Stores and Services Manual was obtained; and
 - (b) ***Procurement of office furniture.*** For the procurement of meeting tables, while the lowest quotation among the 10 quotations received was \$21,300, the second highest quotation of \$95,504 was recommended and approved due to a safety-lock herein and 8 years’ warranty provided. However, such requirements had not been specified in the purchase requisition (para. 5.20).

Executive Summary

Audit recommendations

13. Audit recommendations are made in the respective sections of this Audit Report. Only the key ones are highlighted in this Executive Summary. Audit has *recommended* that the Chairperson, EOC should:

Complaint handling and provision of legal assistance

- (a) explore measures to reduce the time taken to conclude complaint cases as far as practicable (para. 2.14(a));
- (b) remind EOC staff to prepare Investigation Plans for investigation cases in future and improve the reporting to LCC with a view to facilitating LCC's role in monitoring of the progress in handling complaint cases (para. 2.14(b) and (c));
- (c) take measures to improve level of customer satisfaction on complaint handling and enquiry services (para. 2.14(e));
- (d) continue to monitor the decreasing trend in the number of legal assistance applications and take actions to gainfully deploy the staff engaged in providing legal assistance to other areas of work (e.g. legal studies) if the number of legal assistance applications continues to fall (para. 2.26(a));

Community participation and publicity

- (e) take measures to enhance the public awareness of EOC's educational, promotional and publicity activities, and keep in view the awareness of FSDO and if it remains low, step up efforts to address the issue (para. 3.9(a) and (b));
- (f) consider developing a marking scheme for the Community Participation Funding Programme on Equal Opportunities and improve the evaluation of the performance of funded organisations of the Programme (para. 3.21(a) and (e));

Executive Summary

- (g) consider setting requirements on the minimum number of school drama performances on topics relating to equal opportunities and prevention of discrimination when engaging local theatrical troupes (para. 3.30(b));

Legal studies and research projects

- (h) continue to work closely with CMAB in formulating legislative proposals that can effectively tackle discrimination that may be encountered by people from the Mainland (para. 4.12(a));
- (i) keep in view the latest development of sexual harassment while maintaining close dialogue with CMAB on the way forward in enhancing legal protection against sexual harassment (para. 4.12(b));
- (j) keep in view the latest development of discrimination against sexual minorities (para. 4.12(c));
- (k) closely monitor the progress of the legal study and duly consult the stakeholders on the way forward in addressing age discrimination (para. 4.12(d));
- (l) keep proper records on the determination of research topics, objectives and scopes as well as the work plan and timeframe for completing in-house research projects (para. 4.32(a));
- (m) step up efforts in completing outstanding commissioned research projects and consider imposing penalty clause in service contracts of future research projects for delays in completing research work (para. 4.32(b));
- (n) improve oversight on EOC's research work and maintain a pool of staff with relevant experience so that EOC's research work will not be seriously hindered by the departure of a key staff (para. 4.32(e)); and

Executive Summary

Other administrative issues

- (o) **take measures to:**
 - (i) **ensure that meeting minutes are issued within the time target set in NGPM (para. 5.10(b));**
 - (ii) **enhance the compliance with the “two-tier” reporting system on declaration of interests (para. 5.10(c)); and**
 - (iii) **enhance EOC staff’s compliance with the Procurement of Stores and Services Manual, especially in relation to obtaining approval from appropriate authority and providing complete specifications in purchase requisitions (para. 5.22).**

14. **Audit has also *recommended* that the Secretary for Constitutional and Mainland Affairs should, in consultation with the Chairperson, EOC, consider publishing the customer satisfaction survey results of complainants, respondents and enquirers in CMAB’s CORs with a view to enhancing transparency in EOC’s performance (para. 2.15).**

Response from the Equal Opportunities Commission and the Government

15. **The Chairperson, EOC and the Secretary for Constitutional and Mainland Affairs generally agree with the audit recommendations.**

PART 1: INTRODUCTION

1.1 This PART describes the background to the audit and outlines the audit objectives and scope.

Background

1.2 The Government is committed to promoting equal opportunities for all and eliminating all forms of discrimination (Note 1). Four ordinances (hereinafter referred to as the anti-discrimination ordinances) have been enacted in order to prohibit discrimination on the grounds of sex, marital status, pregnancy, breastfeeding, disability, family status and race:

- (a) ***Sex Discrimination Ordinance (SDO — Cap. 480)***. It is unlawful under SDO to discriminate against a person on the grounds of sex, marital status, pregnancy or breastfeeding in prescribed areas of activities. In addition to protecting against discrimination, SDO also protects a person from sexual harassment, victimisation and harassment on the grounds of breastfeeding in prescribed areas of activities;
- (b) ***Disability Discrimination Ordinance (DDO — Cap. 487)***. DDO renders unlawful certain acts which discriminate against a person on the grounds of disability when committed in prescribed areas of activities. Protection is also extended in respect of discrimination on the grounds of the disability of an associate (Note 2), or where the discrimination arises because a person is accompanied by an interpreter, a reader, an assistant or a carer, who provides services because of the person's disability. Disability harassment and victimisation are unlawful when committed in prescribed areas of activities. DDO also protects people against vilification on the grounds of disability;

Note 1: *According to the Equal Opportunities Commission, discrimination means giving a person less favourable treatment because of who they are (such as gender or race) or because they possess certain characteristics (such as disability) without justifiable reasons or circumstance.*

Note 2: *An “associate” includes the person's spouse, relative, carer, a person who is living with the person on a genuine domestic basis, or who is in a business, sporting or recreational relationship with the person.*

Introduction

- (c) ***Family Status Discrimination Ordinance (FSDO — Cap. 527)***. It is unlawful under FSDO to discriminate against a person on the grounds of family status in prescribed areas of activities. Family status means the status of having a responsibility for the care of an immediate family member, i.e. a person who is related to someone by blood, marriage, adoption or affinity. Victimisation is also unlawful under FSDO; and
- (d) ***Race Discrimination Ordinance (RDO — Cap. 602)***. RDO protects people against discrimination, harassment, and vilification on the grounds of their race. Victimisation is also unlawful under RDO. Race means the race, colour, descent, national or ethnic origin of a person. Under RDO, it is unlawful to discriminate, harass or vilify a person on the grounds of his/her race in prescribed areas of activities. Protection is extended in respect of discrimination on the grounds of the race of the person's associate.

Table 1 summaries the prescribed areas of activities under different anti-discrimination ordinances. Anyone feels that he/she has been discriminated against may institute civil proceedings in the District Court.

Table 1

Prescribed areas of activities under different anti-discrimination ordinances

Prescribed areas of activities	SDO	DDO	FSDO	RDO
Employment	✓	✓	✓	✓
Education	✓	✓	✓	✓
Provision of goods, services and/or facilities	✓	✓	✓	✓
Access to premises	N/A	✓	N/A	N/A
Disposal and/or management of premises	✓	✓	✓	✓
Eligibility to vote for and to be elected or appointed to advisory bodies	✓	N/A	✓	✓
Participation in clubs	✓	✓	✓	✓
Activities of the Government	✓	✓	✓	N/A

Source: Audit analysis of Equal Opportunities Commission records

1.3 According to the Constitutional and Mainland Affairs Bureau (CMAB):

- (a) through the four anti-discrimination ordinances, people of Hong Kong are protected from the most common discrimination and harassment on the grounds of sex, marital status, pregnancy, breastfeeding, disability, family status and race;
- (b) it regularly reviews existing anti-discrimination ordinances to ensure that they meet changing social needs and will introduce legislative proposals to address social mischiefs as necessary in the light of local circumstances. This is evident in the recent amendments made to the four anti-discrimination ordinances pursuant to the Discrimination Legislation (Miscellaneous Amendments) Ordinance 2020 and the Sex Discrimination (Amendment) Ordinance 2021 to implement various recommendations to enhance protection from discrimination and harassment (see para. 1.12); and

Introduction

- (c) it has also adopted various legislative, administrative and/or educational measures to promote equal opportunities for people of different gender, family status, sexual orientation and race.

The Equal Opportunities Commission

1.4 Set up in 1996, the Equal Opportunities Commission (EOC) is an independent statutory body tasked with the implementation and enforcement of the four anti-discrimination ordinances (i.e. SDO, DDO, FSDO and RDO — see para. 1.2). CMAB is the housekeeping bureau of EOC. Although funded mainly by recurrent subventions from the Government, EOC operates independently in carrying out its tasks and duties, and has autonomy over the management and control of its activities and budget. It shall not be regarded as a servant or agent of the Government or as enjoying any status, immunity or privilege of the Government.

1.5 The framework of the working relationship between CMAB and EOC is laid out in the Memorandum of Administrative Arrangements. The provisions of the Memorandum of Administrative Arrangements are based on the principle that EOC should have autonomy and flexibility in how to use its funds. At the same time, EOC has the responsibility to ensure that its operational, administrative, and management systems and practices reflect the most effective and prudent use of the Government's subventions. EOC provides monthly expenditure reports and annual audited accounts, as well as quarterly progress review reports on its financial positions and operational performances to CMAB.

Governance structure of EOC

1.6 Members of EOC comprises a Chairperson and up to 16 Members. They are appointed by the Chief Executive of the Hong Kong Special Administrative Region (Chief Executive) to form a governing body (i.e. EOC Board) with authority to perform the functions and exercise the powers of EOC. The Chairperson is appointed on a full-time basis whereas other Members of EOC may be appointed on a full-time or part-time basis. The remuneration and the terms and conditions of appointment of the Chairperson is determined by the Chief Executive. The Chairperson has the executive responsibility for the overall operation and management of EOC.

1.7 EOC may establish committees as it thinks fit. At present, there are four committees appointed under EOC Board to pursue the goals of EOC, as follows:

- (a) ***Administration and Finance Committee (A&FC).*** A&FC is responsible for:
 - (i) reviewing EOC's budget, accounts, operational performances, and the annual report;
 - (ii) setting up tender boards and approving their recommendations;
 - (iii) deciding on personnel matters related to staff employed on the Directorate pay scale; and
 - (iv) reviewing staffing and administrative policies;
- (b) ***Community Participation and Publicity Committee (CPPC).*** CPPC is responsible for:
 - (i) advising and receiving reports on measures related to strengthening publicity, education, media relations and community participation;
 - (ii) providing advice on measures to connect with organisations, both Government and non-government, as well as concern groups;
 - (iii) considering and approving assistance for educational projects undertaken by other persons; and
 - (iv) monitoring the community's response to the work of EOC;
- (c) ***Legal and Complaints Committee (LCC).*** LCC is responsible for:
 - (i) providing advice on, monitoring and evaluating conciliation, formal investigations, applications for legal assistance, and enforcement notices; and

Introduction

- (ii) making recommendations on issues relating to formal investigations and on proposals for amending the four anti-discrimination ordinances; and
- (d) ***Policy, Research and Training Committee (PRTC)***. PRTC is responsible for directing EOC's policy and research efforts, which entails:
 - (i) advising on policy analysis/advocacy;
 - (ii) considering and approving research and training modules; and
 - (iii) evaluating policy and research reports.

Work and organisation of EOC

1.8 EOC is committed to eliminating discrimination on the grounds of sex, marital status, pregnancy, breastfeeding, disability, family status and race, and eliminating sexual harassment, breastfeeding harassment, as well as harassment and vilification on the grounds of disability and race. It implemented a range of initiatives and activities through a three-pronged approach of law enforcement, prevention and education. The work of EOC includes:

- (a) investigating into complaints lodged under the four anti-discrimination ordinances and encouraging settlement by conciliation between parties in dispute;
- (b) providing assistance, including legal assistance, to persons facing discrimination;
- (c) organising public education and publicity programmes to raise awareness and promoting better understanding of equal opportunities concepts;
- (d) commissioning research studies and baseline surveys to examine trends of discrimination, as well as overall attitudes and perceptions of equal opportunities;

- (e) advocating policy change, developing policy frameworks, and tailor-making training programmes for public and private organisations; and
- (f) keeping under review the anti-discrimination ordinances and submitting proposals for amendments to the Government.

1.9 EOC is divided into different divisions and units, namely the Complaint Services Division, the Corporate Communications Division, the Corporate Planning and Services Division, the Legal Service Division (LSD), the Policy, Research and Training Division (PRTD), the Ethnic Minorities Unit and the Anti-Sexual Harassment Unit (ASHU). An extract of the organisation chart of EOC as at 31 December 2022 is shown at Appendix A. The recurrent expenditure and number of staff in EOC from 2017-18 to 2022-23 are shown in Table 2.

Table 2
Recurrent expenditure and number of staff of EOC
(2017-18 to 2022-23)

Year	Recurrent expenditure (\$ million)	Number of staff (as at March 31)
2017-18	118.7	97
2018-19	115.1	96
2019-20	121.5	99
2020-21	125.9	106
2021-22	132.4	106
2022-23	137.4 (Note 1)	104 (Note 2)

Source: EOC records

Note 1: The recurrent expenditure for 2022-23 was an estimate based on the financial position as at 31 December 2022.

Note 2: The number of staff for 2022-23 was the position as at 31 December 2022.

Introduction

Performance targets

1.10 EOC has set six performance targets in the Controlling Officer's Report (COR) of CMAB. Table 3 shows the actual achievement of the six performance targets from 2018 to 2022.

Table 3

**Actual achievement of EOC's performance targets
(2018 to 2022)**

Performance target		2018	2019	2020	2021	2022
1. Interviewing a walk-in enquirer within 30 minutes (% of cases)	95	100	100	100	100	100
2. Replying to written enquiries on complex issues within 14 working days (% of cases)	95	100	100	100	100	100
3. Concluding a complaint case within six months (% of cases)	75	81	80	86	85	86
4. Responding to requests for guided group visits within five working days (% of cases)	95	100	100	100	100	100
5. Major promotional events convened (number of events)	60	118	112	116	70 (Note)	61
6. Participants satisfied with the training services provided by EOC (% of participants)	80	99	99	99	99	99

Source: CORs of CMAB

Note: According to EOC, in view of the relatively limited number of listeners for traditional radio programmes, since 2021, it has suspended the weekly radio programmes, which were regarded as major promotional events in the past years.

Recent developments

1.11 ***Discrimination law review (DLR).*** In March 2013, EOC launched a DLR to review comprehensively the four anti-discrimination ordinances. As part of DLR, a public consultation exercise was conducted from July to October 2014. In March 2016, EOC submitted its report to CMAB which contained a total of 73 recommendations, including 27 which were considered by EOC to be of higher priority. According to CMAB:

- (a) it noted that the submissions contained some relatively complex and sensitive issues, on which the public had expressed strong and divergent views;
- (b) it also noted that EOC had suggested further consultation, research and education on some of the issues; and
- (c) among the recommendations that were of higher priority, it intended to focus on those that were relatively less complex or controversial, with a view to taking forward necessary legislative amendments in a step-by-step manner.

1.12 ***Legislative amendments.*** CMAB, in consultation with relevant government bureaux and departments, initiated discussion with the Panel on Constitutional Affairs of the Legislative Council (LegCo), and took forward 8 recommendations which were considered to be capable of driving consensus among stakeholders and the society among the 27 recommendations. The Discrimination Legislation (Miscellaneous Amendments) Ordinance 2020 and the Sex Discrimination (Amendment) Ordinance 2021 were passed by LegCo in June 2020 and March 2021 respectively to enhance protection from discrimination and harassment under the four anti-discrimination ordinances. Amongst others, SDO has been amended to strengthen legal protection for breastfeeding women, whereby discrimination and harassment on the ground of breastfeeding in various prescribed areas are prohibited with effect from 19 June 2021.

1.13 ***The 2019 Process Review.*** In September 2017, EOC commissioned a review exercise of the core functions of EOC, including:

Introduction

- (a) a review panel comprising three EOC Members to conduct an internal review. The scope of the review included assessing the effectiveness of the governance of EOC, the senior management structure implemented in 2015 and the complaint handling process of EOC. The panel made 13 views and recommendations; and
- (b) commissioning a former High Court judge to conduct a parallel independent external review of the complaint handling process, who made 25 recommendations.

The report on Process Review was published by EOC in December 2019. Having considered the recommendations of the report, EOC has introduced improvement measures on its complaint handling process and legal assistance service, including the adoption of a victim-centric approach (Note 3) as an integral part of its corporate culture, as well as a reform to its management structure.

1.14 ***Safeguarding national security.*** The Law of the People's Republic of China on Safeguarding National Security in the Hong Kong Special Administrative Region (National Security Law) was implemented on 30 June 2020 (Note 4). According to EOC, various actions have been/will be taken by EOC to implement the National Security Law, including the following:

Note 3: *In the context of a discrimination case, a victim-centric approach is one which, while focusing on operating within principles of fairness and impartiality to both parties in a complaint activated under the anti-discrimination ordinances, nevertheless recognises and pays special attention to the needs of victims at all stages of the complaint handling process. The victim could be the complainant, the respondent, or some other third parties.*

Note 4: *Article 4 of the National Security Law stipulates that human rights shall be respected and protected in safeguarding national security in the Hong Kong Special Administrative Region. The rights and freedoms, including the freedoms of speech, of the press, of publication, of association, of assembly, of procession and of demonstration, which the residents of the Region enjoy under the Basic Law of the Hong Kong Special Administrative Region and the provisions of the International Covenant on Civil and Political Rights and International Covenant on Economic, Social and Cultural Rights as applied to Hong Kong, shall be protected in accordance with the law.*

- (a) EOC would upload reference information on the Intranet for staff's reference and self-learning, such as the Promulgation of National Law 2020 and questions and answers on legislation for the Hong Kong Special Administrative Region to safeguard national security;
- (b) EOC would start to explore incorporating a vetting mechanism in its recruitment process, with a view to filling vacant positions in future with candidates who meet the requirements of being a patriot. EOC would draw reference from similar statutory bodies to learn about their vetting criteria as reference;
- (c) EOC would scrutinise service providers or participating organisations applying for and seeking collaborations in self-financed or funded projects (such as survey, research, and Community Participation Funding Programme on Equal Opportunities), with reference to such considerations as their respective background, performance in the industry and the possibility to align with EOC's assertions;
- (d) EOC has revised its Procurement of Stores and Services Manual (PSSM) recently, incorporating a section (like the one set out in the Government's Stores and Procurement Regulations) describing EOC's duty to safeguard national security, including explicit clauses to allow disqualification of tenderers and termination of contracts; and
- (e) EOC's latest guideline regarding funding programmes, which has been uploaded on its website, stipulates that:
 - (i) a funded organisation should ensure that it complies with the applicable laws, rules and regulations of the Hong Kong Special Administrative Region in the conduct of the approved project and when engaging voluntary workers and employing temporary workers and instructors to conduct the approved project; and
 - (ii) EOC reserves the right to rescind the approval if a funded organisation has violated any of the above conditions and demand for a refund of the amount which has been advanced or reimbursed to the organisation for the project in question.

Introduction

Audit review

1.15 In October 2022, the Audit Commission (Audit) commenced a review to examine the administration of EOC. This review focuses on the following areas:

- (a) complaint handling and provision of legal assistance (PART 2);
- (b) community participation and publicity (PART 3);
- (c) legal studies and research projects (PART 4); and
- (d) other administrative issues (PART 5).

Audit has found room for improvement in the above areas and has made a number of recommendations to address the issues.

General response from the Equal Opportunities Commission

1.16 The Chairperson, EOC generally agrees with the audit recommendations. He has said that EOC is committed to ensuring continuous improvements in its operations, and the audit recommendations are useful pointers on areas of refinement.

Acknowledgement

1.17 Audit would like to acknowledge with gratitude the full cooperation of the staff of EOC and CMAB during the course of the audit review.

PART 2: COMPLAINT HANDLING AND PROVISION OF LEGAL ASSISTANCE

2.1 This PART examines EOC's work in handling complaints and provision of legal assistance to complainants, focusing on:

- (a) complaint handling (paras. 2.2 to 2.17); and
- (b) provision of legal assistance (paras. 2.18 to 2.27).

Complaint handling

2.2 Headed by the Director (Complaint Services), the Complaint Services Division is responsible for handling enquiries and complaints, conducting investigation into complaints lodged under the four anti-discrimination ordinances, and encouraging conciliation between the parties in dispute. As at 31 December 2022, it had an establishment of 27 staff.

2.3 ***Complaint handling procedures.*** Anyone who feels that he/she has been subject to discrimination, harassment and vilification as specified in the four anti-discrimination ordinances may lodge a complaint with EOC (Note 5). The procedures for handling complaints are set out in the Internal Operating Procedures Manual (IOPM). Salient points of the complaint handling process are as follows (see Figure 1 for a flowchart of the process):

- (a) ***Assessment.*** All complaints are assessed by a Chief Equal Opportunities Officer (CEO). If it is considered that the complaint falls within the remit of the anti-discrimination ordinances, a case officer will be assigned to

Note 5: *A complaint must be lodged in writing by the aggrieved person or by a representative authorised by that person, and must contain an allegation of unlawful act under the anti-discrimination ordinance(s).*

Complaint handling and provision of legal assistance

handle the case (Note 6). The case officer may write to the complainant seeking further information or clarification of certain points, and may also ask about witnesses or documentary proof that might support the allegation;

- (b) **Early conciliation.** After assessment of the case is completed, the case officer will provide the parties (i.e. the complainant and the respondent) with an option to attempt early conciliation to find ways to resolve the dispute quickly and to negotiate a settlement (Note 7) to the dispute without going through the detailed investigation process. The early conciliation is entirely voluntary;
- (c) **Investigation.** If an early conciliation is not successful, an investigation into the case will be conducted. The case officer should prepare an Investigation Plan together with a draft notification letter to the respondent for CEOO's endorsement. The notification letter will be sent to the respondent requesting for a response. Responses received from the complainant/respondent will be relayed to the counterparty for further responses as soon as possible;
- (d) **Investigation not conducted/discontinued.** The case officer may decide not to conduct, or to discontinue, an investigation into a complaint if:
 - (i) the act complained of is not unlawful by virtue of a provision of the anti-discrimination ordinances;
 - (ii) the aggrieved person does not desire to continue with the investigation;
 - (iii) more than 12 months have passed since the act was done;

Note 6: *Cases are assigned under a roster system. However, allotment can be adjusted in light of operational efficiency, consistency, complexity, sensitivity, urgency, and expediency. More experienced officers are in general assigned with complex cases.*

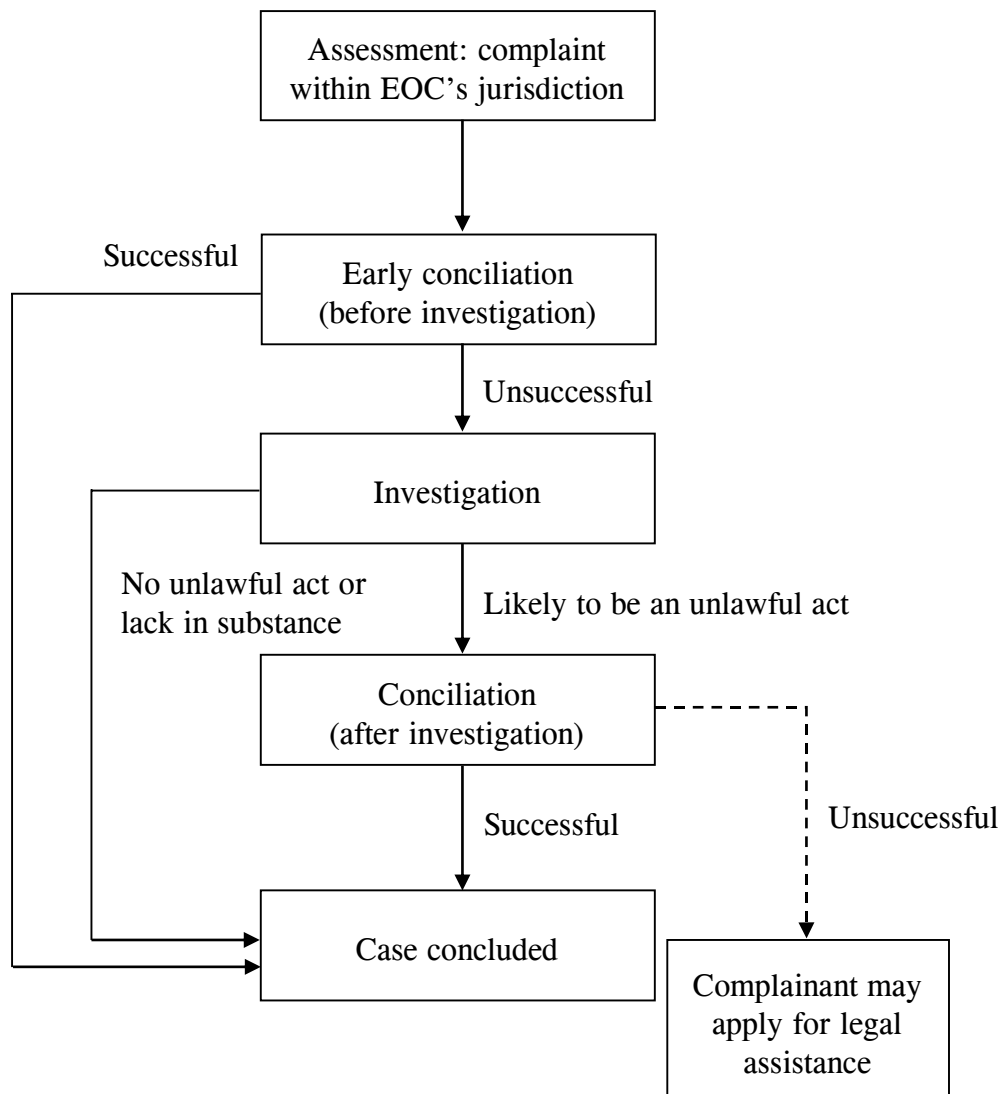
Note 7: *The settlement can be in the form of apology, monetary compensation, change in policy and practice, review of work procedures and other arrangements. Should the parties reach a settlement, the agreement signed by the parties is a contract and is legally binding.*

Complaint handling and provision of legal assistance

- (iv) the complaint cannot be appropriately pursued as a representative complaint; or
 - (v) the complaint is frivolous, vexatious, misconceived or lacking in substance;
- (e) ***Closing an investigation.*** After investigation, an Investigation Report should be prepared once the case officer has decided that the complaint case should proceed to conciliation or to recommend discontinuation of the investigation. Cases recommended for conciliation and discontinuation should obtain an approval on the Investigation Report from CEOO and the Director respectively; and
- (f) ***Conciliation.*** If there is likely to be an unlawful act and approval from CEOO is obtained, the case officer will proceed the case to conciliation. The case officer will assist both parties to examine the issues that led to the complaint, identify points of agreement and negotiate a settlement to the dispute. Conciliation is entirely voluntary. The case officer does not act for either party of the complaint, but will maintain independent and impartial, while adhering to the principle of confidentiality during the conciliation process. The complainant may apply for legal assistance should conciliation be unsuccessful (see para. 2.19).

Figure 1

Flowchart on complaint handling process



Source: *Audit analysis of EOC records*

Complaint handling and provision of legal assistance

2.4 **Statistics.** EOC received 5,014 complaints from 2018 to 2022, of which 4,642 complaints were concluded as at 31 December 2022 (see Table 4):

- (a) early resolution between complainant and respondent (Note 8) was reached in 65 (1%) complaints;
- (b) complaints were successfully conciliated before investigation in 535 (12%) cases;
- (c) it was decided not to conduct investigation or investigation was discontinued in 3,672 (79%) complaints;
- (d) 201 (4%) complaints were proceeded to conciliation after investigation, with 66 complaints successfully conciliated; and
- (e) 169 (4%) complaints were resolved/with no further action after self-initiated investigation (Note 9).

The overall conciliation successful rate (including conciliation before and after investigation) during the period was 82% (Note 10).

Note 8: *If the complaint was resolved after EOC's intervention (e.g. the aggrieved person was no longer aggrieved and did not wish to continue with the complaint or the issue has been resolved by himself/herself), the case should be classified as early resolution.*

Note 9: *EOC can also initiate investigation and/or follow-up actions into incidents or situations involving unlawful acts, and issues that give rise to concerns of discrimination under the law, for example, matters relating to discriminatory advertisements or practices.*

Note 10: *The overall conciliation successful rate*
$$= (\text{successful conciliation before and after investigation}) \div (\text{successful conciliation before and after investigation} + \text{unsuccessful conciliation}) \times 100\%$$
$$= (535 + 66) \div (535 + 66 + 135) \times 100\%$$
$$= 82\%$$

Complaint handling and provision of legal assistance

Table 4

Progress of complaints received by EOC (31 December 2022)

Progress	Year of receipt					
	2018	2019	2020	2021	2022	Total
	(Number of complaint cases)					
(a) Early resolution between complainant and respondent	9	14	10	24	8	65
(b) Successful conciliation on complaints before investigation	122	106	125	134	48	535
(c) Investigation not conducted/ discontinued	761	743	923	758	487	3,672
- <i>Late submission of complaints</i>	18	20	35	31	17	121
- <i>No unlawful act (Note 1)</i>	36	80	256	45	15	432
- <i>Complainants not pursued further</i>	261	233	243	242	181	1,160
- <i>Lacking in substance (Note 2)</i>	446	410	389	440	274	1,959
(d) Investigation completed and proceeded to conciliation	78	46	42	28	7	201
- <i>Successful conciliation</i>	25	15	17	9	0	66
- <i>Unsuccessful conciliation</i>	53	31	25	19	7	135
(e) Self-initiated investigation (resolved/no further action thereafter)	48	44	30	26	21	169
(f) Concluded cases ((a) + (b) + (c) + (d) + (e))	1,018	953	1,130	970	571	4,642
(g) Under investigation	–	–	–	37	335	372
Total (h) = (f) + (g)	1,018	953	1,130	1,007	906	5,014

Source: Audit analysis of EOC records

Note 1: This refers to cases where the alleged acts were considered to be outside the jurisdiction of the four anti-discrimination ordinances.

Note 2: According to EOC, if an aggrieved person is unable to adduce any evidence in support of the allegation, other than mere suspicion, and the facts surrounding the complaint do not support the allegation, the complaint can be declined as lacking in substance.

Complaint handling and provision of legal assistance

2.5 EOC has set a performance pledge of concluding 75% of complaint cases within six months. As reported in CMAB's CORs, EOC met the performance pledge from 2018 to 2022 with actual achievements ranging from 80% to 86% (see Table 3 in para. 1.10).

Room for improvement in investigation and reporting of case progress

2.6 In October 2022, Audit analysed the data extracted from EOC's computer database as at 30 September 2022 and found that:

- (a) of the 2,800 complaint cases received since 2018 and concluded between 1 January 2020 and 30 September 2022, there were 128 (5%) cases which took more than 365 days to conclude (see Table 5). The average time required to conclude the 128 cases was 551 days, ranging from 369 to 1,064 days; and

Table 5

**Time taken to conclude complaint cases
(1 January 2020 to 30 September 2022)**

Time taken (Day)	Number of cases	} 128 (5%)
1 to 183	2,406	
184 to 365	266	
366 to 730	104	
731 to 1,064	24	} 128 (5%)
Total	2,800	

Source: Audit analysis of EOC records

- (b) there were 283 complaints under investigation, of which 51 (18%) complaints had been under investigation for over six months.

Complaint handling and provision of legal assistance

2.7 As shown in Figure 1 in paragraph 2.3, different processes (early conciliation, investigation and conciliation) might be involved in handling a complaint and the time taken to conclude a case might vary. According to EOC, there were prevailing factors which could hardly be controlled or expedited by EOC, including suspension of cases for parallel ongoing police investigation or civil/criminal proceedings, lengthy process of negotiation between parties during conciliation, and loss of contact of parties, etc. Audit noted that while EOC met the performance pledge of concluding 75% of complaint cases within six months from 2018 to 2022 (see Table 3 in para. 1.10), of the 2,800 concluded complaint cases analysed by Audit, 128 (5%) cases took more than 365 days to conclude (a considerably longer time than the target time of six months). Audit considers that EOC needs to investigate the reasons of the long time taken in completing complaint investigation/conciliation, and explore measures to reduce the time taken to conclude complaint cases as far as practicable.

2.8 Audit selected 25 complaint cases which took a long time to conclude (20 cases)/ investigate (5 cases) for examination. Audit's examination revealed that there was scope for improvement in investigation and reporting progress of complaint cases, as follows:

- (a) ***Investigation Plan not prepared.*** According to IOPM, when EOC decides to investigate a complaint, the case officer should prepare an Investigation Plan for CEOO's endorsement (see para. 2.3(c)). An Investigation Plan should specify details of the complaint, including, among others, handling factors requiring priority action, source of further evidence that may be required and actions in priority with proposed time frames. Audit found that Investigation Plans were only prepared in 4 (16%) of the 25 cases, contrary to the requirement in IOPM. According to EOC, the preparation of an Investigation Plan was stipulated in the prevailing version of IOPM which was last updated in 2013. The current practice, including instant and frequent face-to-face case discussions between case officers and their supervisors (CEOOs), case officers' routine submissions of case files to CEOOs for views/advice/direction, time frame of case handling as well as the drafting of investigation questions in the first letter to the respondents, might well serve as an alternative to an Investigation Plan in the majority of suitable cases. Since the Investigation Plan provides a strategic direction to steer the investigation and sets out the timeframe for actions to be taken, it would be difficult to ascertain whether proper procedures had been duly followed without an Investigation Plan. Audit considers that EOC needs to

remind its staff to prepare Investigation Plans for investigation cases in future; and

- (b) ***Reporting to LCC on progress of complaint handling not always comprehensive.*** LCC is responsible for monitoring the progress of complaint cases. The status of all complaints, including the reasons for lengthy process of complaints remaining active after six months and complaints for follow-up actions, would be reported to LCC, usually in its meetings held every two months. Of the 25 cases examined, Audit noted that in 5 (20%) cases, the reporting to LCC on progress of complaint handling was not comprehensive. For example, in 1 case, in reporting to LCC in June and October 2022 for the long time taken in handling the complaint, only the time spent (3 months) on early conciliation was mentioned but not the substantial time taken (10 months) to relay the complainant's response to the respondent. Audit considers that EOC needs to improve the reporting to LCC with a view to facilitating LCC's role in monitoring of the progress in handling complaint cases.

Inadequacy in supervisory check and internal audit

2.9 According to IOPM, supervisory checks and random internal audits shall be carried out for the purpose of case management, as follows:

- (a) ***Supervisory checks.*** Progress of complaint cases should be reviewed regularly by supervisors. Supervisors should look into different aspects including the case processing, line of investigation, compliance of procedures, and proper documentation in case files and computer system; and
- (b) ***Internal audits.*** The Director (Operations) should conduct random internal audits regularly.

Audit noted that IOPM did not stipulate who should conduct the supervisory checks nor did it stipulate the frequency and documentation requirements of the supervisory checks and internal audits. Moreover, following the restructuring of EOC's management structure in May 2020 after the 2019 Process Review (see para. 1.13 —

Complaint handling and provision of legal assistance

Note 11), the post of Director (Operations) no longer existed. However, according to the prevailing version of IOPM which was last updated in 2013, the approver or reviewer in a number of key handling processes is still the Director (Operations).

2.10 According to EOC:

- (a) for supervisory checks, regular case review meetings would be conducted by respective CEOs with individual officers once every 3 to 4 weeks. CEOs would jot notes of discussions/observation during the meetings;
- (b) for internal audits, the Director (Complaint Services) would conduct quarterly case review meetings with individual officers. Case files would be randomly selected for discussion. The Director (Complaint Services) would steer the direction of case handling and jot notes of discussions/observation; and
- (c) the prevailing version of IOPM no longer fit in with EOC's current complaint handling practices, in particular when it had been working on streamlining its procedures in recent years. EOC had commenced the drafting of a revised IOPM since late 2020 (i.e. shortly after the conclusion of the 2019 Process Review) and the first draft was ready for management's endorsement in July 2021. However, with the setting up of the enquiry team in the Complaint Services Division, the draft of the revised IOPM had to be further reviewed and amended.

In Audit's view, it is unsatisfactory that the officers are making reference to outdated procedures in discharging their job responsibilities. Audit considers that EOC needs to review and update IOPM to specify the detailed requirements (including frequency and documentation) for conducting supervisory checks and random internal audits, and reflect the latest distribution of job responsibilities for different officers after the restructuring.

Note 11: *After the restructuring, the two enforcement divisions, namely the Complaint Services Division and LSD, have been placed under the overall command of the Executive Director (Enforcement). As for the other administrative and operational divisions/units, i.e. PRTD, the Corporate Planning and Services Division, the Corporate Communications Division, the Ethnic Minorities Unit, as well as ASHU, they have been under the supervision of the Executive Director (Operations).*

Need to improve customer satisfaction level

2.11 As a regular service monitoring exercise, EOC has engaged external consultants to conduct annual customer satisfaction survey since 2009 to gauge feedback from users on the complaint handling and enquiry services. In 2016, EOC decided that the survey would be conducted biennially taking into account the time and resources involved, with the first one conducted in 2017. An overall customer satisfaction level rated by service users involved in the complaints handling services (i.e. the complainants and the respondents) is reported biennially in CMAB's CORs as a performance indicator. Table 6 shows the customer satisfaction levels in 2017, 2019 and 2021 for service users involved in complaints.

Table 6

**Customer satisfaction levels for service users involved in complaints
(2017, 2019 and 2021)**

Customer satisfaction level	2017	2019	2021
(a) Complainants	57%	56%	51%
(b) Respondents	79%	81%	79%
(c) Overall satisfaction level reported in CMAB's CORs	69%	68%	62%

Source: EOC records

2.12 Audit's examination found the following areas for improvement:

- (a) ***Decreasing overall customer satisfaction level.*** The overall customer satisfaction level remained stable at 69% in 2017 and 68% in 2019 but dropped to 62% in 2021. As shown in Table 6 in paragraph 2.11, the decrease in the overall customer satisfaction level was mainly attributable to the decrease in satisfaction level of the complainants. Audit noted that an EOC Board Member had also expressed concern on the overall downward satisfaction levels of the service users;

Complaint handling and provision of legal assistance

- (b) ***Customer satisfaction levels of complainants and respondents not reported separately.*** Although the customer satisfaction survey had been conducted separately for complainants and respondents (with 2 different sets of questionnaire used for complainants and respondents), their satisfaction levels were not reported separately in CMAB's CORs or any publications of EOC; and
- (c) ***Customer satisfaction levels from enquirers not reported.*** Despite that users of the enquiry services (i.e. enquirers) were also invited to participate in the customer satisfaction surveys and the number of enquiries received by EOC was almost 10 times the number of complaints received, the customer satisfaction levels from enquirers were not reported in CMAB's CORs or any publications of EOC. The customer satisfaction levels of the enquirers in 2017, 2019 and 2021 were 68%, 68% and 63% respectively.

2.13 In March 2023, EOC informed Audit that according to the external consultant engaged in the 2021 survey:

- (a) given EOC's role in law enforcement, EOC was in fact one of the very few public bodies which had initiated to adopt such a survey as a regular exercise to enhance and perfect its services provided to the public;
- (b) the 2021 survey findings were prone to be adversely affected by the community sentiments in and post 2019 and the then prevailing coronavirus disease (COVID-19) epidemic situation. The overall customer satisfaction level in statistical terms was basically on par with the results of the previous surveys; and
- (c) the overall mean score rated by the complainants on EOC's services was comparable with that of the previous survey without a notable decline. Considering that complainants and respondents always held opposing stances, it was in general not possible to obtain high scores from both parties at the same time. Compared with similar overseas survey results collated from complainants and respondents with opposing stances, EOC fared better in terms of the overall customer satisfaction level.

As shown in Table 6 in paragraph 2.11, the customer satisfaction level of complainants was lower than that of respondents in the three surveys conducted in 2017, 2019 and 2021. Audit considers that EOC needs to take measures to improve level of customer satisfaction on complaint handling and enquiry services (for example, through enhancing the quality of communication and empathic skills of EOC officers). With a view to enhancing transparency in EOC's performance, CMAB needs to, in consultation with EOC, consider publishing the customer satisfaction survey results of complainants, respondents and enquirers in CMAB's CORs.

Audit recommendations

2.14 **Audit has *recommended* that the Chairperson, EOC should:**

- (a) **investigate the reasons of the long time taken in completing complaint investigation/conciliation, and explore measures to reduce the time taken to conclude complaint cases as far as practicable;**
- (b) **remind EOC staff to prepare Investigation Plans for investigation cases in future;**
- (c) **improve the reporting to LCC with a view to facilitating LCC's role in monitoring of the progress in handling complaint cases;**
- (d) **review and update IOPM to:**
 - (i) **specify the detailed requirements (including frequency and documentation) for conducting supervisory checks and random internal audits; and**
 - (ii) **reflect the latest distribution of job responsibilities for different officers after the restructuring; and**
- (e) **take measures to improve level of customer satisfaction on complaint handling and enquiry services.**

2.15 **Audit has also *recommended* that the Secretary for Constitutional and Mainland Affairs should, in consultation with the Chairperson, EOC, consider publishing the customer satisfaction survey results of complainants, respondents and enquirers in CMAB's CORs with a view to enhancing transparency in EOC's performance.**

Response from the Equal Opportunities Commission

2.16 The Chairperson, EOC generally agrees with the audit recommendations. He has said that:

- (a) EOC will, as always, continue to be mindful of paying attention to cases with long time taken in completing complaint investigation/conciliation, and will strive to shorten the handling time as far as practicable. It has all along been EOC's target to speedily handle complaint cases without undue delay. Indeed, even under the unforeseeable challenges during the epidemic in recent years, EOC achieved an above target performance in conclusion of cases from 2020 to 2022;
- (b) EOC will consider the applicability and format of an Investigation Plan in revising IOPM;
- (c) EOC has noted that there were occasional slippages in reporting the most up-to-date progress of complaint cases in LCC papers and will strive to ensure accuracy in reporting the case progress to LCC in the future;
- (d) the revision of IOPM has been initiated prior to the audit review and is approaching the finalised stage. The final revised IOPM would be promulgated as soon as practicable which would include all current operational practices that have already been put in place in the transitional period and the job responsibilities for different officers after the restructuring. Albeit the revision of IOPM has yet to be promulgated, transitional arrangements and refinement of practices in the existing IOPM were timely announced in the monthly Complaint Services Division Meetings of which the items for discussion have been properly documented;

Complaint handling and provision of legal assistance

- (e) EOC will, as a prevailing EOC's notion, endeavor to strive for professional and quality services to its service users which is evident by having regular service monitoring exercises since 2009. EOC is mindful of the need to take care of the service users' sentiments and concerns in the complaint handling process, and therefore has been taking active and continuous measures, such as organising workshops and training, to further enhance the communication and empathic skills of its officers; and
- (f) EOC will endeavor to take measures to improve areas identified in the surveys to the extent practicable. EOC will, in consultation with CMAB, consider how best the respective survey results of complainants, respondents and enquirers would be included in CORs for enhancing transparency in EOC's performance.

Response from the Government

2.17 The Secretary for Constitutional and Mainland Affairs agrees with the audit recommendation. He has said that CMAB will work with EOC to consider how best the customer satisfaction survey results of complainants, respondents and enquirers should be reflected in future CORs for enhancing transparency in EOC's performance.

Provision of legal assistance

2.18 Headed by a Chief Legal Counsel, LSD is responsible for handling applications for legal assistance, and providing internal legal advice and support to EOC (Note 12). As at 31 December 2022, it had an establishment of 8 staff.

Note 12: *In addition to handling legal assistance applications, LSD is responsible for other major legal work, including:*

- (a) *reviewing the four anti-discrimination ordinances and making recommendations for amendments; and*
- (b) *conducting research on new protected grounds to explore the possibility of expanding the scope of protection of the ordinances and make submissions to the Government.*

Complaint handling and provision of legal assistance

2.19 *Legal assistance to complainants.* Pursuant to the anti-discrimination ordinances, when a complaint has been lodged but not settled, the complainant may apply to EOC for legal assistance to bring legal proceedings against the respondent. EOC is bound by law to consider each legal assistance application, but is not obliged to grant assistance in every case. The procedures for handling legal assistance applications are also set out in IOPM. The key handling procedures are as follows:

- (a) applications for legal assistance should be made in writing. For each application, an EOC lawyer will be assigned to examine all the documents, conduct legal research, and prepare a detailed report to LCC, which has the authority to decide which cases should be granted assistance. The report shall include the case facts, an analysis of the case from the legal point of view and a recommendation of whether legal assistance should be granted;
- (b) upon the receipt of the report, LCC Members would consider a wide range of factors on a case-by-case basis in deciding whether to grant legal assistance and the type of assistance (Note 13) that should be granted. The factors include:
 - (i) whether the case raises a question of principle;
 - (ii) whether the complexity of the case or the parties' relative positions make it too difficult for the applicant to deal with the case unaided;
 - (iii) strength of the evidence and likelihood of success in court;
 - (iv) whether the case can set an important legal precedent;

Note 13: *EOC has a wide discretion regarding the type of legal assistance it may grant in each case, including:*

- (a) arranging for its own lawyers to give legal advice/provide solicitorial representation/appear as advocate in court;*
- (b) arranging for external lawyers to give legal advice;*
- (c) instructing external solicitors or counsels to provide representation; and*
- (d) providing any other form of assistance EOC considers appropriate.*

Complaint handling and provision of legal assistance

- (v) whether litigation can lead to effective remedy for the applicant, and whether the case can be effectively used to enhance public awareness and promote equal opportunities; and
- (vi) the attitude and behavior of the parties; and
- (c) if LCC decides not to grant legal assistance to an applicant, EOC will write to the applicant informing him/her that the application is unsuccessful and the reasons of the decision (Note 14).

Decrease in number of applications for legal assistance

2.20 From 2018 to 2022, a total of 127 legal assistance applications were received. Audit's analysis found that:

- (a) the number of applications received decreased from 54 in 2018 to 10 in 2022. The number of legal assistance applications as a percentage to the number of complaint cases with unsuccessful conciliation was on a decreasing trend, from 79% in 2018 to 50% in 2022; and
- (b) as at 31 December 2022, of the 127 applications, the results of 126 applications were concluded, of which legal assistance was not granted in 48 (38%) applications (see Table 7).

Note 14: *Unsuccessful applicants of legal assistance may institute civil proceedings in the District Court by themselves. The District Court may not consider a claim unless proceedings in respect of the claim are instituted before the end of the period of 24 months beginning when the act complained of was done. In determining the 24-month time limit, the investigation time taken by EOC between the date when the complaint was lodged and the date when the complaint was disposed of should be excluded.*

Complaint handling and provision of legal assistance

Table 7

Legal assistance applications received by EOC (31 December 2022)

	2018	2019	2020	2021	2022	Overall
	(Number)					
Unsuccessful conciliation cases (a)	68	53	24	29	20	194
Legal assistance applications received (b)	54	32	14	17	10	127
- <i>Granted</i>	35	15	10	11	7	78
- <i>Not granted</i>	19	17	4	6	2	48
- <i>Under consideration</i>	0	0	0	0	1	1
Number of legal assistance applications as a percentage to the number of unsuccessful conciliation cases (c)=(b)÷(a)×100%	79%	60%	58%	59%	50%	65%

Source: Audit analysis of EOC records

Remarks: For reporting legal assistance application results, the annual figures of unsuccessful conciliation cases were classified based on the year in which the complaint cases were concluded. For reporting complaint handling results, in contrast, the annual figures of unsuccessful conciliation cases shown in Table 4 in paragraph 2.4 were classified based on the year in which the complaint cases were received.

2.21 From 2018 to 2022, the percentages of favourable court ruling to complainants/settlements for cases with legal assistance granted ranged from 94% to 100%. Some LegCo members had criticised that legal assistance offered by EOC to members of the public over the years had been on the low side and cases involving court proceedings had been rare. Furthermore, from 2018 to 2022, the number of legal assistance applications decreased from 54 by 44 (81%) to 10. In February 2023, EOC informed Audit that:

- (a) since the majority of the complaints received by EOC were employment-related, EOC believed that the difficult job market caused by the outbreak of COVID-19 epidemic was one of the reasons for the drop in the number of legal assistance applications; and

- (b) EOC achieved high conciliation successful rates in the past few years. This was another factor contributing to the decrease in the number of legal assistance applications.

Audit considers that EOC needs to continue to monitor the decreasing trend in the number of legal assistance applications and take actions to gainfully deploy the staff engaged in providing legal assistance to other areas of work (e.g. legal studies) if the number of legal assistance applications continues to fall.

Room for improvement in engaging professional services when providing legal assistance

2.22 According EOC, its in-house lawyers will generally undertake the solicitorial, advisory and/or appearance in court work required on behalf of the applicants who are granted legal assistance. There may be circumstances where external solicitors' firms or counsels and/or other professionals (for example advisory services relating to architectural issues) are engaged. From 2018-19 to 2021-22, the total professional services fees of engaging external professional services incurred from providing legal assistance to complainants amounted to around \$1.5 million.

2.23 ***Need to consider enhancing procurement procedures of external solicitors' firms or counsels.*** Audit notes that while EOC has promulgated a PSSM setting out the internal controls and procedures in the procurement of goods and services, PSSM specifically states that they are not applicable to the briefing out of legal work. According to EOC, if there is a need to engage external solicitors' firms or counsels, the proposing officer should submit a selection form to the Chief Legal Counsel stating:

- (a) the reasons for engaging external solicitors' firms or counsels (e.g. heavy workload of EOC's in-house lawyers, specialist expertise required, etc.); and
- (b) the name of the external solicitors' firms or counsels selected and the reasons for the selection.

Complaint handling and provision of legal assistance

The Chief Legal Counsel should review the selection form and submit his recommendation to the Executive Director (Enforcement) and the Executive Director (Operations) for endorsement. The endorsed form will be submitted to the Chairperson of EOC for approval.

2.24 During the period from 2018-19 to 2021-22, there were 5 legal assistance cases which incurred professional services fees of \$100,000 or more in each legal case. Audit examined the 5 cases and noted that while quotations from 2 counsels were obtained by the responsible officer in 1 case (and the counsel with lower quotation and more experience was selected), only a single quotation was obtained in the remaining 4 cases. With a view to safeguarding EOC's interest, Audit considers that EOC needs to consider enhancing the procurement procedures of external solicitors' firms or counsels, such as obtaining multiple quotations in the procurement process.

2.25 *Need to ensure compliance with PSSM.* Of the 5 cases examined by Audit, the professional services fee incurred for 1 case involved payment of a consultancy services fee of about \$330,000 to a consultant, the procurement of which was subject to PSSM. According to PSSM, for procurement of consultancy services from a consultant of value over \$50,000 and up to \$500,000:

- (a) at least three written quotations are required; or
- (b) under special circumstances when it may be necessary to waive the requirement for obtaining the required number of quotations, the reasons for the waiver should be clearly specified on the purchase requisition form.

However, in this case, EOC only obtained a single quotation and no reasons for the waiver were documented on the purchase requisition form. Audit considers that EOC needs to remind its staff to comply with the procurement procedures set out in PSSM.

Audit recommendations

2.26 **Audit has recommended that the Chairperson, EOC should:**

- (a) **continue to monitor the decreasing trend in the number of legal assistance applications and take actions to gainfully deploy the staff engaged in providing legal assistance to other areas of work (e.g. legal studies) if the number of legal assistance applications continues to fall;**
- (b) **consider enhancing the procurement procedures of external solicitors' firms or counsels, such as obtaining multiple quotations in the procurement process; and**
- (c) **remind EOC staff to comply with the procurement procedures set out in PSSM.**

Response from the Equal Opportunities Commission

2.27 The Chairperson, EOC generally agrees with the audit recommendations. He has said that EOC will:

- (a) continue its usual practice to gainfully deploy staff on different areas of work;
- (b) continue to follow and comply with its specialised procurement procedures of external lawyers and litigation-related matters, and will consider practices like obtaining multiple quotations when circumstances allow and warrant; and
- (c) remind staff members regularly to comply with the procurement procedures.

PART 3: COMMUNITY PARTICIPATION AND PUBLICITY

3.1 This PART examines EOC's work in conducting community participation and publicity initiatives, focusing on:

- (a) public awareness of equal opportunities (paras. 3.2 to 3.10);
- (b) Community Participation Funding Programme on Equal Opportunities (paras. 3.11 to 3.22); and
- (c) school drama performances on equal opportunities (paras. 3.23 to 3.31).

Public awareness of equal opportunities

Need to enhance public awareness of EOC's educational, promotional and publicity activities

3.2 From time to time, EOC commissions consultancy firms to conduct surveys (Note 15) on public perceptions about equal opportunities awareness and EOC's work. The objectives of such surveys include, among others, gauging public perception on the effectiveness of the EOC programmes (e.g. promotion). The most recent round of survey was conducted in the period from February to April 2021 with its report published in November 2021.

3.3 Audit examined the report of the survey conducted in 2021 and noted the following:

- (a) while 97% of the respondents were aware of EOC, the total awareness level (Note 16) of EOC's educational, promotional and publicity activities during the 12 months before enumeration was only 60%, representing a decrease

Note 15: *Hong Kong residents aged 15 or above are the target respondents of such surveys.*

Note 16: *According to EOC, the total awareness level represented the percentage of respondents who were aware of one or more of the educational, promotional and publicity activities (e.g. advertisements on television) covered in the survey.*

of over 20 percentage points as compared with those of the previous two rounds of surveys conducted in 2012 and 2015 respectively (see Table 8). In other words, 40% of the respondents were not aware of any of EOC's educational, promotional and publicity activities; and

Table 8

**Total awareness level of EOC's educational,
promotional and publicity activities
(2012, 2015 and 2021)**

	Total awareness level
2012 Survey	84 %
2015 Survey	82 %
2021 Survey	60 %

Source: EOC records

Remarks: The total awareness level represented the percentage of respondents who were aware of one or more of the educational, promotional and publicity activities covered in the survey.

- (b) of EOC's 8 educational, promotional and publicity activities covered in the survey, the awareness of 7 (88%) was below 20%, ranging from 2.9% to 19.4% (see Table 9).

Table 9

**Awareness of EOC's educational, promotional and publicity activities
(2021)**

Activity	Awareness
Advertisements on television	47.6%
Advertisements in the Mass Transit Railway	19.4%
Channels on the Internet (Note)	17.1%
Printed/online versions of newspapers/magazines	16.8%
Radio programmes	14.3%
Leaflets and newsletters	8.4%
Mobile phone applications	4.5%
Seminars, talks or exhibitions	2.9%

Source: EOC records

Note: Examples included EOC's website and EOC's accounts on social media platforms.

3.4 In March 2023, EOC informed Audit that:

- (a) the lower public awareness in 2021 was believed to be a result of the COVID-19 epidemic, during which the activities of most businesses and organisations, including those of EOC, were affected. The details were as follows:
 - (i) the field work of the 2021 Survey was conducted between February and April 2021. Respondents were asked if they had seen/heard/encountered the promotional activities of EOC during the past 12 months (i.e. between February/April 2020 and February/April 2021). During such period when Hong Kong underwent the turbulent phase of the epidemic, the focus of different sectors in society, as well as most residents, was the epidemic containment and preventive measures. Owing to the epidemic, EOC did not launch any large-scale publicity campaigns during the period and this inevitably affected the public awareness of EOC; and

- (ii) in contrast, the fieldwork of the 2015 Survey was conducted between September and November 2015, and the respondents were asked if they had seen/heard/encountered the promotional activities of EOC between September/November 2014 and September/November 2015. During that time, EOC conducted a public consultation exercise on DLR, which ran from July to October 2014. A large-scale citywide publicity campaign involving television and radio announcements in the public interest was mounted to promote awareness of the public consultation. This might explain the relatively higher awareness level in 2015; and
- (b) with a view to boosting public awareness about the work of EOC, a series of citywide advertising campaigns were conducted in 2021 and 2022 (e.g. the Equal Opportunity Employer Recognition Scheme, the Equal Opportunity Youth Ambassador Scheme for tertiary students and strengthened social media promotions).

3.5 In Audit's view, EOC needs to ascertain the reasons for the decrease in total awareness level of its educational, promotional and publicity activities, and take measures to enhance their public awareness.

Need to step up efforts in raising awareness of FSDO

3.6 According to the report of the survey conducted in 2021, among the four anti-discrimination ordinances in Hong Kong, the awareness of FSDO (Note 17) remained the lowest, ranging from 25.8% in 2021 to 30% in 2012 (see Table 10).

Note 17: *Direct discrimination may occur when a person who has family status or a particular family status is treated less favourably than a person who does not have family status or the same family status, in the same or not materially different circumstances. Indirect discrimination may occur when a requirement or condition exists, which on the face of it appears neutral, but in fact has an unfair effect on persons with family status or a particular family status.*

Table 10

**Awareness of anti-discrimination ordinances in Hong Kong
(2012, 2015 and 2021)**

	Awareness			
	DDO	SDO	RDO	FSDO
2012 Survey	70.0%	62.0%	71.0%	30.0%
2015 Survey	68.7%	61.7%	65.3%	27.5%
2021 Survey	68.0%	61.8%	61.8%	25.8%

Source: EOC records

3.7 In March 2023, regarding the awareness of FSDO, EOC informed Audit that it had:

- (a) included “increase public knowledge of family status discrimination” as one of its work priorities; and
- (b) stepped up efforts since 2021-22 to promote the awareness of FSDO and the concept of “carers” through a number of public education initiatives, including the production and broadcast of short videos, issue of press releases and articles, promotions on EOC’s social media platforms, and providing talks and funding for events.

3.8 Audit noted that EOC had made family status one of the four themes under the category of thematic projects of the Community Participation Funding Programme on Equal Opportunities in 2022-23 (see Note 21 to para. 3.12(b)(ii)). Audit considers that EOC needs to keep in view the awareness of FSDO and if it remains low, step up efforts to address the issue.

Audit recommendations

- 3.9 **Audit has *recommended* that the Chairperson, EOC should:**
- (a) **ascertain the reasons for the decrease in total awareness level of EOC's educational, promotional and publicity activities, and take measures to enhance their public awareness; and**
 - (b) **keep in view the awareness of FSDO and if it remains low, step up efforts to address the issue.**

Response from the Equal Opportunities Commission

3.10 The Chairperson, EOC generally agrees with the audit recommendations. He has said that EOC will continue to:

- (a) closely monitor the public awareness level and take appropriate measures when needed; and
- (b) encourage community groups, non-governmental organisations and schools to organise public education activities themed on the elimination of family status discrimination and promotion of work/family balance by providing funding support under the Community Participation Funding Programme on Equal Opportunities.

Community Participation Funding Programme on Equal Opportunities

3.11 According to EOC, through the Community Participation Funding Programme on Equal Opportunities launched in September 1996, EOC has supported different projects carried out by non-governmental organisations, community groups and schools to promote public understanding of equal opportunities, and the principles and applications of SDO, DDO, FSDO and RDO. It is hoped that the funded projects would foster anti-discriminatory attitudes and encourage members of the public to put aside their prejudices, and support and apply the principles of equal opportunities in

Community participation and publicity

everyday life. In the period from 2017-18 (Note 18) to 2022-23, 162 projects with funding amounting to about \$6.6 million were approved under the Funding Programme.

3.12 The salient features of the Funding Programme are as follows:

- (a) **Eligibility.** Applicants should be non-profit-making organisations legally registered under the laws of Hong Kong. The following projects will not be funded:
 - (i) projects not carried out in Hong Kong;
 - (ii) projects involving fundraising or profit-making activities;
 - (iii) projects with funding received from other sources; and
 - (iv) research projects;
- (b) **Categories of applications.** There are two categories of applications (Note 19), as follows:
 - (i) **General projects.** This category is for projects themed on equal opportunities with reference to one or more of the priority work areas (e.g. promoting understanding and inclusion of people with disabilities) of EOC's strategic plan. The funding limit for each project is \$50,000 (Note 20); and

Note 18: *A fiscal year of EOC starts in April and ends in March of the following year.*

Note 19: *The two categories of applications with different funding limits were introduced in 2022-23. Prior to that, for projects promoting equal opportunities, and/or fostering anti-discriminatory attitudes and behaviours, a funding limit of \$50,000 for each project had been adopted since 2009-10.*

Note 20: *At its meeting held in October 2022, CPPC (see para. 1.7(b)) decided to increase the funding limit for each project to \$100,000 for the upcoming Funding Programme in 2023-24.*

- (ii) ***Thematic projects.*** This category is for large-scale projects that focus on any one of the specific themes under the anti-discrimination ordinances set by EOC (Note 21). The funding limit for each project is \$150,000; and
- (c) ***Criteria for funding.*** Approval for an application is based on the following criteria:
 - (i) the application should clearly explain how the planned activities will eliminate discrimination and promote equal opportunities;
 - (ii) the planned activities should meet EOC's objectives of promoting equal opportunities and address the needs of the society;
 - (iii) the target and number of participants that would be reached;
 - (iv) the expenditure and cost-effectiveness of the project;
 - (v) the effectiveness of the planned activities can be clearly measured;
 - (vi) the impact of the activities and the extent of the general public's participation in the activities; and
 - (vii) the feasibility of the project.

Taking into account recommendations made by EOC staff after conducting reviews, CPPC is responsible for considering and approving applications under the Funding Programme.

Note 21: *For the Funding Programme in 2022-23, there were four themes under the category of thematic projects, namely universal design, protection from breastfeeding discrimination and harassment, sexual harassment/disability harassment/racial harassment, and family status.*

Need to consider developing marking scheme for CPPC

3.13 Audit reviewed the assessment of 37 applications (23 under the category of general projects and 14 under the category of thematic projects) by CPPC at its meeting held in April 2022 and noted that there was no documentary evidence showing that all the criteria for funding (see para. 3.12(c)) had been duly considered, and that no score was assigned to individual projects for determining the funding priority. As there is an annual budget (Note 22) set for the Funding Programme and thus not all worthy applications can be granted with funding (Note 23), EOC needs to consider developing a marking scheme, taking into account the criteria for funding, to ensure fairness, consistency and objectivity in the assessment of applications received under the Funding Programme.

Need to remind potential applicants that past performance in the conduct of projects funded by Funding Programme will be considered

3.14 Despite the fact that past performance of applicants in the conduct of projects funded by the Funding Programme was not a criterion for funding (see para. 3.12(c)), Audit noted that at the meeting of CPPC held in April 2022, some projects were rejected because of unsatisfactory past performance. Also, at the meeting, a Member of CPPC reminded EOC staff that unsatisfactory past performance of applicants should be put on record for tracing purposes in future assessment of applications.

3.15 According to EOC, for the upcoming Funding Programme in 2023-24, the background of applicants, including their performance under previous rounds of the Funding Programme, will be added as one of the criteria for funding. In view of this new criterion, Audit considers that EOC needs to remind potential applicants that their past performance in the conduct of projects funded by the Funding Programme will be considered in the assessment of their future applications. With a view to facilitating

Note 22: *In 2022-23, the annual budget for the Funding Programme was \$1.2 million (\$600,000 each for the two categories).*

Note 23: *For example, in the Funding Programme in 2022-23, for the category of thematic projects, it was decided that one project for each theme would be approved. In this connection, eight applications received under the theme of sexual harassment/disability harassment/racial harassment had to be rejected because they were not as comprehensive as the selected one.*

the consideration of applicants' past performance by CPPC, EOC should maintain a centralised register for recording the performance of funded organisations in the conduct of projects funded by the Funding Programme.

Need to take measures to ensure timely submission of project reports

3.16 According to EOC's guidelines, each funded organisation of the Funding Programme is required to submit a final report and a financial report to EOC within two months after completion of the project. As at 31 December 2022, of the 120 completed projects approved in the period from 2017-18 to 2021-22, the final reports and financial reports of 114 were due for submission. Audit's examination revealed that there were delays in the submission of the final reports and/or financial reports of 62 (54%) projects, ranging from 1 to 980 days (averaging 61 and 74 days for final report and financial report respectively). In particular, the delays of 6 (5%) projects were more than 180 days (see Table 11).

Table 11

**Submission of project reports by funded organisations of Funding Programme
(31 December 2022)**

Delay in submission of final report and/or financial report (Day)	Project	
	Number	Percentage
No delay	52	46%
≤ 30	32	28%
31 to 90	18	16%
91 to 180	6	5%
Over 180	6 (Note)	5%
Total	114	100%

Source: Audit analysis of EOC records

Note: Among the 6 projects, the delays of 3 were over 360 days, ranging from 386 to 980 days.

3.17 Regarding EOC's follow-up actions on long outstanding project reports, Audit noted that for the 6 projects with delays of more than 180 days, there was no documentary evidence showing that reminders had been issued to the funded organisations of 3 projects. For the remaining 3 projects, the reminders were made more than 10 months after the submission deadlines.

3.18 For proper and timely evaluation of the effectiveness of the projects funded by the Funding Programme, EOC needs to take measures to ensure that final reports and financial reports are submitted by funded organisations in accordance with EOC's guidelines.

Need to improve evaluation of funded organisations' performance

3.19 Audit's sample check of the application forms and final reports of 10 completed projects approved in the period from 2019-20 to 2021-22 revealed that there was room for improvement in EOC's evaluation of the funded organisations' performance, as follows:

- (a) *No measurable targets set.* In the application form of the Funding Programme, an applicant is required to specify the expected results and effects of the proposed project, and explain the evaluation methods to be adopted. Audit noted that in 2 (20%) projects, the funded organisations only specified the evaluation methods without proposing any measurable targets; and
- (b) *No evaluation of effectiveness against expected results and effects mentioned in application form.* In the final report of the Funding Programme, a funded organisation is required to, among others, report the number of participants of the project, evaluate the effectiveness of the project on whether the objective of promoting equal opportunities was achieved, and report the percentages of participants who agreed that the project was satisfactory and could promote the messages of equal opportunities. However, a funded organisation is not required to evaluate the effectiveness of the project against the expected results and effects mentioned in the application form. Audit noted that among the 8 projects with measurable targets set, the funded organisations of 6 (75%) had not reported the level of achievement of all the expected results and effects

mentioned in their application forms. In particular, 3 had not made any report.

3.20 With a view to better evaluating the effectiveness of the Funding Programme, Audit considers that EOC needs to improve the evaluation of funded organisations' performance (e.g. requiring applicants to specify measurable targets in the application forms and evaluate these targets in their final reports).

Audit recommendations

3.21 Audit has *recommended* that the Chairperson, EOC should:

- (a) **consider developing a marking scheme, taking into account the criteria for funding, to ensure fairness, consistency and objectivity in the assessment of applications received under the Community Participation Funding Programme on Equal Opportunities;**
- (b) **remind potential applicants that their past performance in the conduct of projects funded by the Community Participation Funding Programme on Equal Opportunities will be considered in the assessment of their future applications;**
- (c) **maintain a centralised register for recording the performance of funded organisations in the conduct of projects funded by the Community Participation Funding Programme on Equal Opportunities;**
- (d) **take measures to ensure that final reports and financial reports are submitted by funded organisations in accordance with EOC's guidelines; and**
- (e) **improve the evaluation of the performance of funded organisations of the Community Participation Funding Programme on Equal Opportunities.**

Response from the Equal Opportunities Commission

3.22 The Chairperson, EOC generally agrees with the audit recommendations. He has said that:

- (a) assessment of future applications under the Community Participation Funding Programme on Equal Opportunities will be conducted with express reference to each of the stated funding criteria. EOC will maintain documentary records of the assessment process, including written recommendations prepared by officers in charge of the Funding Programme for CPPC's consideration and endorsement;
- (b) EOC will include a reminder in the promotional materials and briefing sessions about the Funding Programme in future to indicate that applicants' past performance will be one of the criteria for assessing their applications;
- (c) EOC has already been building a register of projects funded under previous rounds of the Funding Programme since December 2022 with information on project completion date, report submission date, time extension requests and other details pertinent to assessing the performance of funded organisations. EOC will continue to maintain such centralised register;
- (d) EOC will adopt concrete measures to ensure timely submission of final reports and financial reports by funded organisations, including issuing reminders prior to the submission deadline, communicating the possible consequences of delay (e.g. termination of funding support), and having senior officers in charge of the Funding Programme to contact the organisations concerned in case of severe delays; and
- (e) EOC will require future applicants of the Funding Programme to clearly indicate the key performance indicators and expected outcomes of their proposed projects in the application form. Moreover, the format of the final report has also been revised with CPPC's endorsement at its meeting in January 2023 so that future funded organisations will have to report specifically on how they have achieved the expected outcomes as stated in their applications, or provide an explanation when the outcomes have not been met.

School drama performances on equal opportunities

3.23 With a view to cultivating awareness and understanding of equal opportunities from childhood, EOC has been arranging drama performances to encourage students to learn about equal opportunities, sexual harassment, gender equality, and problems facing ethnic minorities, people with disabilities and persons with family status.

3.24 According to EOC, in the period from 2017/18 to 2021/22 school years (Note 24), three local theatrical troupes were engaged to stage plays and puppet shows on equal opportunities and diversity values at schools, as follows:

- (a) **Troupe A.** Troupe A was engaged to stage performances focusing on anti-discrimination ordinances and equal opportunities issues;
- (b) **Troupe B.** Troupe B was engaged to stage performances about prevention of sexual harassment; and
- (c) **Troupe C.** Troupe C was engaged to provide puppet shows focusing on equal opportunities and disability issues.

Need to consider setting requirements on topics of school drama performances

3.25 According to EOC's letters engaging Troupe C to stage school drama performances in the period from 2017/18 to 2021/22 school years, Troupe C was required to stage at least 100 Chinese and 50 English performances for schools (Note 25) in each school year. Audit's examination of the annual evaluation reports submitted by Troupe C for the same period revealed the following (see Table 12):

Note 24: *A school year starts in September and ends in August of the following year.*

Note 25: *In 2017/18 and 2018/19 school years, Troupe C was engaged by EOC to stage performances in primary schools. The coverage was extended to kindergartens in 2019/20 school year and then all schools in 2020/21 and 2021/22 school years.*

Community participation and publicity

- (a) ***Requirement on number of performances not met.*** In 2019/20 school year, the numbers of Chinese and English performances staged by Troupe C in schools were 95 and 47 respectively, not meeting the requirement of staging at least 100 Chinese and 50 English performances; and
- (b) ***Topics of considerable proportion of performances not related to equal opportunities or disability issues.*** There was no requirement on the topics of performances to be staged stipulated in EOC's letters engaging Troupe C. Audit noted that in the period from 2017/18 to 2021/22 school years, the topics of a considerable proportion of performances staged were not related to equal opportunities or disability issues, as follows:
 - (i) ***Chinese performances.*** Of the 681 Chinese performances staged, the topics of 230 (34%) were not related to equal opportunities or disability issues. In 3 (60%) of the 5 school years, the numbers of Chinese performances on topics relating to equal opportunities or disability issues were less than 100 (i.e. the minimum number of Chinese performances to be staged as required by EOC); and
 - (ii) ***English performances.*** Of the 332 English performances staged, the topics of 212 (64%) were not related to equal opportunities or disability issues. In all the 5 school years, the numbers of English performances on topics relating to equal opportunities or disability issues were less than 50 (i.e. the minimum number of English performances to be staged as required by EOC). In particular, in 4 school years, the numbers of performances on other topics were higher than those relating to equal opportunities or disability issues.

Table 12

**Performances staged by Troupe C
(2017/18 to 2021/22 school years)**

School year	Number of performances					
	Chinese performance			English performance		
	Topics relating to equal opportunities or disability issues	Other topics (Note 1)	Total	Topics relating to equal opportunities or disability issues	Other topics (Note 1)	Total
2017/18	111 (73%)	41 (27%)	152 (100%)	39 (70%)	17 (30%)	56 (100%)
2018/19	92 (63%)	55 (37%)	147 (100%)	17 (29%)	42 (71%)	59 (100%)
2019/20 (Note 2)	63 (66%)	32 (34%)	95 (100%)	7 (15%)	40 (85%)	47 (100%)
2020/21 (Note 3)	80 (56%)	63 (44%)	143 (100%)	27 (33%)	54 (67%)	81 (100%)
2021/22	105 (73%)	39 (27%)	144 (100%)	30 (34%)	59 (66%)	89 (100%)
Overall	451 (66%)	230 (34%)	681 (100%)	120 (36%)	212 (64%)	332 (100%)

Source: Audit analysis of EOC records

Note 1: Examples of other topics included healthy snacking, childhood obesity and drug prevention.

Note 2: According to EOC, due to the COVID-19 epidemic, the deadlines for staging Chinese and English performances for 2019/20 school year were extended to 30 October 2020 and 6 November 2020 respectively.

Note 3: According to EOC, due to the COVID-19 epidemic, the commencement of staging Chinese and English performances for 2020/21 school year were on 31 October 2020 and 7 November 2020 respectively.

Remarks: The topics of performances chosen by the schools in each school year was included in the annual evaluation report submitted to EOC by Troupe C.

Community participation and publicity

3.26 In March 2023, EOC informed Audit that:

- (a) the numbers of Chinese and English performances staged by Troupe C fell short of the requirement in 2019/20 school year because face-to-face classes and on-campus activities of schools were suspended in 2020 under the COVID-19 epidemic, which made it impossible for Troupe C to stage the performances. Taking note of the situation, EOC liaised with Troupe C in early August 2020 on the arrangement and verbally agreed to extend the deadlines (see Note 2 to Table 12) and scope (Note 26) for staging the performances. As soon as face-to-face classes resumed, Troupe C delivered the performances, and fulfilled the requirements of staging 100 Chinese and 50 English performances by the extended deadlines; and
- (b) more performances related to obesity and healthy snacking were provided by Troupe C during the epidemic period than usual upon requests by schools.

3.27 In Audit's view, EOC should take measures to ensure that the number of school drama performances staged by the engaged local theatrical troupes can meet the requirement set by EOC. With a view to more effectively utilising EOC's resources on arranging school drama performances to cultivate awareness and understanding of equal opportunities from childhood, Audit considers that when engaging local theatrical troupes to stage school drama performances, EOC needs to consider setting requirements on the minimum number of performances on topics relating to equal opportunities and prevention of discrimination.

Need to enhance review of annual evaluation reports submitted by local theatrical troupes

3.28 According to EOC's letters engaging the three local theatrical troupes to stage school drama performances, each troupe is required to submit an annual evaluation report to EOC upon completion of the performances in each school year. Audit's sample check of 6 reports (2 for each troupe) submitted for the period from

Note 26: *According to EOC, no documentary evidence was maintained regarding the extension of scope, as agreed with Troupe C, to cover performances staged in secondary schools.*

2017/18 to 2021/22 school years revealed that some information reported in 5 (83 %) reports was inaccurate. Examples of inaccurate information included:

- (a) ***Some prior year's information mistakenly reported as current year's information.*** Some prior year's information was mistakenly reported as current year's information, as follows:
 - (i) ***Troupe B.*** In Troupe B's reports submitted for 2018/19 and 2021/22 school years, the statistics of some results (e.g. number of schools choosing online live streaming and rating on story message) of the questionnaires received from respondents were the same as those reported in Troupe B's reports submitted for 2017/18 and 2020/21 school years respectively; and
 - (ii) ***Troupe C.*** In Troupe C's report submitted for 2020/21 school year, the statistics on performances staged (e.g. distribution of topics of English performances chosen by schools) and results (e.g. total number of questionnaires received) of the questionnaires received from respondents were the same as those reported in Troupe C's report submitted for 2019/20 school year; and
- (b) ***Some information not tallied with supporting documents.*** Some information reported in the reports did not tally with the attached supporting documents, as follows:
 - (i) ***Troupe A.*** In Troupe A's report submitted for 2019/20 school year, it was reported that 17 schools chose online live streaming. However, according to the list of performances staged attached to the report, the number of schools should be 15 instead;
 - (ii) ***Troupe B.*** The number of schools returning questionnaires reported in Troupe B's report submitted for 2021/22 school year was 34. However, according to the list of performances staged attached to the report, the number of schools should be 31 instead; and
 - (iii) ***Troupe C.*** While it was reported in Troupe C's report submitted for 2018/19 school year that Chinese and English performances were staged in 86 and 32 primary schools respectively, according

to the lists of performances staged attached to the report, the numbers should be 85 and 31 instead.

3.29 In Audit's view, as the annual evaluation report is an important tool for evaluating the effectiveness of the school drama performances, EOC needs to remind the local theatrical troupes to ensure that information reported in annual evaluation reports is accurate as far as practicable. EOC also needs to enhance its review of annual evaluation reports submitted by the local theatrical troupes.

Audit recommendations

3.30 Audit has *recommended* that the Chairperson, EOC should:

- (a) **take measures to ensure that the number of school drama performances staged by the engaged local theatrical troupes can meet the requirement set by EOC;**
- (b) **consider setting requirements on the minimum number of school drama performances on topics relating to equal opportunities and prevention of discrimination when engaging local theatrical troupes;**
- (c) **remind the local theatrical troupes to ensure that information reported in annual evaluation reports is accurate as far as practicable; and**
- (d) **enhance the review of annual evaluation reports submitted by the local theatrical troupes.**

Response from the Equal Opportunities Commission

3.31 The Chairperson, EOC generally agrees with the audit recommendations. He has said that:

- (a) due to the COVID-19 epidemic, 153 scheduled performances were cancelled in 2019/20 school year. As soon as schools resumed, Troupe C delivered the performances, and fulfilled the requirements of staging 100 Chinese and 50 English performances by the extended deadlines

(see para. 3.26(a)). Moreover, the feedback of teachers and students indicated in the evaluation forms were overwhelmingly positive for the performances;

- (b) EOC will stipulate in the letters engaging the local theatrical troupes that only performances relating to equal opportunities and non-discrimination should be counted in the list of performances sponsored by EOC. It will be made clear to the troupes that no funding will be provided by EOC for performances not related to equal opportunities or non-discrimination;
- (c) EOC will remind the local theatrical troupes to ensure that the information reported in annual evaluation reports is accurate as far as practicable, which will be one of the considerations of engaging the local theatrical troupes; and
- (d) EOC will enhance the review of annual evaluation reports submitted by the local theatrical troupes by checking against the previous reports submitted by the troupes.

PART 4: LEGAL STUDIES AND RESEARCH PROJECTS

4.1 This PART examines the research work conducted by EOC, focusing on:

- (a) legal studies (paras. 4.2 to 4.13); and
- (b) research projects (paras. 4.14 to 4.33).

Legal studies

4.2 According to the anti-discrimination ordinances, EOC shall keep under review the working of the ordinances and, draw up and submit to the Chief Executive proposals for amending the ordinances when necessary. According to EOC, this role is crucial in order to ensure that anti-discrimination legislation can be modernised, where there is evidence it is necessary to do so. LSD, in addition to handling legal assistance applications, is also responsible for reviewing the four anti-discrimination ordinances and conducting legal studies on new protected grounds to explore the possibility of expanding the scope of protection of the ordinances and make submissions to CMAB for legislative amendments.

4.3 In March 2013, EOC launched DLR to review comprehensively all four existing anti-discrimination ordinances. In March 2016, EOC made its submissions to the Government on DLR. According to EOC:

- (a) among the 27 recommendations identified by EOC with higher priority, the Government intended to focus on those that were relatively less complex or controversial at the juncture, with a view to taking forward necessary legislative amendments in a step-by-step manner; and
- (b) the submissions contained some relatively complex and sensitive issues, on which the public had expressed strong and divergent views and that EOC had suggested further consultation, research and education thereon. These included:

- (i) discrimination between Chinese people in Hong Kong (see paras. 4.4 to 4.6);
- (ii) enhancing protection from sexual harassment under SDO (see paras. 4.7 and 4.8);
- (iii) discrimination on grounds of sexual orientation, gender identity and intersex status (see paras. 4.9 and 4.10); and
- (iv) age discrimination (see para. 4.11).

According to COR of CMAB, it focuses attention on the rights of the individual in respect of promotion of equal opportunities on the grounds of gender, family status, race and sexual orientation. On legislative amendments on existing anti-discrimination legislation, the Government had identified 8 of the 27 recommendations that were considered to be capable of driving consensus among stakeholders and the society (Note 27). In 2020 and 2021, legislative amendments were made to implement the 8 amendments (see para. 1.12).

Note 27: *The eight recommendations were made to:*

- (a) *introduce express provisions in SDO prohibiting direct and indirect discrimination on the ground of breastfeeding, and to include expression of milk in the definition of breastfeeding;*
- (b) *replace the references to “near relative” in RDO with references to “associate”;*
- (c) *provide protection from direct and indirect racial discrimination and racial harassment by imputation in RDO;*
- (d) *expand the scope of protection from sexual, disability and racial harassment between persons working in a common workplace under SDO, DDO and RDO;*
- (e) *protect service providers from disability and racial harassment by customers under DDO and RDO;*
- (f) *provide protection from disability and racial harassment between service providers and customers where the acts of harassment take place outside Hong Kong but on Hong Kong registered aircraft or ships in DDO and RDO;*
- (g) *protect members and applicants for membership of a club from sexual and disability harassment by the management of the club under SDO and DDO; and*
- (h) *repeal provisions in SDO, FSDO and RDO which disallow the award of damages if the respondent in an indirect discrimination case can prove that the requirement or condition was not applied with intention to discriminate.*

Discrimination between Chinese people in Hong Kong

4.4 In DLR, EOC examined the issue of discrimination between Chinese people in Hong Kong (i.e. between Hong Kong Chinese and Mainland Chinese), given that there was evidence of such discrimination between Chinese people in Hong Kong and that the existing protections under RDO might not be sufficient to address that form of discrimination. EOC recommended that the Government should consider providing better protection from discrimination between Chinese people. Since DLR submissions, EOC found that further evidence of significant levels of discrimination between Chinese people in Hong Kong had become apparent from research, investigations conducted by other organisations, and from enquiries and complaints of discrimination EOC had received. With due regard to the friction and conflict between Chinese people in Hong Kong, which have continued to intensify in recent years, in June 2020, EOC undertook a legal study to examine the possible legal provisions for tackling discrimination, harassment and vilification between Chinese people in Hong Kong.

4.5 An internal working group, comprising staff from LSD, the Complaint Services Division and PRTD, was formed in June 2020 to consider the issues and prepare a submission to the Government. The study was embarked on an international comparative study on the issue of discrimination against people from other places of origin, and explored various possibilities of legislative amendments. In March 2021, EOC submitted the study report “Promoting equality and preventing discrimination between Chinese people in Hong Kong” to CMAB. The report stated that it was clear that there was evidence of discrimination between Chinese people in Hong Kong and made five recommendations.

4.6 ***Follow-up actions.*** According to CMAB, it took a serious view of discrimination that might be encountered by persons arriving in Hong Kong from the Mainland. CMAB was considering legislative proposal under RDO to address the issue. Audit noted the following progress for implementing the recommendations in the study report:

- (a) ***February 2021.*** As the final report of the study was near completion and would be submitted to CMAB in due course, CMAB’s goal was to map out the way forward for the relevant recommendations within the fifth-term government (i.e. by June 2022);

- (b) **November 2021.** A meeting was held between representatives from CMAB, EOC and the Department of Justice to discuss draft legislative proposals to address the issue of discrimination that may be encountered by persons arriving in Hong Kong from the Mainland;
- (c) **June 2022.** CMAB and EOC conducted informal briefing sessions for members of LegCo Panel on Constitutional Affairs;
- (d) **October 2022.** According to the Policy Address 2022, the Government continued to work with EOC to study how the protection under the anti-discrimination ordinances could be enhanced to tackle discrimination that might be encountered by persons arriving in Hong Kong from the Mainland; and
- (e) **December 2022.** According to EOC, as of December 2022, taking into account the views of the Panel members, both CMAB and EOC were considering the various options to enhance legal protection from discrimination or vilification under the proposal. Owing to the sensitivity and complexity of the issue, discussion was on-going.

Audit noted that, as of March 2023, the discussion between EOC and CMAB on various aspects of the legislative proposal was still on-going. Audit considers that EOC needs to continue to work closely with CMAB in formulating legislative proposals that can effectively tackle discrimination that may be encountered by people from the Mainland.

Enhancing protection from sexual harassment under SDO

4.7 There were some DLR recommendations concerning legal protection against sexual harassment. After consulting the Department of Justice, CMAB was of the view that EOC should carry out further legal research work on some of the recommendations before they could be taken forward. Having additional subventions allocated from CMAB, EOC established a designated ASHU in 2020-21 to enhance public education and publicity so as to raise public awareness of sexual harassment and enhance their ability to respond to such incidents. In April 2020, CMAB reminded EOC that a main purpose of ASHU was to conduct a holistic review of the current protection against sexual harassment under SDO, to identify gaps in protection

(for example protection against harassment on the ground of pregnancy) and, where appropriate, to make recommendations for legislative amendments.

4.8 In November 2020, EOC commenced to conduct a holistic review of the current legal protection against sexual harassment taking into account factors such as the views expressed by various stakeholders, the views of key non-governmental organisations working on sexual harassment, previous DLR submissions, complaints and enquiries regarding sexual harassment that EOC had received, EOC's research on sexual harassment, and emerging issues of sexual harassment (e.g. online). In October 2021, EOC submitted the study report "Review of sexual harassment and related laws" to CMAB, with proposals on legislative amendments. According to EOC, the review found that sexual harassment remained a serious concern in Hong Kong. Some of the proposals involved employers' liabilities and the Government's functions which would require further deliberations amongst parties concerned. In February 2022, EOC issued a letter suggesting a meeting to be held with CMAB to discuss the recommendations of the report. In view of the sensitivity and complexity of the issue, CMAB was examining the submission of EOC while maintaining close communication with EOC. In Audit's view, EOC needs to keep in view the latest development of sexual harassment and continue with its sexual harassment protection efforts through its ASHU, while maintaining close dialogue with CMAB on the way forward in enhancing legal protection against sexual harassment.

Discrimination on grounds of sexual orientation, gender identity and intersex status

4.9 CMAB promotes equal opportunities on grounds of sexual orientation and gender identity through various publicity and educational measures. These include, among others:

- (a) implementation of the Equal Opportunities (Sexual Orientation) Funding Scheme which provides funding support to worthwhile community projects which promote equal opportunities on grounds of sexual orientation or gender identity, or provide support services for the sexual minorities;
- (b) promulgation of the Code of Practice against Discrimination in Employment on the Ground of Sexual Orientation;

- (c) maintenance of a hotline for enquiries and complaints on issues relating to sexual orientation and gender identity; and
- (d) release of promotional videos on equal opportunities for people of different sexual orientation and transgender persons.

4.10 On the discrimination against sexual minorities, EOC has identified that a key group in Hong Kong society facing discrimination in a number of respects are Lesbian, Gay, Bisexual and Transgender people. Since 2013, EOC had done a wide range of work, including reviewing and making recommendations relating to marital status and family status discrimination as part of DLR of existing anti-discrimination laws. In January 2016, EOC published a detailed research paper on introducing anti-discrimination laws to cover sexual orientation, gender identity and intersex status. In December 2019, EOC embarked on a follow-up study to explore the possible options for providing legal protections from discrimination on those grounds based on the existing framework of the anti-discrimination laws. The timeframe of the planned work was approximately 12 to 18 months (i.e. expected completion by June 2021). In September 2021, an initial draft of consultation document was completed. In December 2021, the Chairperson commented that the presentation framework of draft paper did not meet his expectation and the consultation document had to be re-written (Note 28). In May 2022, the Chairperson informed the LegCo Panel on Constitutional Affairs that given the contentious and controversial nature of the issue, EOC would handle it with care. In Audit's view, EOC needs to keep in view the latest development of discrimination against sexual minorities.

Age discrimination

4.11 Further to DLR, EOC considered it appropriate to conduct further exploratory legal studies, focusing on the scope of protections against age discrimination in other jurisdictions and what lessons could be learned in terms of addressing the issue in the local context. Such work was included in EOC's 2020 to 2022 strategic plan. According to EOC, it has commenced preliminary legal studies on the feasibility of amending the existing law to prohibit age discrimination in the

Note 28: *The Chairperson opined that the presentation framework of draft paper would open up too much room for controversial issues to be argued/deliberated, which deviated from his original thought that they should table to the stakeholders a set of solid legislative amendments for them to discuss and comment. As of March 2023, the study remained in progress.*

employment sector. Information and statistics on the topic were being gathered to provide inputs to policy direction as to how the issue should be taken forward. According to the results of the Equal Opportunities Awareness Survey 2021 released in November 2021 (see para. 3.2), almost half of the respondents (49.9%) regarded age discrimination as very or quite prevalent in Hong Kong, representing a rise of 8.9 percentage points over the last 10 years when comparing to the results of the Survey conducted in 2012 (Note 29). Up to March 2023, the preliminary study was still in progress. In Audit's view, EOC needs to closely monitor the progress of the legal study and duly consult the stakeholders on the way forward in addressing age discrimination.

Audit recommendations

4.12 **Audit has *recommended* that the Chairperson, EOC should:**

- (a) **continue to work closely with CMAB in formulating legislative proposals that can effectively tackle discrimination that may be encountered by people from the Mainland;**
- (b) **keep in view the latest development of sexual harassment and continue with EOC's sexual harassment protection efforts through its ASHU, while maintaining close dialogue with CMAB on the way forward in enhancing legal protection against sexual harassment;**
- (c) **keep in view the latest development of discrimination against sexual minorities; and**
- (d) **closely monitor the progress of the legal study and duly consult the stakeholders on the way forward in addressing age discrimination.**

Note 29: *According to the 2021 Survey, among the respondents who claimed that they had experienced discrimination or harassment during the 12 months before the interview, 54.3% experienced age discrimination, followed by sex discrimination (20.5%) and sexual harassment (16.2%).*

Response from the Equal Opportunities Commission

4.13 The Chairperson, EOC generally agrees with the audit recommendations. He has said that:

- (a) regarding the audit recommendations in paragraph 4.12(a), (c) and (d), EOC will continue to discharge its duty in the respective areas within its statutory remit; and
- (b) EOC will continue its sexual harassment protection efforts as well as communicating with CMAB on the way forward in enhancing legal protection against sexual harassment.

Research projects

4.14 PRTD monitors the trends of discrimination prevalent in society through conducting research projects, and makes recommendations to CMAB and relevant parties on policy measures. Headed by the Head (Policy, Research and Training), the establishment of PRTD as at 31 December 2022 comprised 12 staff.

In-house and commissioned research projects

4.15 *Selection and determination of research topics.* Research projects may be conducted by EOC's in-house resource or out-sourced to third parties (referred to by EOC as commissioned research projects):

- (a) *In-house research projects.* Conducting in-house research projects is a sectorial tool to assist EOC's day-to-day work in policy advocacy of anti-sexual harassment in various sectors. In-house research projects formed part of the policy advocacy work together with seminars and policy-setting workshops in various sectors. The Head of PRTD is responsible for overseeing in-house research projects directly. According to EOC, usually one to two PRTD staff will be engaged depending on the complexity of the research projects; and

- (b) ***Out-sourced research projects.*** As a general practice, PRTD would come up with the initial ideas of the research topics (Note 30) and prepare a study brief (with proposed budget limit) on each topic for consideration and endorsement by PRTC (see para. 1.7(d)). According to EOC, Members of PRTC have a wide discretion to select, change and determine the research topics. For out-sourcing research projects, EOC calls for research proposals through tender invitations. A selection board comprising Members of PRTC and EOC staff will be formed in vetting research proposals and choosing the out-sourced research team for each project. According to the contract requirements, the research teams are required to complete the research projects within a specified timeframe.

4.16 ***Follow-up actions on research projects.*** EOC released findings of research projects in press conferences and uploaded them to its website for the reference of relevant stakeholders and members of the public. Besides media coverage, EOC proactively reached out to different stakeholders to deepen the discussion in order to make wider policy impacts. A systematic framework had been developed for follow-up actions to be taken after the release of research reports, with a view to stock-taking the policy advocacy efforts made subsequent to the release of research findings and recommendations, and giving reference to future research directions. Members of PRTC will be updated on the progress of follow-up actions every six months.

4.17 ***Room for improvement in conducting in-house research projects.*** According to EOC, in-house research projects were conducted on an ad hoc basis. Based on the summary of in-house research projects from 2013 to 2022 provided by EOC, Audit found that:

- (a) 12 research projects were identified by PRTD and determined after discussing with the Working Group on Anti-Sexual Harassment Campaign

Note 30: According to EOC, ideas for research topics are usually generated from channels including: (a) EOC Annual Forum; (b) meetings with key stakeholders; (c) complaints handled by EOC; and (d) hot topics in the media etc.

(Note 31) with the latest one determined in October 2020. No in-house research projects were determined in 2021 and 2022;

- (b) 11 research projects were completed in about one year. However, for the remaining research project determined in August 2020, it was only completed in November 2022 (i.e. it took more than two years to complete); and
- (c) all the 12 research projects only covered the issues relating to SDO in various sectors (including 7 research projects related to the education sector and sports sector) but not the other three anti-discrimination ordinances (i.e. DDO, FSDO and RDO).

4.18 In January 2023, EOC informed Audit that:

- (a) the sector or topic would be determined after discussing with the Working Group on Anti-Sexual Harassment Campaign and in-house research projects would be conducted where appropriate and if needed only; and
- (b) from November 2020 to December 2022, due to the outbreak of COVID-19 epidemic, various research projects and work were all still underway, and no new sectors were identified for in-house research projects on sexual harassment by PRTD.

Audit noted that there were no documentary records showing the objectives and scopes of the projects as well as the work plan and timeframe for completing in-house research projects. In Audit's view, to facilitate better monitoring of in-house research projects, EOC needs to keep proper records on the determination of research topics, objectives and scopes as well as the work plan and timeframe for completing in-house research projects.

Note 31: *The Working Group was formed under PRTC in October 2012 to advise on the strategy and action plan to address the concerns about prevention of sexual harassment in different local sectors.*

Legal studies and research projects

4.19 ***Delays in completing out-sourced research projects.*** Since 2016, EOC has adopted a three-year cycle to commission research projects. Under each cycle, 6 research projects would be commissioned. To facilitate the contracting-out exercises, the 6 research projects would be commissioned in two batches (3 projects for each batch) during the three-year cycle. For the most recent two three-year cycles (i.e. from 2016-17 to 2018-19 and from 2019-20 to 2021-22), EOC had commissioned 12 research projects, comprising 11 projects awarded with contract sums ranging from \$230,000 to \$782,000 (averaging \$580,000) each as well as 1 project out-sourced by quotation costing \$68,000. Audit noted that 2 projects involved out-sourcing of data collection only and the Senior Research Manager (SRM) was in charge of designing the survey questionnaire, conducting data analyses, and preparing the final research report. The 2 projects were completed by May 2022. Audit analysis on the records of the remaining 10 projects found that up to 31 December 2022, there were delays in completing all the 10 projects. The delays ranged from 2.4 to 27 months, averaging 10.9 months (see Table 13).

Table 13

**Analysis of EOC's commissioned research projects
(31 December 2022)**

Research cycle	Research project	Timeframe for completion	Delay in completion	Status as at 31 December 2022
		(Month)		
2016-17 to 2018-19	A	12	2.4	Completed
	B	15	4.6	Completed
	C	12	13.4	Completed
	D	12	6.9	Completed
	E	12	27.0	Completed
	F	12	7.7	Completed
2019-20 to 2021-22	G	24 (Note)	14.4	In-progress
	H	24 (Note)	14.4	In-progress
	I	22 (Note)	15.2	In-progress
	J	9	2.9	Completed

Source: Audit analysis of EOC records

Note: The original timeframe for completion of the three research projects was 12 months. Due to the outbreak of COVID-19 epidemic, an extension of 12 months was granted to Projects G and H, and an extension of 10 months was granted to Project I.

4.20 For the 3 projects still in progress as of 31 December 2022, Audit examined the relevant records and found that the 3 projects (involving three different research teams from two local universities) were conducted during the outbreak of COVID-19 epidemic and were of slow progress:

- (a) **Project G.** The project commenced in October 2019. Data collection was switched from paper-and-pencil based to web-based and the research team was granted a deadline extension of 12 months (i.e. up to October 2021). However, the draft survey report and chapters on qualitative findings and recommendations were only submitted in March and June 2022 respectively. In August 2022, the research team presented their research findings to PRTC. Up to 31 December 2022, the research team was still revising the report based on the suggestions raised by Members of PRTC;
- (b) **Project H.** The project commenced in October 2019. The related data collection process was suspended for some time and a total of 12-month extension was granted to the research team (i.e. up to October 2021). A draft report was only submitted in December 2021 and a presentation of the research findings was made by the research team to PRTC in May 2022. A revised report was submitted in July 2022 and was under EOC's review; and
- (c) **Project I.** The project commenced in November 2019. The related data collection process was delayed and the research team was granted deadline extensions for 10 months (i.e. up to September 2021). In November 2021, the research team presented their research findings to PRTC. In October 2022 (after a lapse of 11 months), EOC provided its comments thereon. The research team was revising the report.

4.21 According to EOC:

- (a) there were neither explicit penalty terms in the service contracts for any delays in completing research projects, nor laid-down procedures on the monitoring of the outstanding research projects; and
- (b) it would communicate proactively with the research teams via emails and phone calls from time to time for monitoring the progress of the research projects. In the event of any delay, the research teams would submit

applications to EOC for deadline extension. For the 3 research projects still in progress as of December 2022, the applications for deadline extension from 10 to 12 months were approved by the Convener of PRTC.

Up to December 2022, no research project had been commissioned for the three-year cycle from 2022-23 to 2024-2025. Only 1 research project was proposed by PRTD and endorsed by PRTC. For this cycle, the remaining projects were planned to be commissioned after publishing the findings of the 3 research projects which were still in progress.

4.22 In March 2023, EOC informed Audit that:

- (a) it had stepped up efforts to clear the commissioned research projects despite the COVID-19 epidemic and the change in responsible staff from March to September 2022; and
- (b) findings of one of the outstanding commissioned research projects (i.e. Project I — see para. 4.20(c)) were published in February 2023.

Audit considers that EOC needs to step up efforts in completing outstanding commissioned research projects and consider imposing penalty clause in service contracts of future research projects for delays in completing research work.

Funding Programme of Research Projects on Equal Opportunities

4.23 According to section 65(3) of SDO, EOC shall not provide any financial assistance to other persons to undertake research except with the prior approval of the Secretary for Constitutional and Mainland Affairs, after consulting with the Secretary for Financial Services and the Treasury. In March 2012, EOC Board Members suggested that it would be beneficial for EOC to capture more innovative ideas to promote equal opportunities if the current practice to commission research projects was supplemented by inviting interested parties to apply for EOC's funds to conduct small-scale research projects on subjects relevant to the work of EOC. In August 2012, EOC wrote to seek CMAB's approval for offering the Funding Programme of Research Projects on Equal Opportunities for 2013-14 as a pilot programme, stating that:

- (a) the Funding Programme was initiated in order to capture a wide pool of academia and organisations with inspiring ideas to undertake innovative research projects aiming at promoting equal opportunities;
- (b) the funded projects would be small-scale research projects and the budget for each one was generally capped at \$50,000;
- (c) it would not be practicable for the funded projects to be micro-monitored by EOC due to the large numbers of such projects; and
- (d) the manpower for implementing the Funding Programme would be internally met by EOC.

In June 2013, CMAB agreed with EOC's proposal to conduct the Funding Programme on a pilot basis on the conditions that the objectives of the proposed projects should work towards the elimination of discrimination falling within the scope of the four anti-discrimination ordinances and promote the principles of these ordinances. Subsequently, another two rounds of the Funding Programme were also approved by CMAB for 2017-18 and 2020-21 respectively. A sum of \$1.2 million was budgeted for the first round of the Funding Programme while \$600,000 was budgeted for each of the next two rounds.

4.24 Applicants (Note 32) were invited to submit research proposals under the Funding Programme. The submitted proposals would be evaluated by Members of PRTC and PRTD staff. A successful applicant was required to sign a letter of acceptance and undertaking, to observe all the specified conditions and guidelines, and to confirm that the funded project would be conducted in accordance with the agreed dates (Note 33).

Note 32: *Applicants were restricted to established not-for-profit educational bodies, registered not-for-profit organisations with track records on equal opportunities related work, and academia attached to local universities.*

Note 33: *The agreed dates included:*

- (a) *project commencement date;*
- (b) *date of submitting progress report;*
- (c) *date of submitting research report; and*
- (d) *completion date of the entire project.*

4.25 *Evaluation of the previous completed round of Funding Programme.* When EOC sought approval for offering a new round of the Funding Programme, CMAB requested for a review (i.e. an evaluation report) on the effectiveness of the previous round of the Funding Programme as well as any operational issues/problems arisen which would form the basis of approval for continuation or otherwise of the Funding Programme. In the event, two evaluation reports were submitted to CMAB in 2015 and 2019 for the Funding Programme held in 2013-14 and 2017-18 respectively. According to EOC's evaluation reports:

- (a) *2013-14 Funding Programme.* Funded organisations were required to submit progress reports, final reports and financial reports. Majority of the funded organisations agreed with the arrangement as an effective means of communication within their capacity and without creating workload to them. There were no operational issues or problems arisen; and
- (b) *2017-18 Funding Programme.* Funded organisations were required to submit progress reports, final reports and financial reports. EOC had provided inputs to funded organisations for refining their final research reports to ensure that all reports were up to a professional research standard and well addressed the overall objectives of promoting equal opportunities and/or fighting against discrimination and harassment. Moreover, a more stringent vetting mechanism (Note 34) was instituted to ensure a more effective use of public funds in producing high quality and relevant research deliverables to the Hong Kong community. There were no operational issues or problems arisen.

While EOC considered that no operational issues or problems had arisen from the previous two rounds of the Funding Programme, there is scope for improvement in its monitoring of the Funding Programme, as elaborated in the ensuing paragraph.

Note 34: *According to EOC, assessment criteria of applications were:*

- (a) *applicant's knowledge of the proposed research topic;*
- (b) *innovation and social impact of the proposed research project;*
- (c) *applicant's track record and experience in delivering research project;*
- (d) *qualifications of the applicant and related teammates (if any);*
- (e) *applicant's capacity to engage and mobilise manpower or other types of resources to complete the proposed research project; and*
- (f) *cost-effectiveness of the proposed research project.*

4.26 According to EOC, the project duration for funded projects agreed with the funded organisations was normally 12 months. Audit noted that 9 (82%) of the 11 funded projects in the 2013-14 Funding Programme and 8 (89%) of the 9 funded projects in the 2017-18 Funding Programme could not be completed by the agreed completion dates. However, despite that the majority of the funded projects were not completed by the agreed completion dates, such issues had not been reported in the two evaluation reports submitted by EOC to CMAB. In Audit's view, EOC needs to enhance the contents of the evaluation reports of the Funding Programme submitted to CMAB (e.g. by reporting the number of funded projects not completed by the agreed completion dates, an assessment of the performance of each funded organisation and the amount of resource EOC deployed in monitoring the funded projects).

4.27 ***Progress of 2020-21 Funding Programme.*** According to the records for the 2020-21 Funding Programme, Audit noted that the capacity to successfully complete the projects within the proposed duration had been taken into account when assessing the proposals. The concern was particularly valid in the context of COVID-19 epidemic which would affect the data collection. Of the 29 applications received, 9 were approved by PRTC. These 9 projects commenced in November/December 2020 with agreed project duration from 12 to 15 months. Audit found that:

- (a) 5 projects were completed between August and November 2022, with delays ranging from 6 to 10.2 months. According to EOC, the major reason for the delays was the suspension of data collection/prolongation of data collection period due to the social distancing requirements imposed during the COVID-19 epidemic; and
- (b) as of December 2022, the remaining 4 projects were still in progress with delays ranging from 9.6 to 12.6 months. According to EOC, the delays were mainly due to the prolonged time required for submitting/revising the research reports by the funded organisations.

According to EOC, as of January 2023, for the above 9 projects with delays, only 2 funded organisations had submitted applications for extending the deadline to EOC.

4.28 According to EOC:

- (a) despite that there were no manual or guidelines laid down for monitoring of the funded projects, it had communicated proactively with the funded organisations via emails and phone calls from time to time to urge for timely submission of the research reports; and
- (b) as of February 2023, among the 4 remaining projects mentioned in paragraph 4.27(b), the findings of 3 projects had been published.

In order to enhance supervisory accountability and to ensure that the funded projects are completed on time with good quality, Audit considers that EOC needs to strengthen its monitoring of funded projects by drawing up guidelines in the supervision and monitoring of funded projects.

Need to maintain a pool of experienced staff engaging in research work

4.29 As mentioned in paragraph 4.14, EOC monitors the trends of discrimination prevalent in society through conducting research projects. The research studies will help EOC to develop its strategy, monitor the attitude change of equal opportunities within the community and provide benchmarks for future studies. For example, EOC commissioned a study on Perceptions of Stigmatisation and Discrimination of Persons with Mental Illness (PMIs) in the Workplace (Note 35) (Project I in Table 13 in para. 4.19).

Note 35: *In February 2023, EOC released the findings of the study. Responses from 858 persons (comprising 593 employed persons and 265 PMIs) participating in a face-to-face questionnaire survey (for their experience of discrimination in the workplace or in the process of seeking jobs in the past five years) from May to November 2020 revealed that: (a) 81.7% of the employed persons considered that discrimination against PMIs in Hong Kong was very prevalent or quite prevalent; and (b) the most observed situations of workplace discrimination against PMIs were “having fewer opportunities for promotion” (71.3%) and “not hired because of mental illness” (68.3%).*

4.30 Among the 12 staff in PRTD (see para. 4.14), 5 staff were responsible for research related work, comprising:

- (a) 1 staff (i.e. SRM — Note 36) for conducting/coordinating commissioned research projects and projects funded under the Funding Programme of Research Projects on Equal Opportunities;
- (b) 1 Senior Policy, Research and Training Officer who was mainly responsible for conducting in-house research projects; and
- (c) 3 other staff who were responsible for supporting policy advocacy initiatives and research work.

Among the 5 staff engaged in research related work, SRM was the only officer who carried out research work on a full-time basis. In August 2022, SRM resigned and a newly-recruited Research Co-ordination Manager (RCM) reported duty in September 2022 to take up the duties of SRM.

4.31 As mentioned in paragraphs 4.19 to 4.28, there were various shortcomings in the administration of out-sourced research projects and the Funding Programme of Research Projects on Equal Opportunities. In this connection, Audit noted that EOC placed heavy reliance on SRM in conducting research work (Note 37) and the resignation of SRM had a negative impact on EOC's research work. According to EOC:

Note 36: *CMAB approved upgrading the post of Research Co-ordination Manager to SRM with effect from April 2020.*

Note 37: *SRM was responsible for, among others:*

- (a) *providing expert-level advice on research methodology, construction of data collection instruments, and data analyses and interpretation for all research projects commissioned, undertaken or funded by EOC and monitoring their progress;*
- (b) *conducting thematic research studies, for example, designing the survey questionnaire, conducting data analyses, and writing the final report of a research project as mentioned in paragraph 4.19; and*
- (c) *preparing tender documents for the invitation, evaluation and selection of service providers for research projects.*

Legal studies and research projects

- (a) the resigned SRM had solid research experience and equal opportunity knowledge acquired in EOC. In comparison, RCM had less equal opportunity experience and exposure; and
- (b) due to the unique position of SRM/RCM, it was highly unlikely that a suitable candidate could be readily found in the job market without the work experience gained in EOC.

In Audit's view, EOC needs to improve oversight on its research work and maintain a pool of staff with relevant experience so that the research work will not be seriously hindered by the departure of a key staff.

Audit recommendations

4.32 **Audit has *recommended* that the Chairperson, EOC should:**

- (a) **keep proper records on the determination of research topics, objectives and scopes as well as the work plan and timeframe for completing in-house research projects;**
- (b) **step up efforts in completing outstanding commissioned research projects and consider imposing penalty clause in service contracts of future research projects for delays in completing research work;**
- (c) **enhance the contents of the evaluation reports of the Funding Programme submitted to CMAB;**
- (d) **strengthen EOC's monitoring of funded projects by drawing up guidelines in the supervision and monitoring of funded projects; and**
- (e) **improve oversight on EOC's research work and maintain a pool of staff with relevant experience so that EOC's research work will not be seriously hindered by the departure of a key staff.**

Response from the Equal Opportunities Commission

4.33 The Chairperson, EOC generally agrees with the audit recommendations. He has said that:

- (a) although in-house research projects are launched on ad hoc basis and if needed only, EOC may consider keeping more documentation at the initial phase of the in-house research projects where appropriate;
- (b) EOC is monitoring the remaining commissioned projects and will explore the feasibility of penalty clause in order to reflect possible consequence of undue delay in project progress;
- (c) EOC will consider enhancing the contents of the evaluation reports for the Funding Programme submitted to CMAB subject to CMAB's views; and
- (d) EOC will continue to take forward succession planning to the extent possible within resources available in consultation with PRTC. EOC would like to accentuate that there are a handful of specialist positions that require tailor-made succession planning as EOC's establishment is relatively small.

PART 5: OTHER ADMINISTRATIVE ISSUES

5.1 This PART examines EOC's other administrative issues, focusing on:

- (a) transaction of Board and Committee meetings (paras. 5.3 to 5.11);
- (b) staff training (paras. 5.12 to 5.18); and
- (c) procurement of goods and services (paras. 5.19 to 5.23).

5.2 Headed by the Director (Corporate Planning and Services), the Corporate Planning and Services Division is responsible for EOC's accounts, human resources, information technology and other general administration. As at 31 December 2022, it had an establishment of 29 staff. EOC had promulgated internal manuals, namely the Human Resources and Administration Manual and PSSM, setting out the policies, procedures and guidelines applicable within EOC.

Transaction of Board and Committee meetings

5.3 EOC Board provides guidance on the overall strategies of EOC. At present, there are four committees appointed under EOC Board to pursue the goals of EOC (see para. 1.7). EOC promulgated the Notes for Guidance for Members on Procedures for Meetings and Related Matters (NGPM) which aimed to facilitate Members to perform the functions and exercise the powers of EOC.

5.4 According to NGPM, EOC Board should appoint the chairperson and determine the number of members for each Committee. EOC Chairperson is an ex-officio member of each Committee and EOC Board may appoint a person who is not a Member of EOC (i.e. co-opted member) as a member of a Committee. Not less than half of the Members of the Board/Committee shall form a quorum.

5.5 ***Attendance of Members.*** LCC holds regular meetings every two months while EOC Board and the remaining three Committees hold regular meetings every three months. Audit reviewed the records of meeting from 2016-17 to 2022-23

(up to December 2022) and found that while the attendance rates of the Members for most EOC Board and Committees meetings were above 70%:

- (a) the attendance rates in 3 (14%) of the 22 EOC Board Meetings and 19 (18%) of the 108 Committee meetings were below 70% (see Table 14). Of the 19 Committee meetings, 2 (11%) had just the minimum number of Members to form a quorum;
- (b) the annual attendance rates of individual EOC Board Members (i.e. including the attendance at meetings of EOC Board and Committees of which the EOC Board Member is a member) were only 60% or below in 14 cases (involving 11 Members); and
- (c) the annual attendance rates of individual co-opted Members were only 60% or below in 12 cases (involving 7 Members).

Table 14

**Number of meetings held and attendance rates
(2016-17 to 2022-23 (up to December 2022))**

Attendance rate	EOC Board	A&FC	CPPC	LCC	PRTC
	(Number of meetings held)				
90% to 100%	7	15	6	7	7
80% to less than 90%	7	10	8	16	9
70% to less than 80%	5	1	3	4	3
60% to less than 70%	3	0	6	5	3
50% to less than 60%	0	0	2	0	3
Total	22	26	25	32	25

Source: Audit analysis of EOC records

Remarks: According to EOC, some scheduled meetings were cancelled due to COVID-19 epidemic. The businesses were transacted by circulation of papers.

Other administrative issues

5.6 In March 2023, EOC informed Audit that:

- (a) apart from attending meetings, Members also contributed to the work of EOC through a host of avenues, e.g. regular email exchanges, telephone conversations, and attending EOC events, etc.;
- (b) while Members' participation in meetings was of vital importance to the governance of EOC, Members often elected the respective committees according to their professional fields and/or interest. The size of a committee was hence much smaller than that of EOC Board. Due to the small number of members in a committee, the attendance rate could be significantly impacted by the occasional absence of an individual member; and
- (c) it had in place an established mechanism to facilitate Members to attend Board and Committee meetings, as follows:
 - (i) informing Members of the meeting schedule for the coming year;
 - (ii) issuing notice of meetings in writing at least seven days before the date of a meeting;
 - (iii) ascertaining attendance shortly before the date of meeting by telephone calls; and
 - (iv) issuing reminders to Members who have been absent for two meetings.

Audit considers that EOC needs to take measures to improve the attendance of Members with low attendance rates as far as practicable.

5.7 ***Issue of meeting minutes.*** According to NGPM, meeting minutes should be issued as soon as possible after each meeting and one month has been set as a target. Audit's examination of relevant records from 2018 to 2022 revealed that:

- (a) ***LCC.*** All 20 meeting minutes were issued more than 1 month after the meetings. The average time required to issue the minutes was 81 days (ranging from 42 to 294 days);

- (b) **CPPC.** In 9 (50%) of the 18 meetings held, the meeting minutes were issued more than 1 month after the meetings. The average time taken to issue the minutes was 35 days (ranging from 32 to 53 days); and
- (c) **PRTC.** In 3 (17%) of the 18 meetings held, the meeting minutes were issued more than 1 month after the meetings. The average time taken to issue the minutes was 36 days (ranging from 31 to 40 days).

Audit considers that EOC needs to take measure to ensure that meeting minutes are issued within the time target set in NGPM.

5.8 ***Declaration of interests.*** As stipulated in NGPM, EOC adopted a “two-tier” reporting system on declaration of interests. Members of EOC Board and its Committees are required to:

- (a) register in writing their personal interests, direct or indirect, pecuniary or otherwise, when they first join the Board/Committee, and annually thereafter, to the Secretary of the Board/Committee;
- (b) disclose any direct personal or pecuniary interest in any matter under consideration by the Board/Committee as soon as practicable after he/she has become aware of it, prior to the discussion of the item; and
- (c) a register of Members’ interests should be kept by the Secretary of the Board/Committees which should be made available for inspection on request by any members of the public.

Upon appointment and on an annual basis subsequent to the appointment, EOC will require the Chairperson and the Board/Committees’ Members to complete a declaration form and submit it to the Secretary of the Board/Committees before a stipulated deadline.

5.9 Audit’s examination of EOC’s records of declaration forms for the period from 2018 to 2022 revealed that:

Other administrative issues

- (a) ***EOC Board Members.*** For the 85 occasions in which the Members were required to declare interests (involving 17 EOC Board Members each year):
 - (i) in 19 (22%) occasions, no declaration forms were found in the records;
 - (ii) in 2 (2%) occasions there were no signatures on the submitted declaration forms; and
 - (iii) in 12 (14%) occasions, the declaration forms were submitted after the deadline, with an average delay of 13 days (ranging from 3 to 31 days); and
- (b) ***Co-opted Members.*** Audit noted that there were co-opted Members in CPPC and PRTC only. However, their declaration mechanisms deviated from the requirements in NGPM, as follows:
 - (i) co-opted Members in CPPC were required to submit declarations only before each Committee meeting when sensitive items would be discussed; and
 - (ii) co-opted Members in PRTC were required to submit declarations only upon their appointments, but not annually hereafter.

Moreover, there was no register of Members' interests kept by EOC or the Secretary of the Committees. In Audit's view, EOC needs to take measures to enhance the compliance with the "two-tier" reporting system on declaration of interests.

Audit recommendations

5.10 Audit has *recommended* that the Chairperson, EOC should take measures to:

- (a) **improve the attendance of Members with low attendance rates as far as practicable;**

- (b) ensure that meeting minutes are issued within the time target set in NGPM; and
- (c) enhance the compliance with the “two-tier” reporting system on declaration of interests.

Response from the Equal Opportunities Commission

5.11 The Chairperson, EOC generally agrees with the audit recommendations. He has said that EOC will take steps to:

- (a) issue further reminders to Members with low attendance rates;
- (b) ensure that the guidelines stated in NGPM would be adhered to; and
- (c) reinforce compliance with the documentation requirements related to the administration of the “two-tier” reporting system on declaration of interests, including but not limited to providing each committee secretary with a register of Committee Members’ interests.

Staff training

5.12 Staff costs, which include staff salaries, gratuity, mandatory provident fund contributions, and other benefits and allowances, constitute a significant share of EOC’s expenditure. In 2021-22, EOC’s staff costs amounted to \$110 million, representing 85% of its annual subventions from the Government.

Application for training sponsorship

5.13 To support staff’s professional and competency development, staff are sponsored on a full or partial reimbursement basis to attend job-related training programmes, seminars or conferences provided by external organisations. From 2019-20 to 2021-22, staff training sponsorship provided amounted to about \$420,000.

Other administrative issues

5.14 According to the Human Resources and Administration Manual, staff applying for training sponsorship should complete an application form with reasons in support of the application and recommendation from Division/Unit Head (indicating the amount of sponsorship recommended) for approval by an Executive Director. Application forms should normally be submitted at least 10 working days before the commencement of the training courses/programmes so as to allow time for consideration of the applications. Applications submitted after the commencement or completion of the training courses/programmes will not normally be considered.

5.15 ***Approval of training sponsorship applications.*** From 2019-20 to 2021-22, 80 applications for training sponsorship were approved. Audit's examination of the records of the 80 approved applications revealed that:

- (a) 10 (13%) applications were submitted less than 10 working days (ranging from 5 to 8 working days, averaging 7 working days) before the commencement of the training courses/programmes without proper justifications (Note 38);
- (b) 4 (5%) applications were not submitted using the stipulated application form as required. They were collectively approved by an Executive Director using an email instead; and
- (c) in 3 (4%) applications (with total course fees amounted to \$4,036), the amounts of recommended sponsorship (full or partial) were not indicated on the application forms by the respective Unit Head/Executive Director. In the event, full sponsorships were provided to the applicants.

5.16 According to EOC, of all the training applications examined by Audit, no applicant had attended the training courses/programmes without having obtained proper approval before the commencement of the training, be it vide the stipulated application form or email. The 10 working days window was an administrative time frame for normal processing training applications and the policy was not meant to

Note 38: *There were altogether 16 applications which were submitted less than 10 working days before the commencement of the training courses/programmes. According to EOC, in 6 applications, the invitation of attendance was only received in short notice or the training was initiated by the management and notification of available places was received within a short notice.*

categorically reject late applications as a result of special circumstances/considerations in individual cases. Audit considers that EOC needs to take measures to ensure compliance with the requirements stipulated in the Human Resources and Administration Manual for training sponsorship applications as far as practicable.

Audit recommendation

5.17 **Audit has *recommended* that the Chairperson, EOC should take measures to ensure compliance with the requirements stipulated in the Human Resources and Administration Manual for training sponsorship applications as far as practicable.**

Response from the Equal Opportunities Commission

5.18 The Chairperson, EOC generally agrees with the audit recommendation. He has said that EOC will remind staff members to comply with the application procedures for external training and continue to refine the staff training policy and processing procedures for betterment of staff training administration.

Procurement of goods and services

5.19 According to PSSM, staff initiating a purchase for goods/services should raise a purchase requisition providing reasons for the purchase and detailed specifications of the item(s) to be sourced. Quotations from suppliers in EOC's suppliers list will be invited. Normally, the supplier offering the lowest price meeting the full specification shall be recommended for approval by senior officers according to the schedule of purchase authority as stipulated in PSSM.

5.20 Audit sample checked 20 procurement of goods and services of values above \$50,000 from 2018 to 2022 and found room for improvement in 2 cases:

- (a) ***Office renovation.*** In May 2020, staff from the General Registry requested the procurement of renovation services for part of the office. Four quotations were obtained and the lowest quotation amounting to \$180,270 was approved by the Division Head. In June and July 2020,

Other administrative issues

three subsequent purchase requisitions for additional renovation works with a total amount of \$88,870 (i.e. 49% of the original quotation value) were raised and they were approved by the Division Head in August 2020. In the event, while the final value of the improvement works amounted to \$267,070, which exceeded the purchase authority of the Division Head of up to \$250,000, there were no documentary records showing that the approval from the next higher authority (i.e. the Executive Director (Operations)) was obtained; and

- (b) ***Procurement of office furniture.*** In March 2021, staff from the General Registry requested the procurement of 32 meeting tables (folding type) with modesty panel and flipper (with size specified), and 3 medium back mesh chairs. Quotations from 10 suppliers were received with the lowest one at \$21,300. However, the second highest quotation of \$95,504 was recommended and approved based on the justifications that:
- (i) the design and materials of the tables of the recommended supplier were more stable and safer to use due to a safety-lock herein (whereas the tables offered by the supplier with the lowest quotation did not have a safety-lock); and
 - (ii) 8 years' warranty were provided by the recommended supplier while other suppliers only provided a warranty of 1 to 5 years.

Audit noted that the requirements of safety-locks and length of warranty period had not been specified in the purchase requisition. There were no documentary records showing that such requirements had been communicated to potential suppliers when inviting quotations.

5.21 In March 2023, EOC informed Audit that:

- (a) for the office renovation work mentioned in paragraph 5.20(a), an additional expense of \$18,200 was unexpectedly incurred as a sewage pipe problem popped up onsite, calling for extra works urgently so as not to delay the works in progress and resulting in exceeding the approved limit by \$17,070; and

- (b) for the procurement of office furniture mentioned in paragraph 5.20(b), the specifications should have been set out completely. The purchase of meeting tables was to replace the old ones which had been used for over 24 years.

In Audit's view, EOC needs to take measures to enhance its staff's compliance with PSSM, especially in relation to obtaining approval from appropriate authority and providing complete specifications in purchase requisitions.

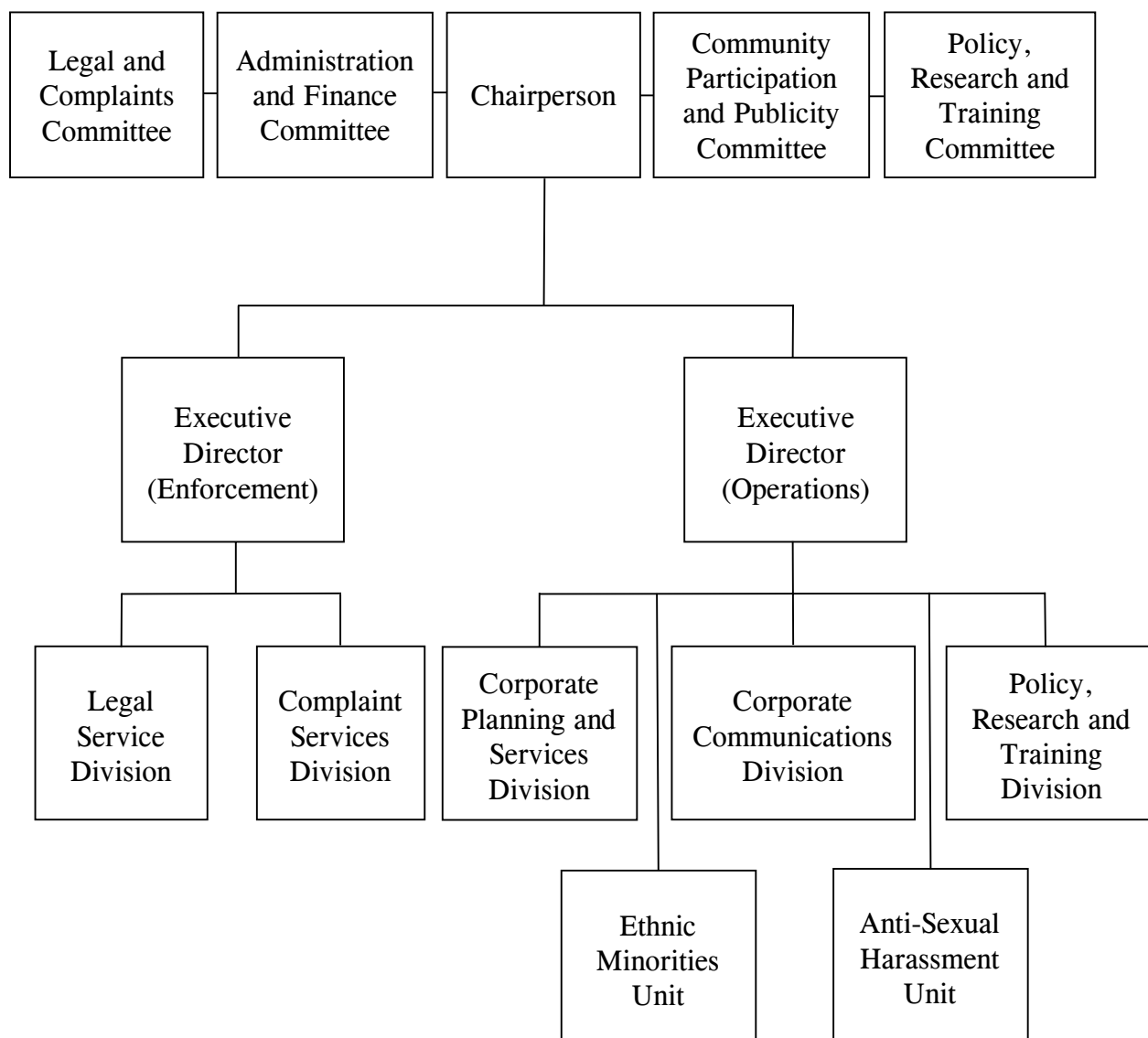
Audit recommendation

5.22 **Audit has *recommended* that the Chairperson, EOC should take measures to enhance EOC staff's compliance with PSSM, especially in relation to obtaining approval from appropriate authority and providing complete specifications in purchase requisitions.**

Response from the Equal Opportunities Commission

5.23 The Chairperson, EOC generally agrees with the audit recommendation. He has said that EOC will provide complete specifications in purchase requisitions and remind staff members to obtain approval from the appropriate authority.

**Equal Opportunities Commission:
Organisation chart (extract)
(31 December 2022)**



Source: EOC records

Acronyms and abbreviations

A&FC	Administration and Finance Committee
ASHU	Anti-Sexual Harassment Unit
Audit	Audit Commission
CEO	Chief Equal Opportunities Officer
CMAB	Constitutional and Mainland Affairs Bureau
COR	Controlling Officer's Report
CPPC	Community Participation and Publicity Committee
DDO	Disability Discrimination Ordinance
DLR	Discrimination law review
EOC	Equal Opportunities Commission
FSDO	Family Status Discrimination Ordinance
IOPM	Internal Operating Procedures Manual
LCC	Legal and Complaints Committee
LegCo	Legislative Council
LSD	Legal Service Division
NGPM	Notes for Guidance for Members on Procedures for Meetings and Related Matters
PMIs	Persons with mental illness
PRTC	Policy, Research and Training Committee
PRTD	Policy, Research and Training Division
PSSM	Procurement of Stores and Services Manual
RCM	Research Co-ordination Manager
RDO	Race Discrimination Ordinance
SDO	Sex Discrimination Ordinance
SRM	Senior Research Manager

CHAPTER 3

Development Bureau

Construction Innovation and Technology Fund

**Audit Commission
Hong Kong
31 March 2023**

This audit review was carried out under a set of guidelines tabled in the Provisional Legislative Council by the Chairman of the Public Accounts Committee on 11 February 1998. The guidelines were agreed between the Public Accounts Committee and the Director of Audit and accepted by the Government of the Hong Kong Special Administrative Region.

Report No. 80 of the Director of Audit contains 8 Chapters which are available on our website at <https://www.aud.gov.hk>



Audit Commission
6th Floor, High Block
Queensway Government Offices
66 Queensway
Hong Kong

Tel : (852) 2867 3423
Fax : (852) 2824 2087
E-mail : enquiry@aud.gov.hk

CONSTRUCTION INNOVATION AND TECHNOLOGY FUND

Contents

	Paragraph
EXECUTIVE SUMMARY	
PART 1: INTRODUCTION	1.1 – 1.12
Audit review	1.13
Acknowledgement	1.14
PART 2: PROCESSING OF APPLICATIONS	2.1
Vetting of applications	2.2 – 2.11
Audit recommendations	2.12
Response from the Government	2.13
Maintenance of pre-approved lists	2.14 – 2.21
Audit recommendations	2.22
Response from the Government	2.23
PART 3: FUNDING DISBURSEMENT AND MONITORING OF APPROVED PROJECTS	3.1
Processing of disbursement requests	3.2 – 3.15
Audit recommendations	3.16
Response from the Government	3.17

	Paragraph
Monitoring of project implementation	3.18 – 3.36
Audit recommendations	3.37
Response from the Government	3.38
 PART 4: OTHER RELATED ISSUES	 4.1
Safeguarding national security	4.2 – 4.4
Audit recommendation	4.5
Response from the Government	4.6
Promotion and publicity programmes	4.7 – 4.9
Audit recommendations	4.10
Response from the Government	4.11
Governance issues	4.12 – 4.23
Audit recommendations	4.24
Response from the Government	4.25
Other administrative issues	4.26 – 4.39
Audit recommendations	4.40
Response from the Government	4.41
 Appendices	 Page
A : Development Bureau: Organisation chart (extract) (30 September 2022)	65
B : Acronyms and abbreviations	66

CONSTRUCTION INNOVATION AND TECHNOLOGY FUND

Executive Summary

1. In the 2018-19 Budget, the Financial Secretary proposed to set up a \$1 billion Construction Innovation and Technology Fund (CITF) to encourage wider adoption of innovative construction methods and technology in the construction industry, and to build up the capacity of construction professionals to leverage innovation for continuous improvement, with a view to promoting productivity, uplifting build quality, improving site safety and enhancing environmental performance. With the approval of the Finance Committee of the Legislative Council (LegCo) in July 2018, the Development Bureau (DEVB) launched the \$1 billion CITF in October 2018. In the 2022-23 Budget Speech, it was proposed to inject another \$1.2 billion to CITF for its ongoing operation and implementation of enhancement measures launched in January 2022. Such injection was approved by LegCo in the context of the Appropriation Bill 2022 in May 2022. CITF covers two aspects, namely technology adoption (i.e. Advanced Construction Technologies (ACT), Building Information Modelling (BIM), Modular Integrated Construction and Prefabricated Steel Reinforcing Bar) and manpower development. Since the launch of CITF in October 2018 and up to September 2022, 2,760 applications had been approved under CITF with approved grants of \$767 million.

2. In view of the knowledge and expertise on construction of the Construction Industry Council (CIC) and its close relationship with construction stakeholders, DEVB commissioned CIC as the implementation partner to implement, manage and administer CITF with effect from the date of signing of the Memorandum of Cooperation (MoC) in October 2018. According to MoC, CIC would set up a dedicated CITF office (i.e. CITF Secretariat) to provide executive, administrative and secretariat support to the operations of CITF. CIC would absorb and bear all manpower and administration costs arising from the implementation, management and administration of CITF. The Steering Committee on Construction Innovation and Technology Fund (SC) was set up by DEVB in September 2018 to provide overall steer and advise the Government on the key parameters and implementation of CITF, and assist in monitoring the use and cost effectiveness of CITF. The Management Committee on Construction Innovation and Technology Fund (MC) was set up by

Executive Summary

CIC to formulate the operational framework of CITF and oversee its day-to-day operations. MC is further supported by four Vetting Sub-committees on Construction Innovation and Technology Fund (VSCs) in providing expert advice on specialised areas, reviewing and approving the relevant pre-approved product scheme applications, and vetting and approving the relevant CITF applications. The Audit Commission (Audit) has recently conducted a review of CITF.

Processing of applications

3. *Time pledge for completing the processing of applications not met in some cases.* According to CITF's "Guide to Application" and website, under normal circumstances, upon receipt of CITF applications, CITF Secretariat will complete the processing of valid applications and notify applicants of the application results within 60 calendar days (for non pre-approved items) or within 30 calendar days (for pre-approved items — see para. 4) from the dates of receipt of the duly completed applications accompanied by all necessary documentation. Audit noted that, as of September 2022: (a) of the 2,337 applications with 30-day time pledge, the time taken to complete the processing of 245 (10.5%) applications were more than 30 days, ranging from 31 to 135 days (averaging 40 days); and (b) of the 633 applications with 60-day time pledge, the time taken to complete the processing of 39 (6.2%) applications were more than 60 days, ranging from 61 to 182 days (averaging 104 days). According to DEVB, regarding the 25 (3 and 22 under 30-day and 60-day time pledge respectively) applications with longer processing time of over 90 days, the majority of them were related to adoption of new technologies or circumstances new to VSCs in the early stage of adoption in the industry and the projects involved were more complicated. In Audit's view, DEVB needs to take measures to ensure that the processing of CITF applications for simple or less complicated cases is timely completed and seek relevant VSCs' advice on complicated cases or cases involving adoption of new technologies as early as practicable (paras. 2.5 to 2.8).

4. *Scope for improvement in maintaining the pre-approved lists.* With a view to simplifying and expediting the CITF application process, CITF Secretariat has drawn up lists of pre-approved items for ACT and BIM (para. 2.14). Audit noted that:

- (a) the criteria for delisting pre-approved items were not clearly spelt out in CITF's operation manual (para. 2.19(a));

Executive Summary

- (b) as of January 2023, of the 67 pre-approved items delisted during October 2018 to September 2022, there were no documentary evidence showing that the delisting of 18 items had been reviewed by VSCs (para. 2.19(b)); and
 - (c) of the 596 pre-approved items in the pre-approved lists as of September 2022, 258 (43%) items had not been adopted under CITF projects since the enlisting of individual items, of which 80 (31%) items had been included in the pre-approved lists for more than 3 years and up to 4 years. According to DEVB, it was the decision of MC and VSCs that as long as the pre-approved items were regarded as still relevant and beneficial to the industry, they should continue to be kept on the pre-approved lists, even there was no or only a small number of CITF applications received for such items. In Audit's view, DEVB needs to step up promotion of pre-approved items with a view to encouraging their adoption in CITF projects (para. 2.19(c)).
5. ***Need to ensure that the pre-approved lists on CITF's website are accurate and up-to-date.*** Audit noted that: (a) while the update of pre-approved lists was approved by MC in November 2022, the relevant pre-approved lists on CITF's website were only updated in January 2023; and (b) as of November 2022, while 634 pre-approved items in the pre-approved lists had been approved by MC, only 622 pre-approved items were found in the pre-approved lists published on CITF's website (para 2.20).

Funding disbursement and monitoring of approved projects

6. According to DEVB, approved funding will be disbursed to successful applicants on a reimbursement basis and upon fulfilment of all the terms and conditions of CITF. For technology adoption, in general, reimbursement will be made in two instalments (i.e. 80% and 20% of the approved funding will be paid under the first and final instalment respectively). For manpower development, reimbursement will be made within two years from the dates of notification of approval of application. As of September 2022, of the 2,760 approved projects with total approved grants of \$767 million, funding disbursements of \$376 million (49%) had been made for 1,946 projects (1,928 technology adoption projects and 18 manpower development projects) (paras. 3.2, 3.3 and 3.6).

Executive Summary

7. *Scope for improvement in monitoring the submission of disbursement requests.* Audit noted the following issues:

- (a) *Timeframe for submission of disbursement requests.* According to CITF's "Guide to Application" and terms and conditions, in general, successful applicants should submit disbursement requests for the first instalment of approved funding for technology adoption projects within 3 months from the dates of notification of approval of application. Audit noted that some successful applicants took a longer time in submitting disbursement requests. For example, regarding the 1,928 projects related to technology adoption with funding disbursement made, the first disbursement requests of 908 (47% of 1,928) projects were submitted by the successful applicants more than 3 months and up to 2.4 years (averaging 6.5 months) from the dates of notification of approval of application. According to DEVB, the 3-month timeframe for submission of first disbursement request serves as a recommended timeframe to encourage applicants' early submission of disbursement requests and a benchmark for CITF Secretariat to trigger the tracking and reminder system (see (b) below) when the applicants have already procured the products. Having regard to the policy objectives of CITF and experience gained in the implementation of CITF in the past few years, DEVB has planned to review the 3-month timeframe in the overall review of CITF, which is scheduled for completion in June 2023. In Audit's view, DEVB needs to complete the review as scheduled and continue to take measures to closely monitor the submission of disbursement requests by successful applicants. In this connection, Audit also noted that there is no specific timeframe on submission of final disbursement requests for technology adoption projects, while a timeframe of two years was set for manpower development projects (paras. 3.5, 3.6, 3.8 and 3.9); and
- (b) *Tracking and reminder system.* A comprehensive tracking and reminder system for monitoring the progress and issuing reminder letters to successful applicants for technology adoption projects was established in July 2020. Audit noted that: (i) there was no readily available information on the issuance of reminders and warning letters, and the follow-up actions taken; and (ii) the system did not cover manpower development projects (paras. 3.10 and 3.11).

Executive Summary

8. *Need to take measures to ensure the timely processing of disbursement requests.* According to CITF Secretariat, since April 2020, the processing of disbursement requests would normally be completed within 30 calendar days upon receiving complete information. From April 2020 to September 2022, CITF Secretariat received 3,664 disbursement requests submitted by successful applicants. Audit noted that, as of September 2022, of these 3,664 disbursement requests: (a) 2,970 (81%) were approved by CITF Secretariat. For 137 (5% of 2,970) disbursement requests, the time taken in completing the processing of them (i.e. time elapsed between the dates of receipt of complete information and the dates of approval) was more than 30 days and up to 8.2 months; and (b) 516 (14%) were being processed by CITF Secretariat, of which 389 (75% of 516) were received more than 30 days ago (paras. 3.13 and 3.14).

9. *Need to take measures to ensure the timely submission of completion reports.* According to the terms and conditions of CITF, the successful applicants will be required to submit completion reports to CITF Secretariat within twelve months from the dates of the first disbursement request for approved technology adoption projects and nine months upon the completion of the approved manpower development projects. The completion reports must include details of the results, performance, achievements and/or evaluation of the approved projects. As of September 2022, there were a total of 1,009 approved projects due for submission of completion reports. Audit noted that: (a) completion reports had not been received for 596 (59%) projects, which had been overdue for 1 day to 3.2 years (averaging about 1 year); and (b) completion reports had been received for 413 (41%) projects, of which completion reports of 278 (67%) projects were submitted 1 day to 2.2 years (averaging 4.8 months) after the required deadlines. According to DEVB, it is noted that successful applicants often need more time to operate the technologies for a reasonable period after their procurement and installation in order to know and be able to set out in the completion reports the benefits brought about by the technologies to their operation. DEVB has planned to review the timeframe for submission of completion report in its overall review of CITF, which is scheduled for completion in June 2023. In Audit's view, DEVB needs to complete the review as scheduled and take measures to ensure the timely submission of completion reports by successful applicants (paras. 3.19 to 3.22).

Other related issues

10. *Need to strengthen regulation over matters concerning the safeguarding of national security.* The Law of the People's Republic of China on Safeguarding National Security in the Hong Kong Special Administrative Region was implemented on 30 June 2020. The Law stipulates that the Government of the Hong Kong Special Administrative Region shall take necessary measures to strengthen public communication, guidance, supervision and regulation over matters concerning national security, including those relating to schools, universities, social organisations, the media, and the Internet. Audit noted that, as of January 2023, the terms and conditions of CITF had not incorporated guidelines and requirements related to the safeguarding of national security. According to DEVB, it conducted a review on CITF in August 2022, with a view to strengthening the safeguards for matters concerning national security, and proposed some amendments to the terms and conditions of CITF. As of January 2023, it was seeking legal advice on the proposed amendments. In Audit's view, DEVB needs to, taking into account the legal advice, incorporate the amendments to the terms and conditions of CITF (paras. 4.2 to 4.4).

11. *Need to step up efforts in promoting CITF.* According to the paper seeking approval from the Finance Committee in June 2018 for setting up CITF, DEVB estimated that about 7,700 target beneficiaries (comprising 1,300 contractors, 5,900 subcontractors and 500 consultants) would be benefited from the technology adoption aspect under CITF. However, from October 2018 to September 2022, there were only 1,140 (15% of 7,700) beneficiaries, mainly comprising 211 (16% of 1,300) contractors, 737 (12% of 5,900) subcontractors and 188 (38% of 500) consultants, submitted applications under CITF. In Audit's view, DEVB needs to step up efforts in promoting CITF to eligible applicants (para. 4.8).

12. *Scope for improvement in making declaration of interests.* SC adopts a two-tier reporting system. The chairperson and members of SC shall register in writing their personal interests when they first join the committee, and annually thereafter. Besides, the chairperson and members need to report conflict of interests as and when it arises at meeting. Audit noted that while DEVB had requested the chairperson and members of SC to declare their personal interests in the first years of Terms 1, 2 and 3, it did not request them to declare their personal interests in the second year of Terms 1 and 2 (i.e. in 2019 and 2021). In the event, annual declaration forms were not received from the chairperson and members of SC in 2019 and 2021 (paras. 4.15 and 4.16).

Executive Summary

13. ***Need to timely submit the required documents to SC.*** According to MoC, MC should submit to SC an annual plan and the associated annual budget for the next financial year by the end of June in each financial year. CIC should submit audited financial statements of CITF for the last financial year to SC within six months after the end of the last financial year. Audit noted that: (a) the annual plans and budgets of 2020 to 2023 were all not submitted for SC's approval within the required timeframe, with delays ranging from 18 days to 14.5 months (averaging 7.2 months); and (b) the audited financial statements of 2020 and 2021 were not submitted to SC within the required timeframe. They were submitted in September 2021 and July 2022 respectively (i.e. more than six months after the end of the last financial year of 2020 and 2021) (paras. 4.21 and 4.22).

14. ***Need to closely monitor the progress of development of Data Administration and Management System (DAMS).*** With a view to enhancing data and report generation quality, and efficiency of processing applications, CIC engaged a contractor in 2021 to design and develop DAMS, which was targeted for completion by December 2022. Audit noted that, as of January 2023, DAMS was still not ready for use. According to DEVB, the expected launch date has been deferred to the second quarter of 2023 (paras. 4.32 and 4.33).

15. ***Need to keep under review the performance and achievement of CITF.*** Audit noted the following issues:

- (a) ***Need to compile management reports based on completion reports of projects.*** Audit noted that CITF Secretariat did not compile management reports based on the completion reports of projects (e.g. summarising the performance and achievement of completed projects, and comments of beneficiaries) (para. 4.35); and
- (b) ***Need to keep under review the implementation of new funding schemes.*** Since 1 January 2022, 4 new funding schemes (e.g. pioneering application related to ACT, BIM project-based coaching and BIM Viewer Collaborative Training Scheme) have been introduced under CITF. Audit noted that, as of December 2022 (i.e. 12 months after the introduction of the new funding schemes), only 27 applications had been received (paras. 4.37 and 4.38).

Executive Summary

Audit recommendations

16. Audit recommendations are made in the respective sections of this Audit Report. Only the key ones are highlighted in this Executive Summary. Audit has *recommended* that the Secretary for Development should:

Processing of applications

- (a) take measures to ensure that the processing of CITF applications for simple or less complicated cases is timely completed and seek relevant VSCs' advice on complicated cases or cases involving adoption of new technologies as early as practicable (para. 2.12(a) and (b));
- (b) spell out clearly the criteria for delisting pre-approved items in CITF's operation manual and take further measures to ensure that all the delisting of pre-approved items is reviewed by VSCs (para. 2.22(b) and (c));
- (c) step up promotion of pre-approved items, particularly those items with low adoption rates, with a view to encouraging their adoption in CITF projects (para. 2.22(d));
- (d) take measures to ensure that the pre-approved lists on CITF's website are accurate and up-to-date (para. 2.22(e));

Funding disbursement and monitoring of approved projects

- (e) regarding the submission of disbursement requests for technology adoption projects:
 - (i) complete the review on the 3-month timeframe for submission of the first disbursement requests by successful applicants as scheduled and continue to take measures to closely monitor the submission of disbursement requests (para. 3.16(a)(i) and (ii)); and
 - (ii) consider setting a specific timeframe on submission of final disbursement requests by successful applicants (para. 3.16(a)(iii));

Executive Summary

- (f) regarding the tracking and reminder system, enhance documentation on the issue of reminders and warning letters and the follow-up actions taken, and consider using the system for monitoring approved manpower development projects (para. 3.16(b)(i) and (iii));
- (g) take measures to ensure that disbursement requests submitted by successful applicants are timely processed by CITF Secretariat in accordance with the stipulated time pledge (para. 3.16(c));
- (h) complete the review on the timeframe for submitting the completion reports by successful applicants as scheduled and take measures to ensure the timely submission of completion reports (para. 3.37(a)(i) and (ii));

Other related issues

- (i) taking into account the legal advice, incorporate the amendments to the terms and conditions of CITF relating to strengthening regulation over matters concerning the safeguarding of national security (para. 4.5);
- (j) step up efforts in promoting CITF to eligible applicants (particularly those who have not made applications before) (para. 4.10(a));
- (k) take measures to ensure that the chairperson and members of SC declare interests upon appointment and annually thereafter in a timely manner in accordance with CITF requirements (para. 4.24(b)(i));
- (l) strengthen measures to ensure the timely submission of required documents to SC by both MC and CIC in accordance with the timeframes set out in MoC (para. 4.24(c));
- (m) closely monitor the progress of the development of DAMS to ensure its early implementation (para. 4.40(b));
- (n) take measures to compile management reports based on the completion reports of projects on a regular basis (para. 4.40(c)); and

Executive Summary

- (o) **keep under review the implementation of the new funding schemes introduced in January 2022 (para. 4.40(e)).**

Response from the Government

- 17. The Secretary for Development agrees with the audit recommendations.

PART 1: INTRODUCTION

1.1 This PART describes the background to the audit and outlines the audit objectives and scope.

Background

1.2 In the 2018-19 Budget, the Financial Secretary proposed to set up a \$1 billion Construction Innovation and Technology Fund (CITF) to encourage wider adoption of innovative construction methods and technology in the construction industry, and to build up the capacity of construction professionals to leverage innovation for continuous improvement, with a view to promoting productivity, uplifting build quality, improving site safety and enhancing environmental performance.

1.3 With the approval of the Finance Committee of the Legislative Council (LegCo) in July 2018, the Development Bureau (DEVB) launched the \$1 billion CITF in October 2018. In the 2022-23 Budget Speech, it was proposed to inject another \$1.2 billion to CITF for its ongoing operation and implementation of enhancement measures launched in January 2022. Such injection was approved by LegCo in the context of the Appropriation Bill 2022 in May 2022.

1.4 CITF has been open for application since October 2018 (Note 1). According to DEVB, CITF covers two aspects, as follows:

- (a) ***Technology adoption.*** Funding is used to support the adoption of technologies (Note 2) with proven effectiveness in boosting productivity, uplifting build quality, improving site safety or enhancing environmental

Note 1: *In seeking approval of the Finance Committee in June 2018 for the establishment of CITF, it was initially proposed that CITF would be open for application for five years (2018-19 to 2022-23). According to DEVB, the funding injection of \$1.2 billion to CITF was approved in May 2022 to support the ongoing operation of CITF for further five years from 2023.*

Note 2: *Adoption of technologies include machinery, equipment and software developed within or outside Hong Kong. Research and development projects are excluded.*

Introduction

performance, through leveraging automation, industrialisation and digitisation rather than sheer innovative management practices. Besides, the Fund is open for application from all stakeholders involved in project design and implementation (Note 3). Technology adoption funded by CITF includes:

- (i) Advanced Construction Technologies (ACT) (see Photograph 1 for an example of ACT);
- (ii) Building Information Modelling (BIM) (see Photograph 2 for an example of BIM);
- (iii) Modular Integrated Construction (MiC) (see Photograph 3 for an example of MiC); and
- (iv) Prefabricated Steel Reinforcing Bar (STB) (see Photograph 4 for an example of STB); and

Note 3: *Target beneficiaries include: (a) levy-paying contractors under the Construction Industry Council Ordinance (Cap. 587) in the past 24 months at the time of application; (b) registered subcontractors under the Voluntary Subcontractor Registration Scheme of the Construction Industry Council; (c) consultants on the consultants lists maintained by the Government and the professional bodies; and (d) other players in the construction process (to be considered on a case-by-case basis).*

Photograph 1

Transportation machine at construction site



Source: DEVB records

Photograph 2

A three-dimensional model produced by BIM software



Source: DEVB records

Photograph 3

Lifting plants and modules of MiC



Source: DEVB records

Photograph 4

STB used in construction site



Source: DEVB records

- (b) ***Manpower development.*** Funding is used to support existing industry practitioners and prospective construction professionals (Note 4) to take part in industry-specific empowerment programmes (Note 5) focusing on construction innovation and technology (see Photograph 5 for an example of manpower development).

Photograph 5

An international conference held in Hong Kong



Source: DEVB records

Funding arrangement

1.5 According to the paper submitted to the Finance Committee by DEVB in June 2018 on the establishment of CITF, to ensure prudent use of CITF, the following guiding principles would be adopted:

Note 4: *Target beneficiaries include: (a) full-time undergraduates and post-graduates in construction-related disciplines of local higher education institutions; (b) construction professionals holding membership of professional class or above of construction-related professional bodies; (c) technicians and site supervisory personnel; and (d) registered skilled workers under the Construction Workers Registration Ordinance (Cap. 583).*

Note 5: *Examples of empowerment programmes include training courses, workshops, visits, and conferences organised locally or outside Hong Kong.*

Introduction

- (a) **Technology adoption.** As users' commitment is of paramount importance to achieve positive outcome, funding support is mainly provided on a matching basis, with Government sharing the main bulk of the costs involved (Note 6) up to a specified ceiling (Note 7). In the interest of proper funding control, CITF applicants are required to obtain prior approval for the proposed innovation or technology before committing any expenditure on it (Note 8). Funding will be provided on a reimbursement basis such that successful applicants will be required to provide supporting documents as proof of purchase to facilitate disbursement of funding; and
- (b) **Manpower development.** Funding will be provided on a reimbursement basis subject to prior approval (see Note 8) up to the specified ceiling for each of the empowerment programmes (see Note 7).

Note 6: According to DEVB, funding is provided to the successful applicant on a 70% matching basis (i.e. CITF will bear up to 70% of the total costs of the approved CITF project). On the other hand, to encourage the use of local technological innovations and products, a higher matching ratio of 80% is allowed.

Note 7: According to DEVB, to benefit more construction companies and support a wider array of innovative technologies, different ceilings on the financial support for individual applications (one application for one technology) and the cumulative total of funding provided to each applicant are imposed. For example, funding ceiling of \$1.2 million per applicant is imposed on BIM adoption, \$14 million per project is imposed on MiC adoption and \$1 million per conference is imposed on international conference in Hong Kong under manpower development. The ceilings are decided by the Steering Committee on Construction Innovation and Technology Fund (see para. 1.9) and reviewed from time to time having regard to industry response and the costs of innovative technologies suitable for Hong Kong. Enterprises registered as different business under the Business Registration Ordinance (Cap. 310) but having the same owner/shareholder holding 30% or more ownership in such enterprises would be treated as one single entity in counting the funding ceiling per applicant.

Note 8: According to DEVB, in general, expenses incurred before obtaining prior approval will not be reimbursed. With effect from April 2019, applicants can commit expenditures after submitting applications for CITF and before the issuance of notification of approval by CITF Secretariat, on the condition that approval should not be presumed and the applicants should shoulder the cost of the committed expenditure if their applications are eventually rejected, in whole or in part.

CITF Secretariat

1.6 In view of the knowledge and expertise on construction of the Construction Industry Council (CIC — Note 9) and its close relationship with construction stakeholders, DEVB commissioned CIC as the implementation partner to implement, manage and administer CITF with effect from the date of signing of the Memorandum of Cooperation (MoC — Note 10) in October 2018. According to MoC, CIC would set up a dedicated CITF office (i.e. CITF Secretariat) to provide executive, administrative and secretariat support to the operations of CITF, including processing of applications, monitoring the progress of approved projects, fund disbursement and promotion.

1.7 According to MoC, CIC maintains the CITF funding in a designated bank account and keeps separate books for CITF. Any funding that is not immediately required by CIC for the performance of its roles and responsibilities under MoC may be invested in accordance with Section 24(a) of the Construction Industry Council Ordinance (Cap. 587) (Note 11). Besides, CIC would absorb and bear all manpower and administration costs arising from the implementation, management and administration of CITF (Note 12).

Note 9: *CIC is a statutory body established under the Construction Industry Council Ordinance in February 2007. It comprises representatives from industry employers, professionals, academics, contractors, workers, independent persons and government officials. Its main functions are to forge consensus on long-term strategic issues, convey the industry's needs and aspirations to the Government as well as provide a communication channel for the Government to solicit advice on all construction-related matters.*

Note 10: *MoC sets out the understanding reached between DEVB and CIC on the regulatory regime and governance for CITF, the respective roles and responsibilities of DEVB and CIC, and other associated arrangements. It is valid for five years (i.e. until September 2023) and subject to extension by DEVB for a further term by giving not less than six months' written notice to CIC before 31 March 2023. According to DEVB, preparation work for extension of MoC is underway.*

Note 11: *According to the Construction Industry Council Ordinance, funding may be deposited on fixed term or call deposit or in a savings account.*

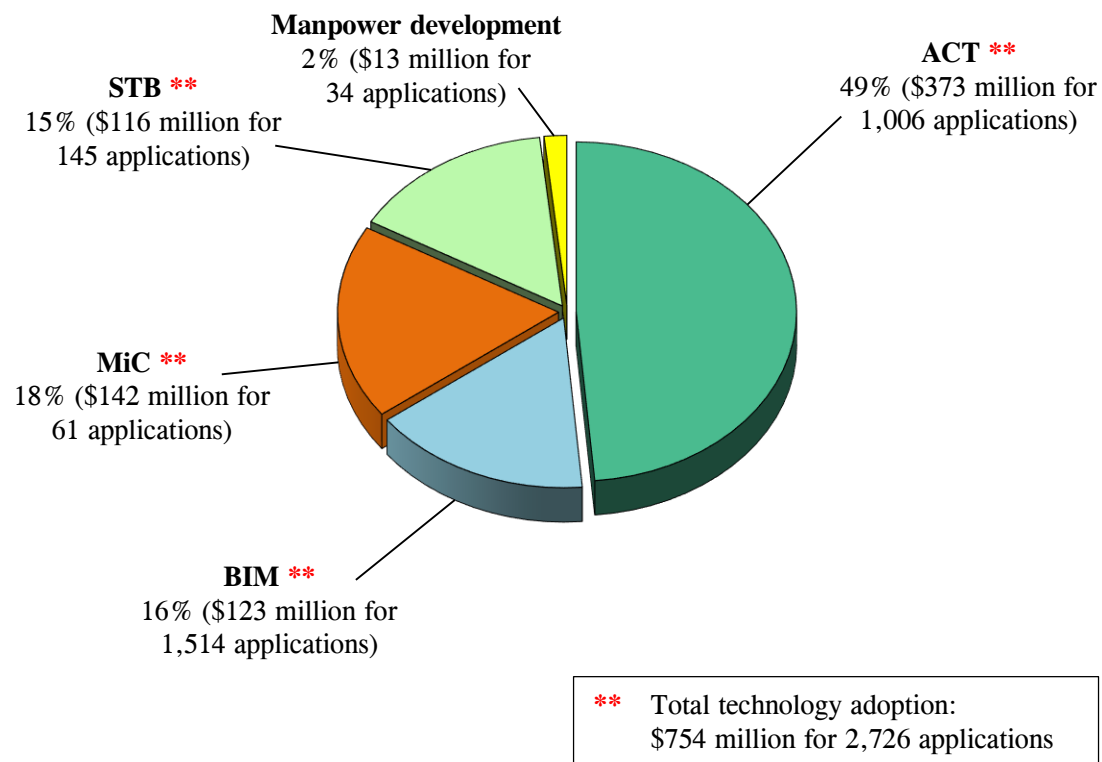
Note 12: *According to CIC, in 2021, it incurred \$5.8 million and \$2.2 million on staff cost and other administration cost respectively. As of September 2022, CITF Secretariat had 13 CIC staff.*

Introduction

1.8 Since the launch of CITF in October 2018 and up to September 2022, 2,760 applications had been approved under CITF with approved grants of \$767 million, of which \$754 million (98%) had been granted to 2,726 (99%) applications related to technology adoption and \$13 million (2%) had been granted to 34 (1%) applications related to manpower development (see Figure 1). According to DEVB, as of September 2022, of the cumulative approved grants of \$767 million, \$376 million (49%) had been disbursed to the applicants (see Figure 2).

Figure 1

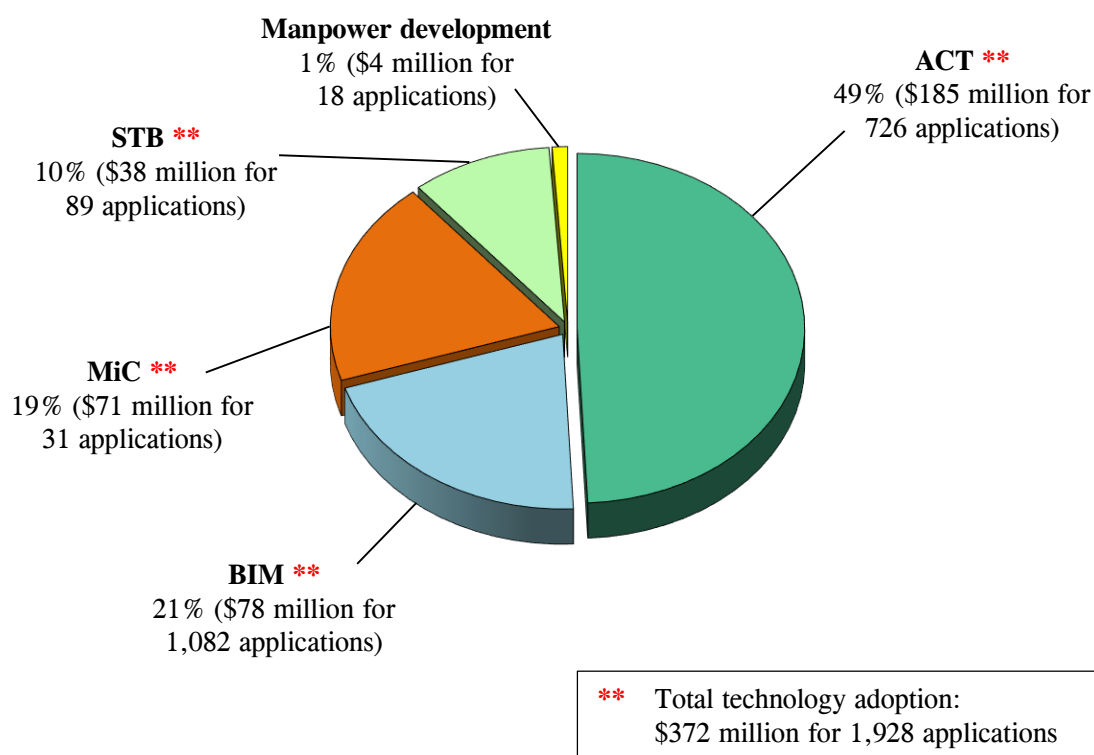
**Approved grants by categories
(October 2018 to September 2022)**



Source: DEVB records

Figure 2

**Disbursed grants by categories
(October 2018 to September 2022)**



Source: DEVB records

Committees and sub-committees on CITF

1.9 ***Steering Committee on Construction Innovation and Technology Fund (SC)***. SC was set up by DEVB in September 2018 to provide overall steer and advise the Government on the key parameters and implementation of CITF, and assist in monitoring the use and cost effectiveness of CITF (Note 13). According to DEVB, SC meets regularly (e.g. quarterly) to monitor usage of CITF and, where necessary, make adjustments to the key operational arrangements to cater for the

Note 13: According to the terms of reference of SC, SC is to: (a) steer the implementation of CITF, including its scope, eligibility and form of support; (b) monitor the utilisation of the Fund; (c) review the efficacy of the Fund in upgrading the industry in terms of innovation and technology; and (d) consider any other related matters to facilitate the industry to adopt technology and enhance manpower development.

Introduction

latest industry developments. SC is chaired by the Permanent Secretary for Development (Works) (Note 14) and comprises members from industry stakeholders and major government departments (e.g. the Buildings Department and the Housing Department). SC members are appointed by the Secretary for Development for a term of two years. The current term is from 7 September 2022 to 6 September 2024. As of September 2022, SC comprised a chairperson, 13 non-official members and 2 ex-officio members (Note 15).

1.10 ***Management Committee on Construction Innovation and Technology Fund (MC)***. MC was set up by CIC to formulate the operational framework of CITF and oversee its day-to-day operations. According to MoC, MC will regularly update SC on the progress of CITF and submit reporting materials of CITF (e.g. annual plan, annual budget, year-end report, audited financial statements and regular/ad-hoc returns) to SC and/or DEVB. MC comprises council members of CIC and government officials, who are appointed for a term of two years. The current term is from 7 September 2022 to 6 September 2024. As of September 2022, MC comprised a chairperson, 6 non-official members and 1 ex-officio member (i.e. a representative from DEVB).

1.11 ***Vetting Sub-committees on Construction Innovation and Technology Fund (VSCs)***. MC is further supported by four VSCs in providing expert advice on specialised areas, reviewing and approving the relevant pre-approved product scheme applications, and vetting and approving the relevant CITF applications, as follows:

- (a) ***Advanced Construction Technologies Vetting Sub-committee (ACTVSC)***. ACTVSC comprises experts from the ACT area, who are appointed for a term of two years. The current term is from 1 September 2022 to 31 August 2024. As of September 2022, ACTVSC comprised a chairperson, 8 non-official members and 2 ex-officio members (i.e. a representative from DEVB and a representative from the Electrical and Mechanical Services Department);

Note 14: *According to Financial Circular No. 1/2004, the Controlling Officer (i.e. the Permanent Secretary for Development (Works)) is ultimately responsible and accountable for the proper use of funds under the Controlling Officer's control.*

Note 15: *The 2 ex-officio members are the Director of Buildings and the Deputy Director (Development and Construction) of the Housing Department.*

- (b) ***Building Information Modelling Vetting Sub-committee (BIMVSC).*** BIMVSC comprises experts from the BIM area, who are appointed for a term of two years. The current term is from 1 September 2022 to 31 August 2024. As of September 2022, BIMVSC comprised a chairperson, 8 non-official members and 2 ex-officio members (i.e. a representative from DEVB and a representative from the Buildings Department);
- (c) ***Modular Integrated Construction Vetting Sub-committee (MiCVSC).*** MiCVSC comprises experts from the MiC area, who are appointed for a term of two years. The current term is from 1 September 2022 to 31 August 2024. As of September 2022, MiCVSC comprised a chairperson, 7 non-official members and 2 ex-officio members (i.e. a representative from DEVB and a representative from the Buildings Department); and
- (d) ***Manpower Development Vetting Sub-committee (MDVSC).*** MDVSC comprises experts from the manpower development area, who are appointed for a term of two years. The current term is from 1 September 2022 to 31 August 2024. As of September 2022, MDVSC comprised a chairperson, 7 non-official members and 2 ex-officio members (i.e. a representative from DEVB and a representative from the Civil Engineering and Development Department).

Administration of CITF by DEVB

1.12 According to MoC, DEVB is the Government's policy bureau initiating and sustaining CITF. Two sections (i.e. Policy and Development Section and Works Policies 1 Section) of DEVB, among other duties, are responsible for providing policy support to the implementation of CITF and overseeing the operation of CITF. As of September 2022, 5 staff of DEVB, among other duties, were involved in the

Introduction

administration of CITF (Note 16). An extract of DEVB's organisation chart as at 30 September 2022 is at Appendix A.

Audit review

1.13 In October 2022, the Audit Commission (Audit) commenced a review of CITF. The audit review has focused on the following areas:

- (a) processing of applications (PART 2);
- (b) funding disbursement and monitoring of approved projects (PART 3); and
- (c) other related issues (PART 4).

Audit has found room for improvement in the above areas and has made a number of recommendations to address the issues.

Acknowledgement

1.14 Audit would like to acknowledge with gratitude the full cooperation of the staff of DEVB during the course of the audit review.

Note 16: *According to DEVB, there were 8 other staff from DEVB (comprising 1 staff from the Works Policies 1 Section, 2 staff from the Works Policies 3 Section and 5 staff from the Project Strategy and Governance Office), among other duties, responsible for providing support to VSCs in vetting and approving relevant CITF applications (see para. 1.11). As all staff involved in duties related to CITF also carried out other duties, there was no breakdown of the staff resources solely responsible for the administration of CITF.*

PART 2: PROCESSING OF APPLICATIONS

2.1 This PART examines the processing of CITF applications, focusing on:

- (a) vetting of applications (paras. 2.2 to 2.13); and
- (b) maintenance of pre-approved lists (paras. 2.14 to 2.23).

Vetting of applications

2.2 According to CITF's "Guide to Application", upon receipt of CITF applications via CITF Application Portal on CITF's website (Note 17), CITF Secretariat will check and assess the applications for adequacy of information required. The applicants may be requested to provide supplementary information from time to time to facilitate the application vetting process. The applications will be passed to relevant VSCs for review and approval (Note 18). The vetting process is overseen by both MC and SC. The applicants will then be informed of their application results (i.e. rejected or approved) by CITF Secretariat (see Figure 3).

Note 17: *According to CITF Secretariat, all CITF applications are made online via CITF Application Portal on CITF's website where applicants are required to register an account.*

Note 18: *According to CITF Secretariat, in vetting the CITF applications, VSCs conducted vetting in accordance with the designated set of vetting criteria developed by the VSC concerned. The vetting criteria were determined according to the nature of projects involved, as well as the outcomes and deliverables expected to be derived from relevant projects. Decisions made on CITF applications are final and not subject to appeal. Applicants are informed of the reasons for rejecting the applications by CITF Secretariat. Prior to August 2022, all CITF applications were reviewed and approved by relevant VSCs. Since August 2022, the application approval procedures have been streamlined and applications including those related to pre-approved items for ACT and BIM (see para. 2.14) of \$0.8 million per application or below would be approved by CITF Secretariat, while the remaining applications would be approved by relevant VSCs. According to DEVB, summary of funding applications approved by CITF Secretariat would be submitted to VSCs concerned on a monthly basis for monitoring purpose. Besides, all decisions of CITF Secretariat will be compiled into reports for submission to MC at least once every six months for MC's review and advice on necessary refinements to the procedures.*

Figure 3

General procedures for processing CITF applications

<i>Submission of applications</i>	• Registration for accounts of CITF Application Portal on CITF's website by applicants • Completion and submission of online applications via CITF Application Portal by applicants
<i>Checking of applications</i>	
<i>Vetting of applications</i>	
<i>Notification of results</i>	• Informing the applicants of their application results by CITF Secretariat

Source: DEVB records

2.3 From October 2018 to September 2022, CITF Secretariat received 3,907 CITF applications. Table 1 shows the number of CITF applications of each category received by CITF Secretariat from October 2018 to September 2022.

Table 1

**Number of CITF applications (by category) received
(October 2018 to September 2022)**

Aspect	Category	Number of applications					
		2018 (since October)	2019	2020	2021	2022 (up to September)	Total
Technology adoption	ACT	18 (14 %)	300 (32 %)	434 (43 %)	410 (42 %)	405 (47 %)	1,567 (40 %)
	BIM	101 (79 %)	534 (57 %)	472 (47 %)	441 (46 %)	392 (45 %)	1,940 (50 %)
	MiC	5 (4 %)	31 (3 %)	38 (4 %)	59 (6 %)	33 (4 %)	166 (4 %)
	STB	— (0 %)	41 (4 %)	49 (5 %)	44 (5 %)	31 (3 %)	165 (4 %)
Sub-total		124 (97 %)	906 (96 %)	993 (99 %)	954 (99 %)	861 (99 %)	3,838 (98 %)
Manpower development		4 (3 %)	39 (4 %)	8 (1 %)	13 (1 %)	5 (1 %)	69 (2 %)
Total		128 (100 %)	945 (100 %)	1,001 (100 %)	967 (100 %)	866 (100 %)	3,907 (100 %)

Source: DEVB records

2.4 Of the 3,907 CITF applications received from October 2018 to September 2022, as of September 2022:

- (a) 2,760 (71 %) applications were approved;
- (b) 210 (5 %) applications were rejected;

Processing of applications

- (c) 580 (15%) applications were withdrawn by the applicants (Note 19); and
- (d) 357 (9%) applications were being processed by CITF Secretariat. In particular, 17 (5% of 357) applications were received more than one year ago.

Time pledge for completing the processing of applications not met in some cases

2.5 According to CITF's "Guide to Application" and website:

- (a) under normal circumstances, upon receipt of CITF applications, CITF Secretariat will complete the processing of valid applications and notify applicants of the application results:
 - (i) within 60 calendar days from the dates of receipt of the duly completed applications accompanied by all necessary documentation as stipulated on CITF's "Guide to Application" for non pre-approved items; or
 - (ii) within 30 calendar days from the dates of receipt of the duly completed applications accompanied by all necessary documentation as stipulated on CITF's website for pre-approved items (see para. 2.14); and
- (b) applicants should ensure that their applications are submitted to CITF Secretariat together with supporting documents as detailed in CITF's "Guide to Application" and "Application Framework".

2.6 As of September 2022, CITF Secretariat completed the processing of 2,970 CITF applications (2,760 approved applications + 210 rejected applications —

Note 19: *According to DEVB, 580 withdrawn applications comprised 331 applications withdrawn prior to approval and 249 applications withdrawn after the applications were approved due to, for example, change in business plan (e.g. business environment, operational and training needs) and discontinuation of approved products.*

see para. 2.4(a) and (b)). Regarding the time taken by CITF Secretariat in completing the processing of these 2,970 applications (from the date of receipt of duly completed applications to the date of notifying the applicants the application results), Audit noted that, as of September 2022:

- (a) of the 2,337 applications with 30-day time pledge, the time taken to complete the processing of 245 (10.5%) applications were more than 30 days, ranging from 31 to 135 days (averaging 40 days) (see Table 2); and
- (b) of the 633 applications with 60-day time pledge, the time taken to complete the processing of 39 (6.2%) applications were more than 60 days, ranging from 61 to 182 days (averaging 104 days) (see Table 2).

Table 2

**Time taken in completing the processing of CITF applications
(September 2022)**

Time taken	Number of applications	
<i>(a) Application with 30-day time pledge</i>		
30 days or less	2,092	(89.5%)
31 to 60 days	235	(10.0%)
61 to 90 days	7	(0.3%)
More than 90 days and up to 135 days	3	(0.2%)
Total	2,337 (100.0%)	
<i>(b) Application with 60-day time pledge</i>		
60 days or less	594	(93.8%)
61 to 90 days	17	(2.7%)
More than 90 days and up to 182 days	22	(3.5%)
Total	633 (100.0%)	
Overall	2,970	

Source: DEVB records

Processing of applications

2.7 According to DEVB:

- (a) regarding the 25 (3 under item (a) and 22 under item (b) in Table 2 in para. 2.6) applications with longer processing time of over 90 days, the majority of them were related to adoption of new technologies (e.g. MiC) or circumstances new to VSCs in the early stage of adoption in the industry and the projects involved were more complicated. VSCs considered that there was a need to allocate more time for a thorough deliberation of every application and to seek more information from the applicants for the relevant VSCs' consideration, with a view to ensuring the prudent use of public money and providing necessary advice to support the smooth implementation of the projects. These cases all happened from 2019 to 2021 and there was no such case in 2022;
- (b) for all these cases, CITF Secretariat had informed the applicants by phone call that extra time was required in order to consider these special cases thoroughly; and
- (c) with the thorough deliberation by VSCs in the early stage of these technologies, the time taken in processing similar applications was significantly reduced in subsequent years.

2.8 In Audit's view, DEVB needs to:

- (a) for simple or less complicated cases (e.g. items on pre-approved lists) of CITF applications, take measures to ensure that the processing of these applications is timely completed and the applicants are notified of the application results in accordance with the stipulated time pledge; and
- (b) for special cases of CITF applications (e.g. complicated cases or cases involving adoption of new technologies), take measures to seek relevant VSCs' advice on these applications as early as practicable.

Scope for enhancing promotion to facilitate applicants' understanding of application requirements

2.9 Audit noted that, of the 2,970 applications with processing completed (see para. 2.6), 210 (7%) applications were rejected by CITF Secretariat. The rejection rate for different categories of CITF applications varies from 1% to 45% (see Table 3). In particular, the rejection rate for applications related to MiC adoption increased from 35% in 2019 to 58% in 2022 (up to September).

Table 3

**Rejection rate of CITF applications
(October 2018 to September 2022)**

Category	Number of applications		Rejection rate (c) = (b) ÷ (a) × 100%
	With processing completed (a)	Rejected (b)	
ACT	1,118	112	10%
BIM	1,548	34	2%
MiC	111	50	45%
STB	147	2	1%
Manpower development	46	12	26%
Overall	2,970	210	7%

Source: DEVB records

2.10 According to DEVB:

- (a) applicants are informed of the reasons for rejecting the applications by CITF Secretariat and the major reasons included:
 - (i) the proposed products were outside the subsidy scope of CITF, not being regarded as innovative or not demonstrating that they could achieve the primary objectives of CITF;

Processing of applications

- (ii) the applicants were not eligible for CITF;
 - (iii) relevant expenses had been committed before the application was submitted; and
 - (iv) the funding ceiling was exceeded; and
- (b) for the 50 rejected applications related to MiC adoption (see Table 3 in para. 2.9), the majority of them were rejected as they were not eligible MiC projects. Upon DEVB's publicity of the enhanced funding support for MiC adoption and the eligibility for applying MiC projects since January 2022, the number of rejected cases had dropped in 2022.

2.11 In Audit's view, DEVB needs to continue to enhance promotion of CITF to facilitate applicants' understanding of the application requirements.

Audit recommendations

2.12 **Audit has *recommended* that the Secretary for Development should:**

- (a) **for simple or less complicated cases (e.g. items on pre-approved lists) of CITF applications, take measures to ensure that the processing of these applications is timely completed and the applicants are notified of the application results in accordance with the stipulated time pledge;**
- (b) **for special cases of CITF applications (e.g. complicated cases or cases involving adoption of new technologies), take measures to seek relevant VSCs' advice on these applications as early as practicable; and**
- (c) **continue to enhance promotion of CITF to facilitate applicants' understanding of the application requirements.**

Response from the Government

2.13 The Secretary for Development agrees with the audit recommendations. She has said that:

- (a) DEVB and CITF Secretariat will take further measures to ensure the timely processing of applications and continue promotion of CITF as recommended by Audit; and
- (b) DEVB noted that most of the past funding applications that required longer time to process were related to adoption of new technologies or new circumstances. DEVB and CITF Secretariat will devise measures to facilitate the relevant VSCs to have the necessary supplementary information regarding these more complicated and special cases for early processing of such cases.

Maintenance of pre-approved lists

2.14 With a view to simplifying and expediting the CITF application process, CITF Secretariat has drawn up lists of pre-approved items for ACT and BIM (i.e. BIM software and BIM training course). Applications for funding support for the pre-approved items in the pre-approved lists will be processed in a streamlined manner (see para. 2.5(a)(ii)).

2.15 Upon the launch of CITF in October 2018, there were 96 pre-approved items in the pre-approved lists. According to DEVB, during the period from October 2018 to September 2022, CITF Secretariat further enlisted 567 pre-approved items and delisted 67 pre-approved items. As a result, a total of 596 pre-approved items were found in the pre-approved lists as of September 2022 (see Table 4).

Table 4**Number of pre-approved items in the pre-approved lists
(September 2022)**

Category	Number of pre-approved items
ACT	300 (Note)
BIM software	84
BIM training course	212
Total	596

Source: DEVB records

Note: The number included 23 suspended items as the vendors were out of contact (see Note 22 to para. 2.16).

Scope for improvement in maintaining the pre-approved lists

2.16 Application for inclusion into the pre-approved lists under CITF is open to public. According to CITF's operation manual, CITF Secretariat will source, invite and screen innovative construction technologies (including machinery, equipment and software) which are applicable to Hong Kong's built environment (Note 20) and submit information on such technologies to relevant VSCs for examination and MC for approval for inclusion into the pre-approved lists. Relevant VSCs will conduct the vetting process in accordance with the assessment criteria for enlisting approved by MC (Note 21). Subject to further approval by MC, the pre-approved lists published on CITF's website will then be updated regularly. The pre-approved lists shall be reviewed by VSCs annually to cover areas including pre-approved items

Note 20: *According to CITF Secretariat (i.e. CIC), CIC has been at the forefront of adopting advanced technology and promoting wider adoption of technological tools to innovate industry practices.*

Note 21: *The assessment criteria for enlisting, which had been approved by MC, is mainly based on: (a) technical competence (e.g. product merits and effectiveness in enhancing productivity, quality, safety and environmental performance); and (b) applicability to industry at large.*

without any funding applications and applicants' feedback and comments on the pre-approved items after adoption (Note 22).

2.17 At the MC meeting of November 2021, MC members agreed that, in order to ensure that the pre-approved lists were maintained in an open and fair manner, reasonable justifications should be given to delisting technologies which were previously approved. In this connection, in reviewing the pre-approved lists, products without valid vendor contacts should be put on a suspension list. For products with insufficient technical merits, CITF Secretariat would notify the vendors with relevant VSCs' recommendations and allow two weeks for the vendors to stage objection and provide fresh justifications. Information would be resubmitted to relevant VSCs for re-assessment.

2.18 While CITF has pre-approved lists for ACT and BIM (see para. 2.14), there is no pre-approved list for MiC and STB. According to DEVB, the reasons are as follows:

- (a) **MiC.** At the MiCVSC meeting of November 2018, it was agreed that given all MiC systems are subject to approval by relevant authorities, CITF's pre-approved list for MiC should make reference to the "List of Pre-accepted MiC Systems/Components" of the Buildings Department and/or the approval by other government departments, instead of creating a separate CITF's pre-approved list. As the design of MiC modules has to be tailor-made to meet the needs of individual projects and the quotation details and project information required for MiC modules are much more complicated comparing with other categories of technology, every application related to MiC adoption needs to be considered by MiCVSC. It is thus not very practicable to adopt the aforesaid Building Department's list as the pre-approved list. Nevertheless, the list will be made reference to for expediting processing of applications; and

Note 22: *At the MC meeting of July 2020, it was agreed that the annual review of pre-approved lists would be conducted starting 2021. CITF Secretariat put up the pre-approved lists for review by VSCs in July 2021 and July 2022. In the event, a total of 24 pre-approved items were delisted and 23 pre-approved items were put on a suspension list (see para. 2.17).*

Processing of applications

- (b) **STB.** According to CITF’s “Guide to Application”, only STB procured from local steel prefabrication yards admitted on the “List of Approved Steel Reinforcing Bar Prefabrication Yards” (this list is hereinafter referred to as the Steel Reinforcing Bar Prefabrication Yards list) administered by the Civil Engineering and Development Department will be eligible for funding support. In practice, such list is de facto the pre-approved list for STB and CITF Secretariat has pledged, as a practice, to process applications related to STB in accordance with the 30-day time pledge (see para. 2.5(a)(ii)) and the processing time for such applications so far was about 16 days. In Audit’s view, there is merit for DEVB to consider formally adopting the Steel Reinforcing Bar Prefabrication Yards list as the pre-approved list for STB.

2.19 Regarding the pre-approved lists for ACT and BIM:

- (a) according to DEVB, it is the practice of CITF Secretariat to delist pre-approved items if such items no longer met the enlisting criteria (see Note 21 to para. 2.16), or negative feedback and comments on such items after adoption had been received from applicants. However, Audit noted that such criteria for delisting pre-approved items were not clearly spelt out in CITF’s operation manual. In Audit’s view, DEVB needs to spell out clearly such delisting criteria in CITF’s operation manual;
- (b) as of January 2023, of the 67 pre-approved items delisted during October 2018 to September 2022 (see para. 2.15), there were no documentary evidence showing that the delisting of 18 items had been reviewed by VSCs (Note 23). According to DEVB, the delisting of these 18 items was duly completed in response to the requests by the relevant suppliers whose consent is required for enlisting of items on the pre-approved lists. CITF Secretariat provided the relevant VSCs with the updated list of pre-approved items with these 18 items removed at the VSC meetings in July 2021 and July 2022. DEVB considers that it is more prudent for CITF Secretariat to report the delisting of these 18 items to VSCs by circulation or meeting before delisting. DEVB has reminded CITF Secretariat to follow this arrangement accordingly. In Audit’s view,

Note 23: *Of the 67 delisted items, 24 items had been reviewed under VSCs’ annual reviews in 2021 and 2022 (see Note 22 to para. 2.16) and 25 items had been reviewed by VSCs on ad hoc basis.*

DEVB needs to take further measures to ensure that all the delisting of pre-approved items is reviewed by VSCs; and

- (c) regarding the 596 pre-approved items (see Table 4 in para. 2.15) in the pre-approved lists as of September 2022:
 - (i) only 338 (57%) items had been adopted under CITF projects since the enlisting of individual items. 258 (43%) items had not been adopted under CITF projects since the enlisting of individual items, of which 80 (31%) items had been included in the pre-approved lists for more than 3 years and up to 4 years (see Table 5); and

Table 5

**Duration of pre-approved items not adopted under CITF projects
(September 2022)**

Category	Number of pre-approved items not adopted for a duration (Note) of:				
	1 year or less	More than 1 year and up to 2 years	More than 2 years and up to 3 years	More than 3 years and up to 4 years	Total
ACT	34 (22%)	29 (19%)	57 (37%)	33 (22%)	153 (100%)
BIM software	3 (9%)	7 (21%)	10 (30%)	13 (40%)	33 (100%)
BIM training course	6 (8%)	5 (7%)	27 (38%)	34 (47%)	72 (100%)
Total	43 (17%)	41 (16%)	94 (36%)	80 (31%)	258 (100%)

Source: DEVB records

Note: The duration is counted from the date of enlisting of individual pre-approved items until 30 September 2022.

- (ii) according to DEVB, the keeping of items relating to innovative technologies in the pre-approved lists is an important means to keep the industry apprised of the technologies and products that the industry is encouraged to adopt for enhancing productivity, and to apply funding from CITF for their adoption. Besides, with a view to enhancing the industry's understanding of innovative technologies and increasing the chance of their adoption in CITF projects, it was the decision of MC and VSCs that as long as the pre-approved items were regarded as still relevant and beneficial to the industry, they should continue to be kept on the pre-approved lists, even there was no or only a small number of CITF applications received for such items.

In Audit's view, DEVB needs to step up promotion of pre-approved items, particularly those items with low adoption rates, with a view to enhancing the industry's understanding of innovations and technologies and encouraging their adoption in CITF projects.

Need to ensure that the pre-approved lists on CITF's website are accurate and up-to-date

2.20 Audit noted that:

- (a) while the update of pre-approved lists was approved by MC in November 2022, the relevant pre-approved lists on CITF's website were only updated in January 2023; and
- (b) as of November 2022, while 634 pre-approved items in the pre-approved lists had been approved by MC, only 622 pre-approved items were found in the pre-approved lists published on CITF's website.

2.21 In Audit's view, DEVB needs to take measures to ensure that the pre-approved lists on CITF's website are accurate and up-to-date.

Audit recommendations

- 2.22 **Audit has *recommended* that the Secretary for Development should:**
- (a) **consider formally adopting the Steel Reinforcing Bar Prefabrication Yards list as the pre-approved list for STB;**
 - (b) **spell out clearly the criteria for delisting pre-approved items in CITF's operation manual;**
 - (c) **take further measures to ensure that all the delisting of pre-approved items is reviewed by VSCs;**
 - (d) **step up promotion of pre-approved items, particularly those items with low adoption rates, with a view to enhancing the industry's understanding of innovations and technologies and encouraging their adoption in CITF projects; and**
 - (e) **take measures to ensure that the pre-approved lists on CITF's website are accurate and up-to-date.**

Response from the Government

2.23 The Secretary for Development agrees with the audit recommendations. She has said that DEVB and CITF Secretariat will enhance promotion of CITF, with particular focus on both hot items and new technologies that are less familiar to the potential applicants.

PART 3: FUNDING DISBURSEMENT AND MONITORING OF APPROVED PROJECTS

3.1 This PART examines CITF's funding disbursement and monitoring of approved projects, focusing on:

- (a) processing of disbursement requests (paras. 3.2 to 3.17); and
- (b) monitoring of project implementation (paras. 3.18 to 3.38).

Processing of disbursement requests

3.2 According to DEVB, successful applicants must properly and timely record all expenditures in respect of the approved projects and properly keep all required documents including receipts and other documents as may be necessary to substantiate the incurrence of expenditures. Approved funding will be disbursed on a reimbursement basis (Note 24) and upon fulfilment of all the terms and conditions of CITF, as follows:

- (a) **Technology adoption.** In general, reimbursement will be made in two instalments (Note 25). The first instalment of 80% of approved funding will be paid upon provision of documentary proof of payments and product delivery (Note 26) while the remaining instalment of 20% will be paid twelve months after the date of the first disbursement request and upon the

Note 24: *With effect from 1 November 2022, successful applicants for ACT and BIM adoption may opt for earlier funding disbursement upon payment with relevant document proof and fulfilling the following criteria: (a) product delivery time (either pledged or actual) takes longer than 2 months; and (b) payment to vendor made by the successful applicants in one single bank transaction exceeds \$100,000.*

Note 25: *According to DEVB, for BIM training and STB, funding will be reimbursed on a one-off cash rebate basis upon completion of training and product delivery respectively.*

Note 26: *According to DEVB, for MiC, the first instalment will only be disbursed upon installation of MiC modules on site or approval for commencement of MiC module production/installation where appropriate.*

Funding disbursement and monitoring of approved projects

satisfactory submission of the required documents (e.g. completion reports — see para. 3.19) by the successful applicants; and

- (b) ***Manpower development.*** Reimbursement will be made within two years from the dates of notification of approval of application. Applicants will be reimbursed in full up to the approved grant upon completion of the programmes, delivery of procured items and submission of the audited financial reports. For local courses or conferences, payments on an instalment basis may also be allowed subject to receipt of documentary proof.

3.3 As of September 2022 (i.e. four years after the launch of CITF in October 2018), Audit noted that, of the total approved grants of \$767 million for 2,760 approved projects under CITF, only \$376 million (49%) had been disbursed to the successful applicants (see Table 6). In particular, for STB and manpower development, only 33% and 31% of approved grants had been disbursed respectively.

Table 6

Disbursement of funding for approved projects under CITF (September 2022)

Aspect	Category	Number of projects		Grant amount (\$ million)	
		Approved	Disbursed	Approved	Disbursed
Technology adoption	ACT	1,006	726 (72%)	373	185 (50%)
	BIM	1,514	1,082 (71%)	123	78 (63%)
	MiC	61	31 (51%)	142	71 (50%)
	STB	145	89 (61%)	116	38 (33%)
Sub-total		2,726	1,928 (71%)	754	372 (49%)
Manpower development		34	18 (53%)	13	4 (31%)
Total		2,760	1,946 (71%)	767	376 (49%)

Source: DEVB records

Funding disbursement and monitoring of approved projects

3.4 According to DEVB:

- (a) as the disbursement of funding is on a reimbursement basis, disbursement requests could only be filed by successful applicants after the procurement and delivery of technologies and products approved. The timing of filing the disbursement requests is contingent on the scheduling of the relevant process of construction and product delivery schedule;
- (b) for technology adoption, the disbursement rates largely depend on the project scheme and the timing of procurement and delivery of the approved products, which very often is determined by the sequence of the relevant works stages (e.g. plants for building works would more likely be procured at the later stage of the construction process). However, earlier funding approval is required to ensure financial certainty for the applicants; and
- (c) for manpower development, the low disbursement rate was mainly because some training classes under approved projects were postponed due to coronavirus disease (COVID-19) epidemic and applicants tended to submit applications for CITF early as it took time to book venues for events.

Scope for improvement in monitoring the submission of disbursement requests

3.5 According to CITF's "Guide to Application" and terms and conditions:

- (a) ***Technology adoption.***
 - (i) ***First instalment of approved funding.*** In general, successful applicants should submit disbursement requests for the first instalment within 3 months from the dates of notification of approval of application. According to DEVB, the 3-month timeframe is a general requirement to encourage successful applicants' early submission of disbursement requests and serves as a benchmark to trigger the tracking and reminder system (see para. 3.8(c)(i) and (ii)); and

Funding disbursement and monitoring of approved projects

- (ii) ***Final instalment of approved funding.*** The final instalment of funding will be paid twelve months after the dates of the first disbursement request upon the satisfactory submission of the required documents (e.g. completion reports). According to DEVB, the 12-month timeframe refers to the minimum period eligible for payment of final disbursement and not the timeframe for making the payment; and
 - (b) ***Manpower development.*** Successful applicants should submit disbursement requests within two years from the dates of notification of approval of application (Note 27).
- 3.6 ***Projects with funding disbursement.*** As of September 2022, of the 2,760 approved projects, funding disbursements of \$376 million had been made for 1,946 projects (1,928 technology adoption projects and 18 manpower development projects). Audit noted that some successful applicants took a longer time in submitting disbursement requests, as follows:
- (a) ***Technology adoption.*** Regarding the 1,928 projects related to technology adoption:
 - (i) ***First disbursement request.*** The first disbursement requests of 908 (47% of 1,928) projects were submitted by the successful applicants more than 3 months and up to 2.4 years (averaging 6.5 months) from the dates of notification of approval of application; and
 - (ii) ***Final disbursement request.*** As of September 2022, there were 1,229 projects with first disbursement requests made more than 12 months (see para. 3.5(a)(ii)). Of these 1,229 projects, as of September 2022, final disbursement requests for 328 (27%) projects were submitted more than 12 months and up to 3 years (averaging

Note 27: *According to DEVB, it is to allow time for earlier submission of applications by applicants with a view to facilitating them to take timely actions in booking venues and schedule the events having regard to the school calendar.*

Funding disbursement and monitoring of approved projects

1.4 years) after the dates of the first disbursement request (Note 28). In this connection, Audit noted that there is no specific timeframe on submission of final disbursement requests for technology adoption projects, while a timeframe of two years was set for manpower development projects (see para. 3.5(b)); and

- (b) **Manpower development.** The disbursement requests of all 18 projects related to manpower development were submitted by the successful applicants within two years from the dates of notification of approval of application.

3.7 Projects not having received funding disbursement. As of September 2022, of the 2,760 approved projects, funding disbursements had not been made for 814 (i.e. 2,760 – 1,946) (29%) projects. Of these 814 projects, disbursement requests had been submitted by the successful applicants for 462 (57%) projects (Note 29). For the remaining 352 (43%) projects, disbursement requests had not been submitted. Regarding these 352 projects, Audit noted that:

- (a) **Technology adoption.** Of the 341 projects related to technology adoption, applicants of 257 (75%) projects had been notified of approval for more than 3 months and up to 3.8 years (averaging 1.4 years); and
- (b) **Manpower development.** Of the 11 projects related to manpower development, applicants of 5 (45%) projects had been notified of approval for more than 2 years and up to about 3 years (averaging 2.5 years) (Note 30).

Note 28: *Final disbursement request had not been submitted for 824 (67%) projects for 1 day to 2.8 years (averaging 1.1 years) after 12 months from the dates of the first disbursement requests.*

Note 29: *The disbursement requests submitted by the successful applicants were being processed by CITF Secretariat (see para. 3.14 for the audit findings on the matter).*

Note 30: *According to DEVB, some of the projects had been postponed due to COVID-19 epidemic. Besides, for the remaining projects, CITF Secretariat had taken all necessary follow-up actions with the applicants.*

3.8 According to DEVB:

- (a) there are different valid reasons for the late submission of disbursement requests by some successful applicants, including, for example, products need to be procured at a later stage when the relevant construction operation that uses the product actually commences, BIM training depends on applicants' scheduling of classes that suit their needs and availability, MiC and STB depend on the project progress, and longer product delivery time due to disruption to supply chain during COVID-19 epidemic, delay in project or site possession by the applicants, and long time taken in the internal procurement procedures of the applicants;
- (b) to meet the operational needs of the industry and encourage early decision on technology adoption by applicants as far as practicable, with the support of SC, MC and ACTVSC, CITF Secretariat accepts early approval of CITF applications for products that will be procured and adopted at a later stage when the relevant stage of works commences. To accommodate the industry needs while ensuring monitoring of the use of funding in a reasonable timeframe, applicants are required to state the tentative timeframe for procuring and adopting the technologies in the CITF application forms. Applications are approved having regard to relevant considerations which, among other things, include whether the tentative timeframe provided is reasonable having regard to the nature of the project and the function of the technologies to be procured; and
- (c) regarding the 3-month timeframe for submission of first disbursement request for technology adoption projects by successful applicants (see para. 3.5(a)(i)):
 - (i) it serves as a recommended timeframe to encourage applicants' early submission of disbursement requests when the applicants have already procured the products according to their project programme;
 - (ii) it also serves as a benchmark for CITF Secretariat to trigger the tracking and reminder system (see para. 3.10) to remind applicants to submit the first disbursement requests if they have already procured the products; and

Funding disbursement and monitoring of approved projects

- (iii) having regard to the policy objectives of CITF and experience gained in the implementation of CITF in the past few years, DEVB has planned to review the 3-month timeframe in the overall review of CITF, which is scheduled for completion in June 2023 (see para. 4.37(b)).

3.9 In Audit's view, DEVB needs to:

- (a) complete the review on the 3-month timeframe for submission of the first disbursement requests by successful applicants for technology adoption projects as scheduled, having regard to policy objectives, operational needs of the industry and experience gained in the implementation of CITF, and take prompt follow-up action after the review;
- (b) continue to take measures to closely monitor the submission of disbursement requests by successful applicants and take appropriate follow-up actions (e.g. issue of reminders and warning letters, and referral to MC) on the overdue cases; and
- (c) consider setting a specific timeframe on submission of final disbursement requests by successful applicants for technology adoption projects.

3.10 According to DEVB, a comprehensive tracking and reminder system for monitoring the progress and issuing reminder letters to successful applicants for technology adoption projects was established in July 2020. According to CITF's operation manual:

- (a) reminders for submission of disbursement requests would be issued to successful applicants at designated time (Note 31);

Note 31: *According to CITF's operation manual, reminder emails would be sent to successful applicants two and three months after the date of notification of approval of CITF application. If disbursement requests are still not received four months after the date of notification of approval, a reminder letter together with a reply slip for confirming the procurement plan would be issued to the successful applicants.*

Funding disbursement and monitoring of approved projects

- (b) warning letters would be issued to successful applicants if the applicants failed to submit the first disbursement requests within six months from the dates of notification of approval of application and the applicants would be temporarily suspended from raising new applications; and
- (c) cases would be referred to MC for appropriate actions if the first disbursement requests remain outstanding seven months after the dates of notification of approval of CITF application.

3.11 Regarding the tracking and reminder system, Audit noted that:

- (a) there was no readily available information on the issuance of reminders and warning letters (including those conducted via phone calls), and the follow-up actions taken (Note 32);
- (b) according to CITF's operation manual, cases would be referred to MC for appropriate actions if the first disbursement requests remain outstanding seven months after the dates of notification of approval of CITF application (see para. 3.10(c)). According to DEVB, in practice, CITF Secretariat would only refer those cases of irregularity to MC. However, such practice was not clearly set out in CITF's operation manual; and
- (c) the tracking and reminder system did not cover manpower development projects.

3.12 In Audit's view, regarding the tracking and reminder system, DEVB needs to:

- (a) enhance documentation on the issue of reminders and warning letters (including those conducted via phone calls) and the follow-up actions taken;

Note 32: *Audit noted that, as of September 2022, of the 908 technology adoption projects with the first disbursement requests submitted by the successful applicants more than three months from the dates of notification of approval of application (see para. 3.6(a)(i)) that warrant the issuance of reminders, disbursement requests of 366 (40%) projects were submitted more than six months from the dates of notification of approval of application that warrant the issuance of warning letters.*

Funding disbursement and monitoring of approved projects

- (b) set out more clearly the need to refer cases of irregularity to MC in CITF's operation manual; and
- (c) consider using the system for monitoring approved manpower development projects.

Need to take measures to ensure the timely processing of disbursement requests

3.13 According to CITF Secretariat, since April 2020, the processing of disbursement requests would normally be completed within 30 calendar days upon receiving complete information. Specifically, for final disbursement requests, the successful applicants will be informed of the evaluation within 30 calendar days after the receipt of the completion reports and all necessary information required by CITF Secretariat.

3.14 From April 2020 to September 2022, CITF Secretariat received 3,664 disbursement requests submitted by successful applicants of 1,960 approved projects. Audit noted that, as of September 2022, of these 3,664 disbursement requests:

- (a) 2,970 (81%) were approved by CITF Secretariat. For 137 (5% of 2,970) disbursement requests, the time taken in completing the processing of them (i.e. time elapsed between the dates of receipt of complete information and the dates of approval) was more than 30 days and up to 8.2 months;
- (b) 161 (4%) were rejected by CITF Secretariat. For 73 (45% of 161) disbursement requests, the time taken in completing the processing of them (i.e. time elapsed between the last dates of receipt of information from applicants and the dates of rejection) was more than 30 days and up to 11.6 months;
- (c) 17 (1%) were withdrawn by successful applicants; and
- (d) 516 (14%) were being processed by CITF Secretariat, of which 389 (75% of 516) were received more than 30 days ago. In particular, 46 (9% of 516) disbursement requests were received more than 1 year ago with outstanding information pending from successful applicants.

3.15 In Audit's view, DEVB needs to take measures to ensure that disbursement requests submitted by successful applicants are timely processed by CITF Secretariat in accordance with the stipulated time pledge.

Audit recommendations

3.16 **Audit has *recommended* that the Secretary for Development should:**

- (a) **regarding the submission of disbursement requests for technology adoption projects:**
 - (i) **complete the review on the 3-month timeframe for submission of the first disbursement requests by successful applicants as scheduled, having regard to policy objectives, operational needs of the industry and experience gained in the implementation of CITF, and take prompt follow-up action after the review;**
 - (ii) **continue to take measures to closely monitor the submission of disbursement requests by successful applicants and take appropriate follow-up actions (e.g. issue of reminders and warning letters, and referral to MC) on the overdue cases; and**
 - (iii) **consider setting a specific timeframe on submission of final disbursement requests by successful applicants;**
- (b) **regarding the tracking and reminder system:**
 - (i) **enhance documentation on the issue of reminders and warning letters (including those conducted via phone calls) and the follow-up actions taken;**
 - (ii) **set out more clearly the need to refer cases of irregularity to MC in CITF's operation manual; and**
 - (iii) **consider using the system for monitoring approved manpower development projects; and**

Funding disbursement and monitoring of approved projects

- (c) take measures to ensure that disbursement requests submitted by successful applicants are timely processed by CITF Secretariat in accordance with the stipulated time pledge.

Response from the Government

3.17 The Secretary for Development agrees with the audit recommendations. She has said that DEVB will:

- (a) review, amongst other things, the stipulated timeframe (including the 3-month timeframe) for submission of disbursement requests by successful applicants in the overall review of CITF to be completed in June 2023; and
- (b) suitably adjust the timeframe to ensure that it will be up-to-date to support the objectives of CITF while addressing the operational needs of the industry and the experience gained in the implementation of CITF as explained in paragraph 3.8 above.

Monitoring of project implementation

3.18 According to the terms and conditions of CITF, an approved project is required to be carried out strictly in accordance with CITF's "Guide to Application", the requirements stipulated in the application form (together with the declaration) and the notification of approval, and the terms and conditions.

Need to take measures to ensure the timely submission of completion reports

3.19 According to the terms and conditions of CITF, the successful applicants will be required to submit completion reports (Note 33) to CITF Secretariat within twelve months from the dates of the first disbursement request for approved

Note 33: *According to the terms and conditions of CITF, in general, successful applicants receiving funding of more than \$500,000 in a single application on technology adoption project or any amount in an application on manpower development project should submit an audited financial report duly certified by auditors together with the completion report.*

Funding disbursement and monitoring of approved projects

technology adoption projects and nine months upon the completion of the approved manpower development projects. The completion reports must include details of the results, performance, achievements and/or evaluation of the approved projects, and be prepared in a standard format provided and stipulated by CITF Secretariat.

3.20 As of September 2022, there were a total of 991 approved technology adoption projects with the first disbursement requests received more than twelve months ago and 18 approved manpower development projects completed more than nine months ago (i.e. due for submission of completion reports — see para. 3.19). Audit noted that, as of September 2022, of these 1,009 (i.e. 991 + 18) projects:

- (a) completion reports had not been received for 596 (59%) projects, which had been overdue for 1 day to 3.2 years (averaging about 1 year); and
- (b) completion reports had been received for 413 (41%) projects, of which:
 - (i) completion reports of 278 (67%) projects were submitted 1 day to 2.2 years (averaging 4.8 months) after the required deadlines; and
 - (ii) completion reports of 135 (33%) projects were submitted within the required deadlines.

3.21 According to DEVB:

- (a) completion reports primarily serve the purpose of confirming the completion of the trial of the technologies in the project or the completion of activities for manpower development for evaluating the performance and benefits of the technologies adopted. Based on the experience gained in the implementation of CITF, it is noted that successful applicants often need more time to operate the technologies for a reasonable period after their procurement and installation (i.e. the time they filed their first disbursement request) in order to know and be able to set out in the completion reports the benefits brought about by the technologies to their operation;
- (b) while some applicants have not submitted their completion reports according to the prescribed timeframe due to the reason above, suitable safeguards on disbursement of funds are in place, as follows:

Funding disbursement and monitoring of approved projects

- (i) before approving the first disbursement requests of the applicants (which accounts for 80% of the approved funding), CITF Secretariat has ensured that the funded items had been delivered to the sites for adoption by the successful applicants by checking the serial numbers and photographs/delivery notes of the funded items; and
- (ii) CITF Secretariat has also ensured that the final disbursement requests (which accounts for the remaining 20% of the approved funding) will not be approved without receiving the completion reports from the successful applicants; and
- (c) it has planned to review the timeframe for submission of completion report in its overall review of CITF, which is scheduled for completion in June 2023 (see para. 4.37(b)).

3.22 In Audit's view, DEVB needs to:

- (a) complete the review on the timeframe for submitting the completion reports by successful applicants as scheduled and take prompt follow-up actions after the review; and
- (b) take measures to ensure the timely submission of completion reports by successful applicants (including taking appropriate follow-up actions on overdue cases).

Scope for improvement in conducting site inspections

3.23 According to DEVB, in order to ensure that the funds granted under CITF are properly used by the successful applicants and to verify that the items funded by CITF are being used properly on site, site inspections will be conducted by CITF Secretariat. According to CITF's operation manual, CITF Secretariat adopts a risk-based approach in selecting CITF projects for site inspections, as follows:

Funding disbursement and monitoring of approved projects

- (a) ***Technology adoption.*** Site inspections will be conducted on an applicant basis (Note 34) for approved ACT, BIM and MiC projects. For each project category, a specified percentage of projects with approved grant amount exceeding certain thresholds (Note 35) would be selected for site inspections. Inspections would be conducted within 12 months from the dates of the first disbursement request; and
- (b) ***Manpower development.*** For local courses and conferences with approved grants of \$300,000 or more, site inspections should be conducted at least once within the duration of programme.

Site inspections will also be conducted when there are complaints or suspected cases related to misuse of funding.

3.24 According to DEVB records, from October 2018 to December 2022, CITF Secretariat conducted site inspections on 196 approved projects (see Table 7).

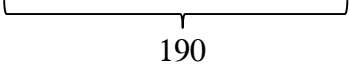
Note 34: *Applicants who had been inspected before would not be inspected again unless there are reasonable doubts of non-compliance or complaints are received.*

Note 35: *For example, for ACT projects, 15% of the approved applications with an approved funding amount above \$500,000 and 10% of the approved applications with an approved funding amount above \$200,000 would be selected for inspections.*

Table 7

**Number of approved projects with site inspections
(October 2018 to December 2022)**

Year	Number of projects with site inspections				
	Technology adoption			Manpower development	Total
	ACT	BIM	MiC		
2019 (Note)	5	41	–	6	52
2020	28	52	4	–	84
2021	4	30	–	–	34
2022	20	6	–	–	26
Total	57	129	4	6	196



190

Source: DEVB records

Note: According to DEVB records, no site inspection was conducted in 2018.

3.25 Audit noted that:

- (a) **Significant decrease in number of projects with site inspections conducted.** The total number of projects with site inspections conducted increased from 52 in 2019 to 84 in 2020, decreased to 34 in 2021 and 26 in 2022; and
- (b) **Need to conduct site inspections of projects in accordance with the timeframe set out in CITF's operation manual.** Regarding the site inspections for the 196 projects:
 - (i) **Technology adoption.** Of the 190 approved projects with site inspections conducted, for 57 (30%) projects, site inspections were conducted 1 day to 1.8 years (averaging 190 days) after 12 months from the respective dates of the first disbursement request (i.e. not meeting the 12-month timeframe — see para. 3.23(a)). In particular, for 2 (1% of 190) projects, site inspections were

Funding disbursement and monitoring of approved projects

conducted about two months after the payment of the final instalment of the approved funding of the projects (Note 36); and

- (ii) ***Manpower development.*** According to DEVB records, from October 2018 to September 2022, all 6 site inspections were timely conducted.

3.26 According to DEVB:

- (a) the decrease in number of site inspections in 2021 and 2022 was due to difficulties in conducting site inspections during COVID-19 epidemic. CITF Secretariat performed documentary check (e.g. checking the requested photographs and videos from the successful applicants) to confirm the adoption of the technologies at the sites concerned; and
- (b) having regard to the experience gained after the implementation of the projects, it is noted that the conduct of site inspections at a later project stage before the funding disbursement for the final instalment has its merits as it enables CITF Secretariat to check and ensure that the successful applicants are using the procured products properly for a longer period of time. As such, DEVB has planned to review the timeframe for carrying out site inspections in its overall review of CITF, which is scheduled for completion in June 2023 (see para. 4.37(b)).

3.27 With a view to ensuring the funds granted under CITF are properly used by successful applicants and the items funded by CITF are being used properly on site, Audit considers that DEVB needs to complete the review on the timeframe for carrying out site inspections as scheduled and take prompt follow-up actions after the review.

Note 36: *According to DEVB, site inspections for these two projects were deferred to November 2020 due to difficulties in conducting site inspections during COVID-19 epidemic.*

Overdue declaration of ownership of equipment procured by successful applicants

3.28 According to the terms and conditions of CITF, all title to and ownership of the equipment procured under approved CITF projects shall vest with the successful applicants. The successful applicants are forbidden to transfer, sell or lease, with a view to making profits, the equipment procured under the approved projects within the first three years of their procurement.

3.29 According to CITF's operation manual:

- (a) site inspections will be conducted by CITF Secretariat to verify that the items funded by CITF are being used properly on site (see para. 3.23); and
- (b) since October 2020, for approved technology adoption (other than BIM training) projects, successful applicants should submit declaration forms (Note 37) to declare compliance with the requirements related to the ownership of equipment procured by the end of the 24-month period (i.e. first declaration) and 36-month period (i.e. second declaration) from the dates of the first disbursement request.

3.30 Based on DEVB records, as of September 2022, Audit noted that there were 695 projects overdue for submission of the first declaration forms for 1 day to 1.7 years (averaging 7.8 months). Of these 695 projects, 157 (23%) projects were also overdue for submission of the second declaration forms for 3 days to 8 months (averaging 2.7 months).

3.31 According to DEVB:

- (a) all successful applicants are required to sign a declaration on their compliance with the terms and conditions of CITF upon application,

Note 37: *Apart from the clause related to the ownership of equipment procured, the declaration forms also include other requirements stipulated in the terms and conditions of CITF.*

including the requirement on ownership of equipment procured within the first three years of its procurement; and

- (b) the declaration forms to be signed by the end of the 24-month period and 36-month period aim to provide additional reassurance that the successful applicants have complied with the terms and conditions of CITF during the relevant period (i.e. 24-month period or 36-month period) as they have so declared upon application. In other words, the signing of these additional declaration forms entails no additional requirement. The applicant is contractually obligated to comply with the terms and conditions of CITF throughout the project period upon its signing of declaration upon application. To ensure that the declaration arrangements are reasonable and necessary, DEVB has planned to review the need and the timeframe for submitting these declarations in its overall review of CITF, which is scheduled for completion in June 2023 (see para. 4.37(b)).

3.32 In Audit's view, DEVB needs to complete the review on the need and the timeframe for submission of the declaration forms related to the ownership of equipment procured by successful applicants as scheduled and take prompt follow-up actions after the review.

Need to ensure compliance with the requirements on acknowledgement of funding support from CITF

3.33 According to the terms and conditions of CITF, the successful applicant shall acknowledge the funding support from CITF in all of its applicable marketing and publicity activities as well as publications. For publications, the successful applicant is also required to inform and send a prototype to CITF Secretariat for approval in writing prior to the production.

3.34 Audit noted that the requirements on acknowledgement of funding support from CITF were not strictly followed by the successful applicants in two approved manpower development projects, as follows:

Funding disbursement and monitoring of approved projects

- (a) **Project A.** In August 2019, Applicant A submitted a CITF application to organise a non-local training/visit for practitioners. The application was approved in October 2019 with approved grant of about \$148,000. The event was held in October 2019. Audit noted that the funding support from CITF had not been acknowledged on the website and the poster of the event. In January 2020, Applicant A submitted a disbursement request to CITF Secretariat, which was subsequently approved in March 2020; and
- (b) **Project B.** In April 2021, Applicant B submitted a CITF application to organise an international conference in Hong Kong. The application was approved in May 2021 with approved grant of \$355,900. The conference was held in May 2021. Audit noted that, while there was a special acknowledgement to CIC on the website and the booklet of the conference, funding support from CITF had not been acknowledged therein. In April and September 2022, Applicant B submitted disbursement requests to CITF Secretariat. As of February 2023, the requests were under processing.

3.35 According to DEVB, for Projects A and B, applications for funding were shortly granted before the event days. The successful applicants had already printed the publicity materials before obtaining CITF approval and hence CITF acknowledgement on the websites and posters were not incorporated. That said, for Project A, DEVB noticed that the successful applicant had published the event on its newsletter after the event and had not acknowledged CITF. CITF Secretariat had reminded the applicant to observe the acknowledgement requirement accordingly.

3.36 In Audit's view, DEVB needs to take measures to ensure that successful applicants comply with the requirements on acknowledgement of funding support from CITF in all their applicable marketing and publicity activities as well as publications.

Audit recommendations

3.37 **Audit has recommended that the Secretary for Development should:**

- (a) **regarding the submission of completion reports:**
 - (i) **complete the review on the timeframe for submitting the completion reports by successful applicants as scheduled and take prompt follow-up actions after the review; and**
 - (ii) **take measures to ensure the timely submission of completion reports by successful applicants (including taking appropriate follow-up actions on overdue cases);**
- (b) **complete the review on the timeframe for carrying out site inspections and the need and the timeframe for submission of the declaration forms related to the ownership of equipment procured by successful applicants as scheduled, and take prompt follow-up actions after the review; and**
- (c) **take measures to ensure that successful applicants comply with the requirements on acknowledgement of funding support from CITF in all their applicable marketing and publicity activities as well as publications.**

Response from the Government

3.38 The Secretary for Development agrees with the audit recommendations. She has said that DEVB will cover, in the overall review of CITF to be completed in June 2023, the stipulated timeframe for submission of completion reports and conducting of site inspections to ensure that it is up-to-date to support the objectives of CITF while addressing the operational needs of the industry and experience gained in the implementation of CITF as explained in paragraphs 3.21 and 3.26.

PART 4: OTHER RELATED ISSUES

4.1 This PART examines other issues related to CITF focusing on:

- (a) safeguarding national security (paras. 4.2 to 4.6);
- (b) promotion and publicity programmes (paras. 4.7 to 4.11);
- (c) governance issues (paras. 4.12 to 4.25); and
- (d) other administrative issues (paras. 4.26 to 4.41).

Safeguarding national security

4.2 The Law of the People's Republic of China on Safeguarding National Security in the Hong Kong Special Administrative Region (National Security Law) was implemented on 30 June 2020. The National Security Law stipulates that:

- (a) it is the constitutional duty of the Hong Kong Special Administrative Region to safeguard national security;
- (b) the executive authorities of the Hong Kong Special Administrative Region shall effectively prevent, suppress and impose punishment for any act or activity endangering national security in accordance with the National Security Law and other relevant laws; and
- (c) the Hong Kong Special Administrative Region shall strengthen its work on safeguarding national security and prevention of terrorist activities. The Government of the Hong Kong Special Administrative Region shall take necessary measures to strengthen public communication, guidance, supervision and regulation over matters concerning national security, including those relating to schools, universities, social organisations, the media and the Internet.

Need to strengthen regulation over matters concerning the safeguarding of national security

4.3 Audit noted that, as of January 2023, the terms and conditions of CITF had not incorporated guidelines and requirements related to the safeguarding of national security.

4.4 According to DEVB:

- (a) it conducted a review on CITF in August 2022, with a view to strengthening the safeguards for matters concerning national security, and proposed some amendments to the terms and conditions of CITF;
- (b) as of January 2023, it was seeking legal advice on the proposed amendments and will incorporate the relevant amendments to the terms and conditions of CITF thereafter; and
- (c) it will continue to review the CITF operations regularly to safeguard national security and implement measures as considered necessary.

Audit recommendation

4.5 Audit has *recommended* that the Secretary for Development should, taking into account the legal advice, incorporate the amendments to the terms and conditions of CITF relating to strengthening regulation over matters concerning the safeguarding of national security.

Response from the Government

4.6 The Secretary for Development agrees with the audit recommendation. She has said that DEVB will take on board the audit recommendation.

Promotion and publicity programmes

4.7 According to MoC, CITF Secretariat is responsible for organising and conducting regular promotion and publicity activities with an aim to promote CITF to industry stakeholders and general public. According to CITF Secretariat:

- (a) from October 2018 to September 2022, it organised some 200 promotion and publicity activities including seminars, webinars, experience sharing sessions by successful applicants, conferences and signature events; and
- (b) it publicises CITF and disseminates information to the public by newspapers, e-newsletter, radio broadcasting, banners and social media platforms, and uses digital marketing (e.g. electronic direct mail) to disseminate information directly to industry stakeholders (e.g. contractors and consultants).

Need to step up efforts in promoting CITF

4.8 *Target beneficiaries submitting applications under the technology adoption aspect.* According to the paper seeking approval from the Finance Committee in June 2018 for setting up CITF (see para. 1.2), DEVB estimated that about 7,700 target beneficiaries (comprising 1,300 contractors, 5,900 subcontractors and 500 consultants) would be benefited from the technology adoption aspect under CITF. However, from October 2018 to September 2022, there were only 1,140 (15 % of 7,700) beneficiaries, mainly comprising 211 (16 % of 1,300) contractors, 737 (12 % of 5,900) subcontractors and 188 (38 % of 500) consultants, submitted applications under CITF (see Table 8).

Table 8

**Target beneficiaries of CITF submitting applications
under the funding aspect of technology adoption
(October 2018 to September 2022)**

Target beneficiaries	Number of eligible applicants estimated by DEVB in June 2018	Actual number of applicants (Note 1)	Percentage
	(a)	(b)	(c) = (b) ÷ (a) × 100%
Contractor	1,300 (Note 2)	211	16%
Subcontractor	5,900	737	12%
Consultant	500	188	38%
Others	N/A	4	N/A
Overall	7,700	1,140	15%

Source: DEVB records

Note 1: The number represents the total number of applicants submitted funding applications (irrespective of the status of the applications) under the technology adoption aspect during the period from October 2018 to September 2022.

Note 2: In March 2023, DEVB informed Audit that, based on the latest CIC records, there were currently about 580 eligible contractors who have paid levy to CIC in the past 24 months and have ongoing works projects eligible for CITF application. Based on the above population, the percentage of eligible contractors who have applied for CITF would be 36% (i.e. $211 \div 580 \times 100\%$).

4.9 Use of social media and video sharing platforms to promote CITF. In order to better communicate with industry stakeholders on the updated news of CITF and to share updated knowledge on innovation and technology, CITF Secretariat set up 2 social media accounts in 2018 and 2019, and uploaded promotional videos onto the official CIC channel and CITF channel of the video sharing and social media platforms since March 2019 and April 2022 respectively. Based on the information shown in social media and video sharing platforms on 10 March 2023:

Other related issues

- (a) there were 716 and 147 followers for the 2 social media accounts;
- (b) a total of 3 and 132 promotional videos related to CITF had been uploaded onto the related video sharing and social media platforms since March 2019 and April 2022 respectively. The number of views of the 3 videos ranged from 657 to 1,234 views (averaging 1,015 views) and that of the 132 videos ranged from 6 to 357 views (averaging 55 views); and
- (c) CITF Secretariat did not maintain records of the number of followers of its 2 social media accounts, and the number of views of promotional videos uploaded onto the official CIC channel and CITF channel of the video sharing and social media platforms on a regular basis for monitoring purpose.

Audit recommendations

4.10 **Audit has recommended that the Secretary for Development should:**

- (a) **step up efforts in promoting CITF to eligible applicants with a view to encouraging them to submit applications under CITF (particularly those who have not made applications before); and**
- (b) **take measures to make better use of social media and video sharing platforms for promoting CITF and maintain records of the number of followers and views of promotional videos for these platforms for monitoring purpose.**

Response from the Government

4.11 The Secretary for Development agrees with the audit recommendations. She has said that CITF Secretariat will, starting from 1 April 2023, have in place an outreach team to help enhance promotional efforts targeting at those eligible applicants who have not yet applied for CITF, especially small and medium-sized enterprises. These eligible applicants will be provided with tailor-made technology recommendations and support, ranging from briefing on application requirements to advice on implementation of the technology on site.

Governance issues

Scope for improvement in appointing SC members

4.12 In October 2017, the Government announced that it would appoint more young people to various Government boards and committees with the aim of increasing the overall ratio of young members (i.e. persons who are aged between 18 and 35) to 15% by June 2022.

4.13 Audit noted that, of the total number of non-official members appointed for SC, the number of young members appointed was 1 (9%), 1 (8%) and 1 (8%) for Term 1 to 3 (Note 38) respectively.

4.14 In Audit's view, DEVB needs to consider appointing more young members to participate in SC in future with a view to increasing the overall ratio of young members in SC.

Scope for improvement in making declaration of interests

4.15 According to DEVB, for declaration of interests:

- (a) ***One-tier reporting system.*** MC and VSCs adopt a one-tier reporting system. The chairperson and members of MC and VSCs need to report conflict of interests as and when it arises at meeting; and
- (b) ***Two-tier reporting system.*** SC adopts a two-tier reporting system. The chairperson and members of SC shall register in writing (i.e. registration forms for declaration of interests) their personal interests when they first join the committee, and annually thereafter. Besides, the chairperson and members need to report conflict of interests as and when it arises at meeting.

Note 38: *Term 1 was from 7 September 2018 to 6 September 2020, Term 2 was from 7 September 2020 to 6 September 2022, and Term 3 was from 7 September 2022 to 6 September 2024.*

Other related issues

4.16 Audit noted that while DEVB had requested the chairperson and members of SC to declare their personal interests in the first years of Terms 1, 2 and 3, it did not request them to declare their personal interests in the second year of Terms 1 and 2 (i.e. in 2019 and 2021). In the event, annual declaration forms were not received from the chairperson and members of SC in 2019 and 2021.

4.17 In Audit's view, DEVB needs to take measures to ensure that the chairperson and members of SC declare interests upon appointment and annually thereafter in a timely manner in accordance with CITF requirements.

Time pledge for preparation and issuance of meeting materials not met for some meetings

4.18 According to CITF Secretariat, the time pledge for preparing and issuing the meeting materials of MC and VSCs was set out in 2019. It is required that meeting notices and meeting documents should be issued to members 14 and 7 calendar days before meetings respectively. Besides, meeting minutes should be issued to members within 21 calendar days after meetings.

4.19 Audit selected 4 MC meetings and 9 VSCs (comprising 1 ACTVSC, 4 BIMVSC and 4 MDVSC) meetings held from October 2018 to September 2022 for review and noted that the time pledge was not met in some cases, as follows:

- (a) meeting notices of 5 (38%) meetings were issued to members less than 14 calendar days before meetings, ranging from 6 to 7 calendar days before meetings (averaging 7 calendar days);
- (b) meeting documents of 2 (15%) meetings were issued to members less than 7 calendar days before meetings, ranging from 0 to 6 calendar days before meetings (averaging 3 calendar days); and
- (c) meeting minutes of 5 (38%) meetings were issued to members more than 21 calendar days after meetings, ranging from 24 to 43 calendar days after meetings (averaging 31 calendar days).

4.20 In Audit's view, DEVB needs to take measures to ensure that the meeting materials are timely prepared and issued to members of MC and VSCs in accordance with the stipulated time pledge of CITF.

Need to timely submit the required documents to SC

4.21 According to MoC:

- (a) MC should submit the following reporting materials to SC in accordance with the specified timeframes:
 - (i) an annual plan and the associated annual budget for the next financial year by the end of June in each financial year (i.e. the period from 1 January to 31 December); and
 - (ii) a year-end report after the end of the last financial year; and
- (b) CIC should submit audited financial statements of CITF for the last financial year to SC within six months after the end of the last financial year.

4.22 Audit noted that:

- (a) ***Annual plans and budgets.*** The annual plans and budgets of 2020 to 2023 were all not submitted for SC's approval within the required timeframe, with delays ranging from 18 days to 14.5 months (averaging 7.2 months);
- (b) ***Year-end reports.*** While deadlines are set for submissions of annual plans and budgets and audited financial statements, no specific deadline is set for the submission of year-end reports by MC; and
- (c) ***Audited financial statements.*** The audited financial statements of 2020 and 2021 were not submitted to SC within the required timeframe. They were submitted in September 2021 and July 2022 respectively (i.e. more than six months after the end of the last financial year of 2020 and 2021).

Other related issues

4.23 In Audit's view, DEVB needs to strengthen measures to ensure the timely submission of required documents (including annual plans and budgets, year-end reports and audited financial statements) to SC by both MC and CIC in accordance with the timeframes set out in MoC.

Audit recommendations

4.24 **Audit has *recommended* that the Secretary for Development should:**

- (a) **consider appointing more young members to participate in SC in future with a view to increasing the overall ratio of young members in SC;**
- (b) **take measure to ensure that:**
 - (i) **the chairperson and members of SC declare interests upon appointment and annually thereafter in a timely manner in accordance with CITF requirements; and**
 - (ii) **the meeting materials are timely prepared and issued to members of MC and VSCs in accordance with the stipulated time pledge of CITF; and**
- (c) **strengthen measures to ensure the timely submission of required documents (including annual plans and budgets, year-end reports and audited financial statements) to SC by both MC and CIC in accordance with the timeframes set out in MoC.**

Response from the Government

4.25 The Secretary for Development agrees with the audit recommendations. She has said that DEVB will take on board the audit recommendations.

Other administrative issues

Need to keep under review the funding allocation between technology adoption and manpower development

4.26 According to DEVB, CITF was established to encourage wider adoption of innovative construction methods and technology in the construction industry, and to build up the capacity of construction professionals to leverage innovation for continuous improvement (see para. 1.2). In seeking approval of the Finance Committee in June and July 2018 for the establishment of CITF, DEVB said that:

- (a) upon the establishment of the Fund, it was proposed to use the main bulk of the Fund for technology adoption while the remainder of the Fund would be used for manpower development, as follows:
 - (i) about 80% of the Fund would be used to directly subsidise the construction industry in adopting innovative building technology (i.e. technology adoption); and
 - (ii) about 20% of the Fund would be utilised to finance construction practitioners and tertiary students to undertake training (i.e. manpower development); and
- (b) the funding allocation would be determined and reviewed regularly by SC, taking into account the latest development of the industry, its needs and responses.

4.27 Audit noted that, of the total grants of \$767 million approved under CITF since its launch in October 2018 and up to September 2022, technology adoption accounted for 98% (\$754 million) (Note 39) and manpower development accounted for 2% (\$13 million).

Note 39: *According to DEVB, the \$754 million for technology adoption included \$28 million for BIM training (which was related to manpower development) for the period from October 2018 to September 2022.*

4.28 In March 2023, DEVB informed Audit that:

- (a) the funding allocation of 80% for technology adoption and 20% for manpower development as mentioned in the meeting of the Finance Committee in July 2018 for the establishment of CITF were initial estimates during the scheme formulation stage. It serves as indicative figures and would be subject to regular review by SC, taking into account the latest development of the industry and stakeholders' feedback to the Fund. It was not intended to be a rule of funding allocation during the implementation of the Fund;
- (b) in fact, the Fund and its allocation should be responsive to the changing needs of the industry and stakeholders' feedback by timely introduction of the enhancement measures (Note 40); and
- (c) it is considered that the allocation should keep varying subject to the enhancement measures launched and the industry's response, and hence a prescribed fixed allocation may not be appropriate.

4.29 In Audit's view, DEVB needs to keep under review the allocation of funding for technology adoption and manpower development, taking into account the latest development of the industry, its needs and responses.

Need to closely monitor the progress of development of Data Administration and Management System

4.30 According to MoC, CIC should devise and host a dedicated website for CITF with e-portal functions including online application and online management of the application status and reimbursement. The e-portal was fully implemented in January 2019 and allows online submission of applications, disbursement requests and completion reports by the applicants, and supports vetting of applications and disbursement requests by CITF Secretariat. The e-portal also maintains information

Note 40: *The enhancement measures included, for example, the launch of new initiatives to support enhanced BIM training in early 2022, Multi-trade Integrated Mechanical, Electrical and Plumbing (see para. 4.37(a)(i)) under MiC in August 2022 and the upcoming launch of enhanced support for Smart Site Safety System for private works projects in April 2023.*

of all CITF applications (e.g. project details, vetting results of CITF Secretariat, progress status and reimbursement details).

4.31 According to CITF Secretariat, the e-portal cannot generate management reports automatically. It is the practice of CITF Secretariat to manually extracts data from e-portal into different spreadsheets (e.g. CITF master summary, disbursement summary, inspection summary and standard analytical reports) and further integrates with other data from workflows performed outside the e-portal for monitoring the application status, data analysis and management reporting.

4.32 With a view to enhancing data and report generation quality, and efficiency of processing applications, CIC further engaged a contractor in 2021 to design and develop the Data Administration and Management System (DAMS), which was targeted for completion by December 2022. DAMS aims to integrate and manage data from multiple sources, generate standard analytical reports and provide interfaces/dashboards for CITF Secretariat to retrieve data and perform analysis.

4.33 Audit noted that, as of January 2023, DAMS was still not ready for use. According to DEVB, as of January 2023, DAMS was still under the system testing stage. As further enhancement of DAMS was required in order to incorporate the enhancement measures launched under CITF in early 2022 (see para. 4.37(a)), the expected launch date has been deferred to the second quarter of 2023.

4.34 In Audit's view, DEVB needs to closely monitor the progress of the development of DAMS to ensure its early implementation with a view to enhancing the monitoring of CITF.

Need to keep under review the performance and achievement of CITF

4.35 ***Need to compile management reports based on completion reports of projects.*** According to the terms and conditions of CITF, for each approved project, the successful applicants are required to submit completion reports (see para. 3.19), which contains:

Other related issues

- (a) details of the results, performance, achievements and/or evaluation in terms of productivity, safety and environmental impact of the approved projects; and
- (b) comments of the approved projects by the beneficiaries and quantitative measurements on the benefits to the construction industry as a whole (e.g. increase in productivity and reduction in fuel consumption) after using the new technology.

According to DEVB, CITF Secretariat submitted regular progress reports on CITF (including number of applications, funding amount approved and examples of achievements of individual funded items in achieving the purposes of CITF). Audit noted that CITF Secretariat did not compile management reports based on the completion reports of projects (e.g. summarising the performance and achievement of completed projects, and comments of beneficiaries). In Audit's view, there is merit in compiling such information on a regular basis with a view to further enhancing the operation and performance of CITF.

4.36 *Scope for enhancing performance measures.* According to DEVB, apart from the performance pledge related to the timeframe for completing the processing of CITF applications (see para. 2.5) and the processing of disbursement requests (see para. 3.13), it has also:

- (a) set general performance indicators (e.g. number of applications received and amount of funding approved each year); and
- (b) monitored the types of technologies and products funded and individual cases to demonstrate how the four objectives of CITF (see para. 1.2) are achieved (Note 41).

Note 41: *For example, according to a study conducted by a local university on two pilot MiC projects in Hong Kong, MiC adoption can save the construction time by 30% to 50%, reduce the construction cost by at least 10%, increase the productivity by 100% to 400%, and with performance improvements in terms of quality, environment and construction safety. According to the feedback from CITF beneficiaries, the use of automatic bar bending machine can reduce the manpower need by 75%, the use of transportation robotics can increase the productivity by 10 folds, and the use of demolition robotics can speed up the construction time by 5 to 6 times.*

In Audit's view, DEVB needs to make continued efforts to enhance the performance measures of CITF with a view to better reflecting the performance and achievement of CITF.

4.37 ***Need to keep under review the implementation of new funding schemes and complete overall review as early as possible.*** According to MoC, DEVB and CIC should conduct reviews on the operation of CITF, as follows:

- (a) ***Mid-term review.*** Mid-term review should be conducted after two years of operation of CITF (i.e. October 2020) to assess its effectiveness (Note 42) and identify ways for improvement and enhancement. According to DEVB, the mid-term review commenced in October 2020 by a consultant engaged by CIC and was completed in September 2021. Under the mid-term review, the consultant conducted industry-wide surveys and focus group meetings (Note 43). The consultant collated various findings for each funding scope and provided recommendations for enhancement. The findings and proposed enhancement measures were discussed and endorsed by MC in August 2021 and approved by SC in September 2021. Since 1 January 2022, the following enhancement measures have been introduced:
 - (i) 4 new funding schemes (i.e. pioneering application related to ACT (Note 44), BIM project-based coaching, BIM Viewer Collaborative

Note 42: *According to the mid-term review report: (a) 80% of respondents perceived CITF as helpful to both the entire industry as well as their business; (b) CITF were considered as drivers accelerating technology adoption, particularly in raising awareness, reducing financial burden and training up talents; (c) 85% of respondents confirmed an increased number of BIM skilled staff; and (d) 75% of current beneficiaries will recommend CITF to others.*

Note 43: *The mid-term review focused on: (a) awareness of CITF and construction technologies of industry stakeholders; (b) current technology adoption situation and barriers to adoption; and (c) views of industry stakeholders on the effectiveness of CITF including funding ceiling, funding scope and funding operation.*

Note 44: *With the introduction of the new funding scheme for pioneering application, cost incidental to introducing the technology for experiential use in Hong Kong could be reimbursed to applicants at a 70% matching ratio in general.*

Other related issues

Training Scheme and Multi-trade Integrated Mechanical, Electrical and Plumbing (MiMEP — Note 45) under MiC); and

- (ii) enhancement measures (e.g. increase in matching ratio of locally developed innovations or products under ACT from 75% to 80% and increase in the funding ceilings for ACT and BIM); and
- (b) **Overall review.** Overall review should be conducted after four years of operation of CITF (i.e. October 2022) or having committed 80% of the \$1 billion allocation (Note 46), whichever is the earlier. According to DEVB, the overall review was planned to be conducted in October 2022. In July 2022, the proposed scope of the overall review (i.e. to assess the achievements of CITF and identify its way forward) was circulated to MC for approval. According to 2023 business plan, the overall review is targeted for completion in June 2023.

4.38 Audit noted that:

- (a) as of December 2022 (i.e. 12 months after the introduction of the new funding schemes in January 2022 — see para. 4.37(a)(i)), only 27 applications had been received (comprising 7 applications for pioneering application related to ACT, 2 applications for BIM project-based coaching, 17 applications for BIM Viewer Collaborative Training Scheme and 1 application for MiMEP under MiC); and
- (b) as of December 2022 (i.e. 2 months after the target commencement date of October 2022), the overall review of CITF had not yet commenced. According to DEVB, it was expected that the tender for the overall review

Note 45: *MiMEP refers to the integration of multi-trade building services components into a single assembly of prefabricated modules, manufactured in a factory then transported to the site for connection of modules to complete various trades of building services installations on site. With the introduction of the new funding scheme, project consultants are encouraged to carry out MiMEP design at the project beginning and mechanical, electrical and plumbing contractors are encouraged to design and construct MiMEP modules in order to enhance the productivity.*

Note 46: *According to DEVB, as of September 2022, the approved funding of CITF was \$767 million (i.e. 77% of the \$1 billion allocation).*

would be awarded in February 2023 and the review is targeted for completion in June 2023.

4.39 In Audit's view, DEVB needs to:

- (a) keep under review the implementation of the new funding schemes introduced in January 2022 and take measures to publicise the schemes to the industry; and
- (b) complete the overall review of CITF as soon as possible with a view to identifying areas for further improvement, assessing its performance and paving the way forward.

Audit recommendations

4.40 **Audit has recommended that the Secretary for Development should:**

- (a) **keep under review the allocation of funding for technology adoption and manpower development, taking into account the latest development of the industry, its needs and responses;**
- (b) **closely monitor the progress of the development of DAMS to ensure its early implementation with a view to enhancing the monitoring of CITF;**
- (c) **take measures to compile management reports based on the completion reports of projects (including the results, performance, achievements and/or evaluation of the approved projects, comments of the beneficiaries, and quantitative measurements on the benefits to the construction industry) on a regular basis with a view to further enhancing the operation and performance of CITF;**
- (d) **make continued efforts to enhance the performance measures of CITF with a view to better reflecting the performance and achievement of CITF;**

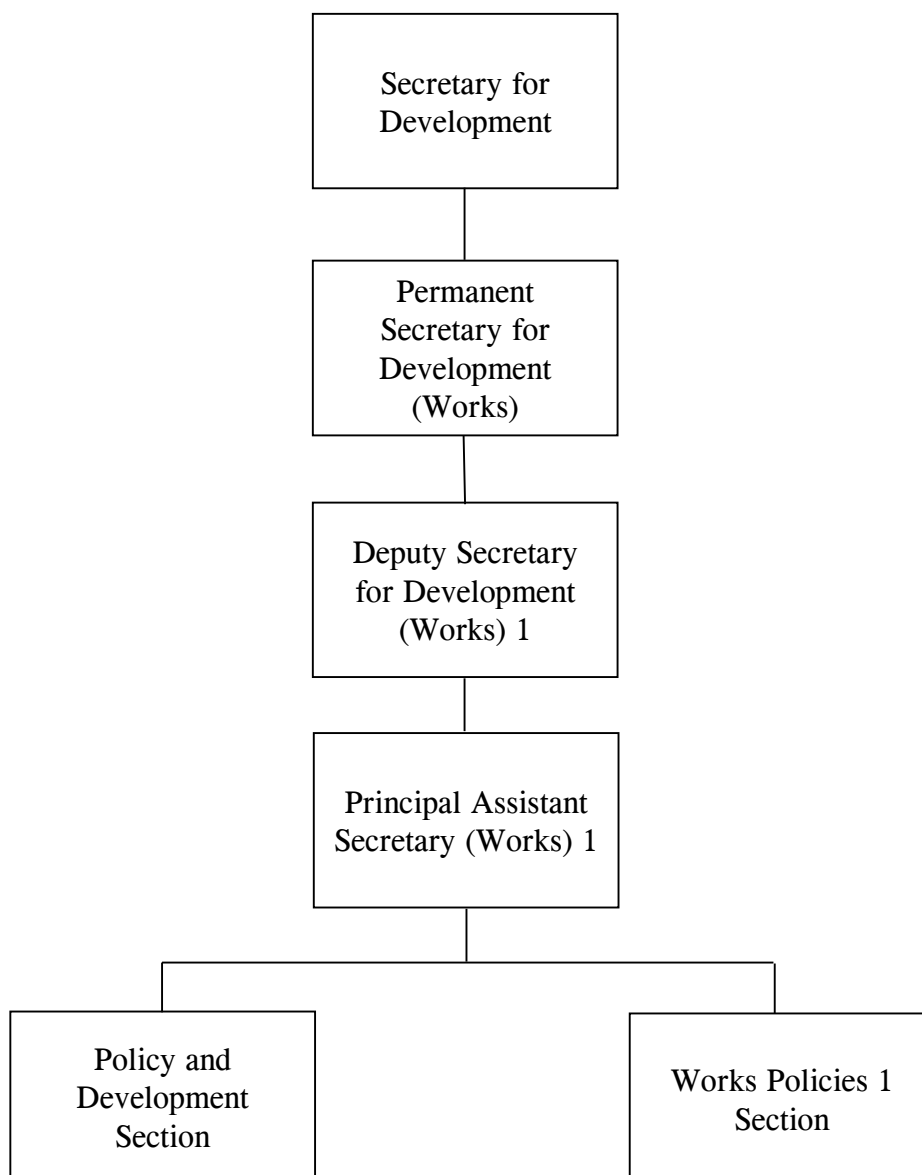
Other related issues

- (e) **keep under review the implementation of the new funding schemes introduced in January 2022 and take measures to publicise the schemes to the industry; and**
- (f) **complete the overall review of CITF as soon as possible with a view to identifying areas for further improvement, assessing its performance and paving the way forward.**

Response from the Government

4.41 The Secretary for Development agrees with the audit recommendations. She has said that DEVB and CITF Secretariat will, in the context of the overall review of CITF to be completed in June 2023, make continued efforts in enhancing the performance measures and identify areas for further improvements with a view to ensuring that CITF would meet the construction industry's evolving needs for innovation and technologies.

**Development Bureau:
Organisation chart (extract)
(30 September 2022)**



Source: DEVB records

Acronyms and abbreviations

ACT	Advanced Construction Technologies
ACTVSC	Advanced Construction Technologies Vetting Sub-committee
Audit	Audit Commission
BIM	Building Information Modelling
BIMVSC	Building Information Modelling Vetting Sub-committee
CIC	Construction Industry Council
CITF	Construction Innovation and Technology Fund
DAMS	Data Administration and Management System
DEVB	Development Bureau
LegCo	Legislative Council
MC	Management Committee on Construction Innovation and Technology Fund
MDVSC	Manpower Development Vetting Sub-committee
MiC	Modular Integrated Construction
MiCVSC	Modular Integrated Construction Vetting Sub-committee
MiMEP	Multi-trade Integrated Mechanical, Electrical and Plumbing
MoC	Memorandum of Cooperation
SC	Steering Committee on Construction Innovation and Technology Fund
STB	Prefabricated Steel Reinforcing Bar
VSC	Vetting Sub-committee on Construction Innovation and Technology Fund

CHAPTER 4

**Culture, Sports and Tourism Bureau
Create Hong Kong**

Hong Kong Design Centre

**Audit Commission
Hong Kong
31 March 2023**

This audit review was carried out under a set of guidelines tabled in the Provisional Legislative Council by the Chairman of the Public Accounts Committee on 11 February 1998. The guidelines were agreed between the Public Accounts Committee and the Director of Audit and accepted by the Government of the Hong Kong Special Administrative Region.

Report No. 80 of the Director of Audit contains 8 Chapters which are available on our website at <https://www.aud.gov.hk>



Audit Commission
6th Floor, High Block
Queensway Government Offices
66 Queensway
Hong Kong

Tel : (852) 2867 3423
Fax : (852) 2824 2087
E-mail : enquiry@aud.gov.hk

HONG KONG DESIGN CENTRE

Contents

Paragraph

EXECUTIVE SUMMARY

PART 1: INTRODUCTION	1.1 – 1.12
Audit review	1.13
General response from the Hong Kong Design Centre	1.14
General response from the Government	1.15
Acknowledgement	1.16
 PART 2: FLAGSHIP PROGRAMMES	 2.1 – 2.3
Administration of Business of Design Week	2.4 – 2.16
Audit recommendations	2.17 – 2.18
Response from the Government	2.19
Response from the Hong Kong Design Centre	2.20
Administration of Nurturing Programme of Hong Kong Young Design Talents	2.21 – 2.26
Audit recommendations	2.27
Response from the Hong Kong Design Centre	2.28

	Paragraph
Evaluation of flagship programmes	2.29 – 2.34
Audit recommendations	2.35
Response from the Hong Kong Design Centre	2.36
Project income and sustainability	2.37 – 2.45
Audit recommendations	2.46 – 2.47
Response from the Government	2.48
Response from the Hong Kong Design Centre	2.49
 PART 3: OTHER PROGRAMMES AND PROJECTS	 3.1
Incubation programmes	3.2 – 3.23
Audit recommendations	3.24
Response from the Hong Kong Design Centre	3.25
Projects funded by CreateSmart Initiative outside the dedicated funding	3.26 – 3.40
Audit recommendations	3.41 – 3.42
Response from the Government	3.43
Response from the Hong Kong Design Centre	3.44
Design District Hong Kong	3.45 – 3.51
Audit recommendations	3.52
Response from the Hong Kong Design Centre	3.53

	Paragraph
PART 4: OTHER ISSUES	4.1
Safeguarding national security	4.2 – 4.3
Audit recommendation	4.4
Response from the Government	4.5
Corporate governance	4.6 – 4.16
Audit recommendations	4.17 – 4.19
Response from the Government	4.20
Response from the Hong Kong Design Centre	4.21
Compliance with funding agreements	4.22 – 4.25
Audit recommendations	4.26
Response from the Hong Kong Design Centre	4.27
Staff management	4.28 – 4.31
Audit recommendations	4.32
Response from the Hong Kong Design Centre	4.33
Hong Kong Design Centre's website	4.34 – 4.36
Audit recommendation	4.37
Response from the Hong Kong Design Centre	4.38
 Appendices	 Page
A : Hong Kong Design Centre: Organisation chart (extract) (31 December 2022)	82
B : Acronyms and abbreviations	83

HONG KONG DESIGN CENTRE

Executive Summary

1. Hong Kong Design Centre (HKDC) is the Government's main partner in promoting design and related creative industries. It is a non-profit making organisation established in 2001. Create Hong Kong (CreateHK), under the purview of the Culture, Sports and Tourism Bureau (CSTB) headed by the Secretary for Culture, Sports and Tourism, is responsible for overseeing HKDC, and the administration and management of the CreateSmart Initiative (CSI), a funding scheme that provides financial support to projects conducive to the development of creative industries in Hong Kong. The Permanent Secretary for Culture, Sports and Tourism is the Controlling Officer of CSI. For the period from 2022-23 to 2024-25, dedicated funding of \$268 million from CSI has been earmarked for HKDC. HKDC's activities included the promotion of Hong Kong's creative industries by organising five flagship programmes, two incubation programmes and other projects. The Audit Commission (Audit) has recently conducted a review of HKDC.

Flagship programmes

2. *Need to monitor implementation of Business of Design Week (BODW) City Programme events.* To monitor the implementation of events without HKDC funding, BODW City Programme partners are required to provide the numbers of participants and event photos to HKDC, and HKDC will arrange site visits to selected events to ascertain the performance of the partners and the quality of the events. Audit noted that, of the 463 events conducted in the period from 2018-19 to 2021-22, the partners of 189 (41%) had not provided the numbers of participants and the partners of 80 (17%) had not provided event photos to HKDC. Furthermore, other than the records of travel expenses claimed by staff, HKDC did not have documentary records relating to the site visits conducted to ascertain the performance of the partners and the quality of events (paras. 2.5 and 2.6).

3. *Requirements on event promotion not complied with by BODW City Programme partners.* Up to 31 January 2023, BODW City Programme 2022 had rolled out 86 events. In December 2022 and January 2023, Audit conducted site visits to 6 of the 86 events and examined the social media pages of the partners of all the

Executive Summary

86 events. Audit noted that the requirements on event promotion were not complied with by a number of BODW City Programme partners. The partner of 1 (17%) of the 6 events visited by Audit did not put up BODW City Programme signage, posters, table tent cards or the equivalent at the event area. There were posts relating to the BODW City Programme events in the social media of the partners of 70 (81%) of the 86 events. For 30 (43%) of the 70 events, the partners did not acknowledge the events as BODW City Programme events nor applied tags or hashtags on the events' social media posts (para. 2.9).

4. ***Need to improve performance evaluation of BODW.*** The number of business contacts or enquiries received by event participants is set as a key performance indicator for BODW. Since July 2011, CreateHK has required HKDC to collect feedback from participants using a standard questionnaire on how useful BODW is in assisting them to expand their contact network and explore new business opportunities. Audit noted that in the period from 2017-18 to 2021-22, HKDC did not have information on the number of business contacts or enquiries received by event participants and did not report such information to CreateHK. In 2018-19, 30% of the respondents rated the programme as “fair” or “not useful” in assisting them to expand their contact network, and 33% of the respondents rated the programme as “fair” or “not useful” in assisting them to explore new business opportunities. Audit also noted that, since 2020-21, HKDC had used a customised questionnaire for its survey which did not include questions on usefulness of BODW (paras. 2.13 and 2.14).

5. ***Delays in commencement of work attachments or studies outside Hong Kong.*** Awardees of the CreateSmart Young Design Talent Award and CreateSmart Young Design Talent Special Award are required to commence their work attachments by the end of September in the year following the year of the award or to commence their studies by the end of February of the second year after the year of the award. Up to 28 February 2023, among the 34 awardees in the period from 2019-20 to 2021-22, 17 (50%) had not commenced work attachments or studies. Due to the coronavirus disease epidemic, HKDC had postponed the deadlines to 31 March 2023 for work attachments and 30 September 2023 for studies (para. 2.22).

6. ***Need to enforce undertakings to return to Hong Kong and work for a Hong Kong design business.*** Awardees of the CreateSmart Young Design Talent Award and the CreateSmart Young Design Talent Special Award are required to return to Hong Kong after the completion of their work attachments or studies outside

Executive Summary

Hong Kong, and work for a Hong Kong design business for not less than two consecutive years. HKDC has the right to rescind the award and claw back the sponsorships paid if the awardees failed to fulfil the requirements. Of the 54 awardees who received the awards in the period from 2017-18 to 2021-22, up to 28 February 2023, 26 had completed their work attachments or studies outside Hong Kong. Audit noted that one (4%) of the awardees had not returned to Hong Kong after the completion of his study. There was no documentary evidence showing that HKDC had taken enforcement actions against him. Furthermore, HKDC did not have information on whether every awardee had fulfilled the requirement on working for a Hong Kong design business for not less than two consecutive years and no specific timeframe was set out for the awardees to fulfil the requirements (paras. 2.24 and 2.25).

7. *Need to improve response rates and event selection mechanism for questionnaire surveys.* Audit examined the records of the questionnaire surveys for four flagship programmes conducted in the period from 2017-18 to 2021-22 and noted that questionnaire surveys were not conducted for some events of the flagship programmes. The response rates of the questionnaire surveys were on the low side, ranging from 0.76% to 45.73% in the period from 2017-18 to 2019-20 and 0.3% to 11.18% in 2020-21 and 2021-22 (para. 2.29).

8. *Need to set challenging target Income-to-Expenditure (I/E) ratios.* According to the funding agreements between the Government and HKDC, HKDC shall use its best endeavours to increase its income level to recoup the cost of the programmes funded by the Government and HKDC is required to meet the target I/E ratio for each financial year. Audit noted that although the actual I/E ratios were much higher than the targets in the period from 2017-18 to 2019-20, the target was reduced from 25% in 2019-20 to 20% in 2020-21 and further to 17% in 2021-22 (paras. 2.37 and 2.38).

9. *Need to explore measures to improve I/E ratios of flagship programmes.* Four flagship programmes, namely BODW, DFA Awards, Knowledge of Design Week and Fashion Asia Hong Kong, are included in the calculation of HKDC's I/E ratio. Audit noted that in the period from 2017-18 to 2021-22, the overall I/E ratio of the four flagship programmes decreased by 14.6 percentage points from 35.7% to 21.1%. There were decreases in I/E ratios of individual programmes of all the four flagship programmes, ranging from 5.1 percentage points to 20.2 percentage points. The income of DFA Awards and Fashion Asia Hong Kong decreased by

Executive Summary

\$0.6 million and \$0.4 million respectively, notwithstanding that the expenditure increased by \$4.9 million and \$6.8 million respectively (para. 2.41).

10. *Need to improve administration of sponsorship.* Audit examined HKDC's sponsorship records for the five flagship programmes conducted in the period from 2019-20 to 2021-22. Audit noted that HKDC did not lay down guidelines on the procedures for handling sponsorships. As a result, there were variations in HKDC's handling of sponsorships. While customised agreements detailing the terms and conditions for the provision of sponsorships were signed with some sponsors, sponsorship reply forms confirming the values and types of sponsorship were signed with other sponsors. Furthermore, 36 (36%) of the 100 sponsorship reply forms examined by Audit were signed by the sponsors after the commencement dates of the sponsored programmes, with delays ranging from 1 to 338 days (averaging 85 days) (para. 2.44).

Other programmes and projects

11. *Need to review provision of working spaces to incubatees.* The Design Incubation Programme (DIP) and the Fashion Incubation Programme (FIP) of HKDC provide incubatees with working spaces in the incubation centres during the two-year incubation period. Audit found that HKDC did not maintain records on the utilisation of the working spaces by the incubatees. In the period from October to December 2022, Audit visited the incubation centres four times and found that the utilisation was low: (a) in the first visit, there were persons present in 2 (3%) of the 69 working spaces visited; and (b) in the three subsequent visits, there were persons present in 2 (25%), 3 (38%) and 5 (63%) of the 8 working spaces visited respectively (paras. 3.6 and 3.11).

12. *Some working spaces were vacant for a long period of time.* In 2018, CreateHK asked HKDC to ensure that the vacancy period of an individual working space would not exceed seven calendar days, and told HKDC that leaving working space vacant for over a month without legitimate reasons could be tantamount to wastage of public funds and was unacceptable. Audit noted that, in the four-year period from 2018-19 to 2021-22: (a) in 3 of the 4 years, there were working spaces with vacancy period exceeding 7 calendar days; (b) 6 to 23 working spaces in each of the 3 years had a vacancy period of 1 month or more. The length of the vacancy period ranged from 1 to 7 months in a year, averaging 3 months; and (c) the total

Executive Summary

vacant working-space-months (i.e. the sum of the number of months vacant for each working space) ranged from 17 to 86 each year (paras. 3.13 and 3.14).

13. ***Admission of DIP graduates as FIP incubatees.*** In the period from August 2016 to December 2022, 6 (40%) of the 15 incubatees admitted to FIP Phase 1 and 14 (93%) of the 15 incubatees admitted to FIP Phase 2 were DIP graduates. In Audit's view, the large number of DIP graduates being admitted to FIP may not be compatible with the original intention of launching DIP and FIP because by admitting a DIP graduate into FIP, HKDC will provide a total of four years of incubation services to the incubatee. With the high percentage of FIP incubatees being DIP graduates, FIP virtually became an extension of DIP. Furthermore, the provision of such a long period of incubation services to incubatees may not be conducive to the achievement of the objectives of DIP and FIP (paras. 3.20 and 3.22).

14. ***Funding applications not submitted in a timely manner.*** According to CSI Guide, for projects funded by CSI outside the dedicated funding, CSI Secretariat's processing time for funding application is 50 clear working days after receiving all the required information from HKDC. If HKDC chooses to incur/commit any expenditure for the projects before funding approval, it will have to pay for the incurred/committed expenditure itself in case the funding applications are rejected or only partially approved. Audit noted that, of the 9 HKDC projects funded by CSI outside the dedicated funding in the period from 1 April 2017 to 31 December 2022, 8 (89%) commenced before receiving funding approvals. For 5 (63%) of the 8 projects, HKDC submitted the funding applications to CreateHK less than 50 clear working days before the project commencements, ranging from 0 to 43 clear working days, averaging 14 clear working days (paras. 3.28 to 3.30).

15. ***Progress reports accepted after completion of projects.*** For 2 of the projects funded by CSI outside the dedicated funding, HKDC is required to submit to CreateHK progress reports that contain details on the progress and financial positions of the projects for the first half of the project durations. Audit reviewed the acceptance of progress reports of the 2 projects and found that the progress reports were accepted 3 days and one month respectively after the projects have been completed (paras. 3.32 and 3.33).

16. ***Long time taken in the revision and acceptance of completion reports.*** Audit reviewed the processing of the completion reports of the 8 completed projects

Executive Summary

funded by CSI outside the dedicated funding, of which 7 have been accepted as at 31 December 2022. Audit found that HKDC had taken 44 to 154 days (averaging 93 days) to submit the revised completion reports after receiving CreateHK's comments. For 2 (29%) of the 7 accepted completion reports, the stipulated time of informing applicants of the results within 50 clear working days after receipt of full information of the completion reports was not met, with delays of 20 and 43 clear working days respectively (averaging 31.5 clear working days) (paras. 3.36 and 3.37).

Other issues

17. ***Need to strengthen regulation over matters concerning the safeguarding of national security.*** The Law of the People's Republic of China on Safeguarding National Security in the Hong Kong Special Administrative Region was implemented on 30 June 2020. The Law stipulates that the Government of the Hong Kong Special Administrative Region shall take necessary measures to strengthen public communication, guidance, supervision and regulation over matters concerning national security, including those relating to schools, universities, social organisations, the media, and the Internet. Audit noted that the funding agreements between the Government and HKDC had not incorporated guidelines and requirements related to the safeguarding of national security (paras. 4.2 and 4.3).

18. ***Need to improve attendance of some Directors in Board of Directors (Board) meetings.*** In the period from 2017-18 to 2021-22, 5 Board meetings were held in each year. In each year during the five-year period, the overall attendance rates of the Directors ranged from 55% to 78% (averaging 65%). Among the three classes of Directors, the attendance rates of Class B Directors were relatively low, ranging from 49% to 74% (averaging 61%) (para. 4.8).

19. ***Need to ensure that Board members comply with requirements on declaration of interest.*** In the period from 1 January 2018 to 31 December 2022: (a) 14 (70%) of the 20 Board members having first appointment in the period had not submitted the Register of Members' Interest forms for first appointment; (b) 50 (40%) of the 126 annual Register of Members' Interest forms due for submission had not been submitted by the Board members; and (c) HKDC had not issued requests to the Board members for submission of 36 (11 for first appointment and 25 for annual submission) Register of Members' Interest forms (para. 4.11).

Executive Summary

20. ***Late submission of and long time taken in endorsements of three-year business plans and annual plans.*** In the six-year period from 2017-18 to 2022-23, for 3 (50%) of the 6 years, the three-year business plans and annual plans were submitted later than the stipulated deadlines or the extended deadline agreed by CreateHK. The delays ranged from 11 to 272 days (averaging 100 days) for the three-year business plans and 7 to 17 days (averaging 12 days) for the annual plans. For all the 6 years, the endorsements of the three-year business plans and annual plans were obtained after the period covered by the plans had commenced. The time periods from the start of the period to the endorsements of the three-year business plans and annual plans ranged from 1 to 264 days (averaging 82 days) and from 1 to 107 days (averaging 39 days) respectively (para. 4.15).

21. ***Need to ensure compliance with funding agreements.*** In August 2020, CSI's Controlling Officer issued a warning letter to urge HKDC's Board Chairman to tackle a breach of the funding agreement between the Government and HKDC regarding HKDC's pitching of \$3.8 million CSI funding as in-kind contribution to the Design District Hong Kong project without the Controlling Officer's approval. In the period from 2019-20 to 2021-22, apart from the warning letter issued in August 2020, CreateHK also expressed its concern on HKDC's non-compliance with the funding agreements signed between the Government and HKDC (paras. 4.22 and 4.23).

22. ***High staff turnover rates and vacancy rates.*** In the period from 2019-20 to 2021-22, overall speaking, HKDC's staff turnover rates were high, ranging from 21.3% in 2020-21 to 48.4% in 2021-22 (averaging 36.4%). As at 31 December 2022, 24 (23.1%) of the 104 positions were vacant. There was a significant increase in staff vacancy rate from 6.6% as at 31 March 2021 to 12.2% as at 31 March 2022 and 22.4% as at 31 December 2022 (paras. 4.28 and 4.29).

Audit recommendations

23. **Audit recommendations are made in the respective sections of this Audit Report. Only the key ones are highlighted in this Executive Summary. Audit has recommended that:**

- (a) **the Secretary for Culture, Sports and Tourism should incorporate guidelines and requirements in future funding agreements to strengthen**

Executive Summary

regulation over matters concerning the safeguarding of national security (para. 4.4);

- (b) the Head of Create Hong Kong should:

Flagship programmes

- (i) devise appropriate mechanism to improve the performance evaluation of BODW (para. 2.17);
- (ii) set a challenging target I/E ratio for HKDC taking into account the actual I/E ratios achieved in preceding years (para. 2.46);

Other programmes and projects

- (iii) ensure that progress reports are processed in a timely manner and accepted before the completion of projects (para. 3.41(a));
- (iv) ensure that completion reports requiring revisions are resubmitted by HKDC in a timely manner (para. 3.41(b));
- (v) ensure that completion reports are processed and accepted in a timely manner (para. 3.41(c)); and

Other issues

- (vi) closely monitor the attendance rates of Directors at Board meetings and, when necessary, take measures to encourage Directors to avoid absences from Board meetings as far as possible (para. 4.17);

- (c) the Executive Director, HKDC should:

Flagship programmes

- (i) for BODW City Programme events without HKDC funding, ensure that:

Executive Summary

- **documentary records are maintained for site visits conducted (para. 2.18(a)); and**
 - **the partners provide the numbers of participants and event photos to HKDC as required, and comply with the requirements on event promotion (para. 2.18(b) and (c));**
- (ii) **for the CreateSmart Young Design Talent Award and the CreateSmart Young Design Talent Special Award:**
- **urge the awardees to commence their work attachments or studies as soon as possible (para. 2.27(a)); and**
 - **monitor the compliance of and enforce awardees' undertakings, and consider setting a timeframe for the awardees' fulfilment of the undertakings (para. 2.27(c) and (d));**
- (iii) **improve the response rates of the questionnaire surveys for evaluation of events (para. 2.35(a));**
- (iv) **improve the mechanism for selecting events for questionnaire surveys (para. 2.35(b));**
- (v) **improve I/E ratios of BODW, DFA Awards, Knowledge of Design Week and Fashion Asia Hong Kong (para. 2.47(a));**
- (vi) **issue guidelines on the procedures for handling sponsorships (para. 2.47(c));**

Other programmes and projects

- (vii) **review the justifications for the provision of working spaces to the incubatees (para. 3.24(a));**
- (viii) **closely monitor the utilisation of working spaces (para. 3.24(c));**

Executive Summary

- (ix) **monitor the allocation of working spaces in the incubation centres, particularly when launching the new phase of DIP and FIP (para. 3.24(e));**
- (x) **review whether the admission of a high percentage of FIP incubatees from DIP graduates is conducive to the achievement of the objectives of DIP and FIP (para. 3.24(h));**
- (xi) **ensure that funding applications for projects funded by CSI outside the dedicated funding are submitted to CreateHK at least 50 clear working days prior to project commencements (para. 3.42(a));**
- (xii) **ensure that completion reports requiring revisions are revised and resubmitted to CreateHK in a timely manner (para. 3.42(b));**

Other issues

- (xiii) **ensure that the Register of Members' Interest forms are submitted by Board members in a timely manner (para. 4.18(a));**
 - (xiv) **ensure compliance with funding agreements between the Government and HKDC (para. 4.26); and**
 - (xv) **ensure that the review on HKDC's human resources issues and practices is completed in a timely manner, and take measures to address the issues of high staff turnover rates and high staff vacancy rates (para. 4.32); and**
- (d) **the Head of Create Hong Kong and the Executive Director, HKDC should ensure that the three-year business plans and annual plans are submitted in a timely manner and endorsements are obtained from CSTB prior to the start of the period concerned (para. 4.19).**

Response from the Government and the Hong Kong Design Centre

24. The Secretary for Culture, Sports and Tourism, the Head of Create Hong Kong and the Executive Director, HKDC agree with the audit recommendations.

PART 1: INTRODUCTION

1.1 This PART describes the background to the audit and outlines the audit objectives and scope.

Background

1.2 Creative industries are important economic drivers for Hong Kong. They help to increase the innovation capacity of the economy and can be a powerhouse for future economic growth. Hong Kong Design Centre (HKDC) is the Government's main partner in promoting design and related creative industries. It is a non-profit making organisation established in 2001 as a company limited by guarantee comprising the following five members:

- (a) the Hong Kong Designers Association;
- (b) the Chartered Society of Designers (Hong Kong);
- (c) the Hong Kong Interior Design Association;
- (d) the Hong Kong Fashion Designers Association; and
- (e) the Hong Kong Federation of Design and Creative Industries.

1.3 ***HKDC's work.*** There are five aspects of HKDC's work:

- (a) publicity and promotion of Hong Kong's design works;
- (b) promotion of design leadership;
- (c) promotion of design excellence;
- (d) nurturing of design-entrepreneurs; and

Introduction

- (e) supporting the development of Hong Kong's fashion design industry.

1.4 **Create Hong Kong.** Create Hong Kong (CreateHK) was set up in June 2009 by the Government as an office dedicated to promoting the development of creative industries. Since 1 July 2022, CreateHK has been under the purview of the Culture, Sports and Tourism Bureau (CSTB — Note 1), which is headed by the Secretary for Culture, Sports and Tourism. CreateHK, under the Head of Create Hong Kong, is responsible for overseeing HKDC (Note 2), and the administration and management of the CreateSmart Initiative (CSI — see para. 1.5).

1.5 **CSI.** CSI was established in June 2009 concurrently with CreateHK. It is a funding scheme that provides financial support to projects conducive to the development of creative industries in Hong Kong. CSI funding covers projects in seven creative sectors, namely advertising, architecture, design, digital entertainment, music, printing and publishing, and television. The Permanent Secretary for Culture, Sports and Tourism (PSCST — Note 3) is the Controlling Officer of CSI.

HKDC's activities

1.6 HKDC's activities target a wide spectrum of audience, such as business leaders, entrepreneurs, brand owners, design professionals and students, and the public. The activities include the promotion of Hong Kong's creative industries by organising programmes funded by CSI's dedicated funding (see para. 1.7) (i.e. five flagship programmes and two incubation programmes) and some other projects not funded by CSI's dedicated funding:

Note 1: *CSTB took over the creative industries portfolio from the Commerce and Economic Development Bureau following the reorganisation of government structure on 1 July 2022.*

Note 2: *Following the establishment of CreateHK in 2009, the housekeeping responsibility of HKDC was transferred from the Innovation and Technology Commission to CreateHK.*

Note 3: *PSCST was re-created from the Permanent Secretary for Commerce and Economic Development (Communications and Creative Industries) when CSTB was established on 1 July 2022.*

- (a) ***Flagship programmes.*** The five flagship programmes are:
 - (i) Business of Design Week (BODW — see Photograph 1);
 - (ii) DFA Awards (see Photograph 2);
 - (iii) Knowledge of Design Week;
 - (iv) Nurturing Programme of Hong Kong Young Design Talents; and
 - (v) Fashion Asia Hong Kong;
- (b) ***Incubation programmes.*** The two incubation programmes are:
 - (i) Design Incubation Programme (DIP); and
 - (ii) Fashion Incubation Programme (FIP);
- (c) ***Projects funded by CSI outside the dedicated funding.*** In the period from April 2017 to December 2022, HKDC organised 9 projects funded by CSI outside the dedicated funding. The CSI funding approved for the 9 projects was \$59 million; and
- (d) ***Other projects.*** From time to time, HKDC collaborates with government departments or other organisations in organising projects related to the promotion of design and related creative industries in Hong Kong. For example, in the period from 2018-19 to 2020-21, HKDC collaborated with the Tourism Commission in organising a creative tourism project named Design District Hong Kong.

Photograph 1

A forum held under BODW (2022)



Source: *HKDC records*

Photograph 2

An award presentation ceremony held under DFA Awards (2022)



Source: *HKDC records*

Funding model

1.7 In the period from its establishment in 2001 to March 2019, HKDC received Government funding of about \$300 million to support its basic operation. Since 2019-20, a streamlined funding approach supported by the Legislative Council Panel on Information Technology and Broadcasting has been adopted. For the three-year funding cycle from 2019-20 to 2021-22, dedicated funding of around \$300 million from CSI was earmarked for HKDC. In the funding cycle, cumulative payments of about \$208 million have been made to HKDC mainly for implementing the flagship programmes and the incubation programmes. For the three-year funding cycle from 2022-23 to 2024-25, dedicated funding of \$268 million from CSI has been earmarked for HKDC. Funding agreements were signed between the Government and HKDC, which set out the ambit of the use and the conditions for allocation of funds.

Income and expenditure

1.8 **Income.** In the period from 2017-18 to 2021-22, the annual income of HKDC ranged from \$102.3 million to \$129.2 million, mainly comprising government funding, project income and sponsorships, as follows:

- (a) **Government funding.** Government funding mainly comprised CSI funding (comprising CSI's dedicated funding and CSI funding outside the dedicated funding) and funding from other government departments (e.g. funding from the Tourism Commission for the Design District Hong Kong project). The amount of government funding ranged from \$82.5 million to \$112.5 million annually;
- (b) **Project income.** Project income mainly comprised registration fees for the events organised by HKDC under the flagship programmes, and entry and winner fees for DFA Awards (see para. 1.6(a)). The amount of project income ranged from \$4.1 million to \$7.7 million annually; and
- (c) **Sponsorships.** Sponsorships were mainly those designated for individual flagship programmes. The amount of sponsorships received ranged from \$3.2 million to \$14.3 million annually.

Introduction

1.9 *Expenditure.* In the period from 2017-18 to 2021-22, the annual expenditure of HKDC ranged from \$102.2 million to \$128.3 million, comprising expenditure for project expenses (e.g. marketing and communication expenses, and event venue hiring costs), payroll and related costs, and overhead and administration.

1.10 Table 1 summarises the income and expenditure of HKDC in the period from 2017-18 to 2021-22.

Table 1

**Income and expenditure of HKDC
(2017-18 to 2021-22)**

	2017-18	2018-19	2019-20	2020-21	2021-22
	(\$'000)				
<i>Income</i>					
Government funding	82,520	99,947	108,940	109,472	112,454
Project income	6,244	7,727	6,279	4,093	4,820
Sponsorship	13,469	14,340	3,164	8,441	11,878
Other income (Note)	23	30	86	—	—
Total	102,256	122,044	118,469	122,006	129,152
<i>Expenditure</i>					
Project expenses	66,411	77,101	72,282	72,074	75,733
Payroll and related costs	29,725	35,296	36,332	41,357	43,193
Overhead and administration	6,048	9,741	9,647	8,344	9,357
Total	102,184	122,138	118,261	121,775	128,283

Source: Audit analysis of HKDC records

Note: Other income was mainly bank interest income.

Governance and organisation structure

1.11 ***Governance structure.*** The governing body of HKDC is the Board of Directors (the Board). The Board is responsible for steering and overseeing HKDC's operations. As of 31 December 2022, the Board consisted of a Chairman and

Introduction

23 members. The Board comprised the Head of Create Hong Kong, a representative from each of the five design associations (see para. 1.2), and members elected from the design/cultural/creative sectors, business/industry sectors and professionals/academics/industry support organisations (Note 4). The Board is supported by four committees, namely the Audit Committee, the Development Committee, the Finance and Administration Committee, and the Programme Committee.

1.12 **Organisation structure.** The Executive Director, appointed by the Board, is responsible for ensuring the proper operation of HKDC. As at 31 December 2022, HKDC had an establishment of 104 staff (including 28 positions funded by the Job Creation Scheme (Note 5)). The strength of HKDC was 80 (including 21 staff funded by the Job Creation Scheme). An extract of the organisation chart of HKDC as at 31 December 2022 is shown in Appendix A.

Audit review

1.13 In September 2022, the Audit Commission (Audit) commenced a review of HKDC. This audit has focused on the following areas:

- (a) flagship programmes (PART 2);
- (b) other programmes and projects (PART 3); and
- (c) other issues (PART 4).

Audit has found room for improvement in the above areas and has made a number of recommendations to address the issues.

Note 4: *Members elected from the design/cultural/creative sectors, business/industry sectors and professionals/academics/industry support organisations are appointed jointly by the five Directors representing the five design associations and approved by the Secretary for Culture, Sports and Tourism.*

Note 5: *The Job Creation Scheme was launched by the Government in 2020 to create time-limited jobs in the public and private sectors to relieve the unemployment situation caused by the coronavirus disease epidemic and the anti-epidemic measures. Under the scheme, the Government subsidises part of the cost of the additional staff employed by the non-governmental sector.*

General response from the Hong Kong Design Centre

1.14 The Executive Director, HKDC agrees with the audit recommendations. He has said that HKDC will work closely with CreateHK to take follow-up actions and improvement measures as appropriate.

General response from the Government

1.15 The Secretary for Culture, Sports and Tourism and the Head of Create Hong Kong agree with the audit recommendations. The Head of Create Hong Kong has said that CreateHK will work closely with HKDC to take follow-up actions and improvement measures as appropriate.

Acknowledgement

1.16 Audit would like to acknowledge with gratitude the full cooperation of the staff of CreateHK and HKDC during the course of the audit review.

PART 2: FLAGSHIP PROGRAMMES

2.1 This PART examines the implementation of flagship programmes by HKDC, focusing on the following areas:

- (a) administration of BODW (paras. 2.4 to 2.20);
- (b) administration of Nurturing Programme of Hong Kong Young Design Talents (paras. 2.21 to 2.28);
- (c) evaluation of flagship programmes (paras. 2.29 to 2.36); and
- (d) project income and sustainability (paras. 2.37 to 2.49).

Background

2.2 Every year, HKDC organises the following flagship programmes:

- (a) ***BODW***. Launched in 2002, BODW is a week-long event dedicated to design, brand and innovation with conferences, forums, awards presentation, exhibitions, outreach programme (i.e. BODW City Programme — see para. 2.4), gala dinner and other networking gatherings. It serves as a platform for design enthusiasts, students and the public to network, exchange ideas and explore business collaborations;
- (b) ***DFA Awards***. DFA Awards has been HKDC's annual flagship event since 2003 to honour design excellence and demonstrate how design can improve the quality of life in Asia. There are five award programmes, namely DFA Lifetime Achievement Award, DFA Design Leadership Award, DFA World's Outstanding Chinese Designer, DFA Design for Asia Awards and DFA Hong Kong Young Design Talent Award;
- (c) ***Knowledge of Design Week***. Knowledge of Design Week was first held in 2006. It is a week-long event consisting of a series of conferences and workshops. The programme aims to engage participants in a multi-level dialogue on how design can solve complex challenge of the society. It also

aims to inspire business executives with the application of design in business context and update local design professionals with the latest global design trend and knowledge;

- (d) ***Nurturing Programme of Hong Kong Young Design Talents.*** The programme was introduced in 2012. It provides financial sponsorships for eligible DFA Hong Kong Young Design Talent Award awardees to undergo work attachments or studies outside Hong Kong. The programme allows the awardees to develop their skills and bring different ideas back to Hong Kong, contributing to the city's design and creative industries upon their return. The programme also provides a platform to the awardees for promotion and network building; and
- (e) ***Fashion Asia Hong Kong.*** Fashion Asia Hong Kong was launched in 2016 as part of the Fashion Initiatives of the Government. It geared to energise Hong Kong's image and position as an international city of fashion business development in Asia. Fashion Asia Hong Kong includes a two-day forum and a week-long fashion exhibition. The forum and the exhibition are held concurrently with BODW.

2.3 In 2021-22, HKDC's expenditures in implementing each flagship programme ranged from \$5.9 million to \$28.5 million, totalling \$70.9 million. Table 2 shows HKDC's expenditures in implementing the flagship programmes in the three-year funding cycle from 2019-20 to 2021-22.

Table 2**Expenditure in implementing the flagship programmes
(2019-20 to 2021-22)**

Flagship programme	Expenditure (\$ million)		
	2019-20	2020-21	2021-22
BODW	18.3	22.0	28.5
DFA Awards	11.2	10.9	12.8
Knowledge of Design Week	6.5	5.4	7.2
Nurturing Programme of Hong Kong Young Design Talents	2.8	3.4	5.9
Fashion Asia Hong Kong	9.6	14.6	16.5
Total	48.4	56.3	70.9

Source: Audit analysis of HKDC records

Administration of Business of Design Week

Need to monitor implementation of BODW City Programme events

2.4 BODW City Programme is a citywide creative business and design and creative clusters activation programme initiated by HKDC in 2018. It is a community extension programme of BODW. HKDC collaborates with various parties (e.g. individual designers, non-governmental organisations and local creative communities) as partners to organise events under the following three platforms:

- (a) ***Anchor Site Festivals.*** Partners of Anchor Site Festivals organise design festivals that activate and connect local creative businesses and communities. Each festival should comprise at least five to eight free of charge design and innovation related activities for the public to experience the value of design;

- (b) ***Design EduVation Programmes.*** Partners of Design EduVation Programmes organise educational programmes for design thinking education and creative community engagement. The programmes should be free of charge, and target different communities and age groups; and
- (c) ***Satellite Events and Offers.*** Partners of Satellite Events and Offers organise a range of individual design related activities at their own resources and venues, or provide special offers such as sales discount, free gifts, discount or free admission to paid workshops or activities.

2.5 Partners of the Anchor Site Festivals and the Design EduVation Programmes may apply for HKDC funding (Note 6). To monitor the implementation of events by BODW City Programme partners, HKDC has implemented the following measures:

- (a) ***Events with HKDC funding.*** The partners need to:
 - (i) meet with HKDC representatives regularly to report the event progress; and
 - (ii) submit a report to and attend a review meeting with HKDC after completion of the events, and assist HKDC to collect feedback from the participants through conducting a questionnaire survey; and
- (b) ***Events without HKDC funding.*** The partners are:
 - (i) required to provide the numbers of participants and event photos for HKDC's record; and
 - (ii) not required to report the event progress to HKDC. Instead, HKDC will arrange site visits to selected events to ascertain the performance of the partners and the quality of the events.

Note 6: *In the period from 2018-19 to 2021-22, the amount of funding provided to each BODW City Programme event ranged from \$18,000 to \$140,000, averaging \$61,339.*

Flagship programmes

2.6 Audit reviewed HKDC's records on BODW City Programme conducted in the period from 2018-19 to 2021-22. Audit noted that:

- (a) ***Events with HKDC funding.*** All the 43 events with HKDC funding complied with the requirements on submission of reports and collection of feedback (see para. 2.5(a)); and
- (b) ***Events without HKDC funding.*** Of the 463 events without HKDC funding:
 - (i) the partners of 189 (41%) had not provided the numbers of participants and the partners of 80 (17%) had not provided event photos to HKDC (see para. 2.5(b)(i)); and
 - (ii) other than the records of travel expenses claimed by staff, HKDC did not have documentary records relating to the site visits conducted to ascertain the performance of the partners and the quality of events (see para. 2.5(b)(ii)).

2.7 Audit considers that HKDC needs to take measures to ensure that:

- (a) for BODW City Programme events without HKDC funding, documentary records are maintained for site visits conducted to ascertain the performance of the partners and the quality of the events, including records on the results of the site visits and whether any follow-up actions are necessary; and
- (b) the partners of BODW City Programme events without HKDC funding provide the numbers of participants and event photos to HKDC as required.

Requirements on event promotion not complied with by BODW City Programme partners

2.8 With a view to achieving effective promotion and greater marketing synergy, the partner agreements and the information kit of BODW City Programme stipulated that, on event promotion, partners of BODW City Programme are required to:

- (a) put up BODW City Programme signage, posters, table tent cards or the equivalent at prominent positions in the event area; and
- (b) acknowledge the events as BODW City Programme events, and tag BODW City Programme and add hashtags of BODW City Programme on their social media posts (Note 7).

2.9 Up to 31 January 2023, BODW City Programme 2022 had rolled out 86 events, including 12 Anchor Site Festivals, 4 Design EduVation Programmes and 70 Satellite Events and Offers. According to HKDC, it had reminded the partners to acknowledge the events as BODW City Programme events on-site and on the social media during the event period. In December 2022 and January 2023, Audit conducted site visits to 6 of the 86 events (comprising 3 Anchor Site Festivals, and 3 Satellite Events and Offers) and examined the social media pages of the partners of all the 86 events. Audit noted that the requirements on event promotion were not complied with by a number of BODW City Programme partners:

- (a) the partner of 1 (17%) of the 6 events visited by Audit did not put up BODW City Programme signage, posters, table tent cards or the equivalent at the event area; and
- (b) there were posts relating to the BODW City Programme events in the social media of the partners of 70 (81% — including 12 Anchor Site Festivals, 4 Design EduVation Programmes, and 54 Satellite Events and Offers) of the 86 events. For 30 (43% — including 6 Anchor Site Festivals and 24 Satellite Events and Offers) of the 70 events, the partners did not acknowledge the events as BODW City Programme events nor applied tags or hashtags on the events' social media posts.

2.10 Audit considers that HKDC needs to take measures to ensure that BODW City Programme partners comply with the requirements on event promotion with a view to achieving effective promotion and greater marketing synergy.

Note 7: *By tagging BODW City Programme on a social media post, users can access BODW City Programme webpage on the same social media platform via the link created by the tag. A hashtag is a word or phrase preceded by a hash (#) sign and is used on social media websites and applications to identify messages relating to a specific topic.*

Need to rationalise the basis of reporting the number of physical attendance of BODW City Programme

2.11 Number of physical attendance is one of the key performance indicators for BODW City Programme. In accordance with the funding agreements between the Government and HKDC, HKDC reported the number of physical attendance of BODW City Programme to CreateHK in the half-yearly operational reports. Audit examined the reports submitted by HKDC in the period from 2018-19 to 2021-22. Audit noted that there were inconsistencies in the basis of HKDC's reporting of the number of physical attendance:

- (a) for Anchor Site Festivals, physical attendance was not reported for events without HKDC funding; and
- (b) for Design EduVation Programmes and Satellite Events and Offers, physical attendance was reported for all events, including those without HKDC funding.

2.12 Audit considers that HKDC needs to, in consultation with CreateHK, rationalise the basis of reporting the number of physical attendance of BODW City Programme to accurately reflect the effectiveness of BODW City Programme.

Need to improve performance evaluation of BODW

2.13 One of the objectives of BODW is to serve as a platform for design enthusiasts, students and the public to network, exchange ideas and explore business collaborations (see para. 2.2(a)). To measure the achievement of this objective:

- (a) the number of business contacts or enquiries received by event participants is set as a key performance indicator for BODW; and
- (b) since July 2011, CreateHK has required HKDC to collect feedback from participants using a standard questionnaire on how useful BODW is in assisting them to expand their contact network and explore new business opportunities.

2.14 Audit examined HKDC's achievements of the key performance indicators and the results of the questionnaire surveys for BODW in the period from 2017-18 to 2021-22. Audit noted that:

- (a) HKDC did not have information on the number of business contacts or enquiries received by event participants and did not report such information to CreateHK. Every year, HKDC either reported that the number was "zero" or that the performance indicator was not applicable;
- (b) in 2018-19, 30% of the respondents rated the programme as "fair" or "not useful" in assisting them to expand their contact network, and 33% of the respondents rated the programme as "fair" or "not useful" in assisting them to explore new business opportunities (Note 8); and
- (c) since 2020-21, instead of using CreateHK's standard questionnaire (see para. 2.13(b)), HKDC had used a customised questionnaire for its survey. Questions on usefulness of BODW were not included in the customised questionnaire. Hence, feedback on the usefulness of BODW was no longer collected from the participants (Note 9).

2.15 According to HKDC, event participants of BODW refused to disclose the number of business contacts or enquiries received, therefore the key performance indicator on number of business contacts or enquiries received by event participants was reported as "zero" or not applicable. However, Audit noted that other flagship programmes and projects (i.e. Knowledge of Design Week in 2020-21 and Public Awareness Programme in 2019-20 to 2021-22) had provided such information to HKDC. This suggested that it was not reasonable for the event participants to refuse to disclose such information.

Note 8: *According to HKDC, in 2019-20, the questionnaire surveys were not conducted because some BODW events were cancelled due to the black-clad violence.*

Note 9: *According to CreateHK, in November 2022, it noted that HKDC had not included questions in CreateHK's standard questionnaire in the BODW questionnaires. In January 2023, CreateHK requested HKDC to rectify the questionnaires and provide the questionnaires for each flagship programme for CreateHK's information on an annual basis.*

Flagship programmes

2.16 Audit considers that CreateHK needs to, in collaboration with HKDC, devise appropriate mechanism to improve the performance evaluation of BODW with a view to reflecting the effectiveness of the programme in achieving its objectives.

Audit recommendations

2.17 Audit has *recommended* that the Head of Create Hong Kong should, in collaboration with HKDC, devise appropriate mechanism to improve the performance evaluation of BODW with a view to reflecting the effectiveness of the programme in achieving its objectives.

2.18 Audit has *recommended* that the Executive Director, HKDC should:

- (a) take measures to ensure that, for BODW City Programme events without HKDC funding, documentary records are maintained for site visits conducted to ascertain the performance of the partners and the quality of the events, including records on the results of the site visits and whether any follow-up actions are necessary;
- (b) take measures to ensure that the partners of BODW City Programme events without HKDC funding provide the numbers of participants and event photos to HKDC as required;
- (c) take measures to ensure that BODW City Programme partners comply with the requirements on event promotion; and
- (d) in consultation with CreateHK, rationalise the basis of reporting the number of physical attendance of BODW City Programme to accurately reflect the effectiveness of BODW City Programme.

Response from the Government

2.19 The Head of Create Hong Kong agrees with the audit recommendation. He has said that:

- (a) CreateHK has collaborated with HKDC in setting the key performance indicators for its flagship programmes including BODW funded by CSI's dedicated funding, and constantly reviews the key performance indicators to ensure that they reflect the effectiveness of the programmes; and
- (b) CreateHK will continue to work closely with HKDC to review and take measures to further improve the performance evaluation of its flagship programmes including BODW.

Response from the Hong Kong Design Centre

2.20 The Executive Director, HKDC agrees with the audit recommendations. He has said that HKDC will:

- (a) take measures to maintain proper documentary records of the site visits conducted for BODW City Programme events without HKDC funding to ascertain the performance of the partners and the quality of the events;
- (b) adopt measures to ensure that the partners of BODW City Programme events without HKDC funding provide the number of participants and event photos to HKDC as required;
- (c) explore measures to ensure that BODW City Programme partners comply with the requirements on event promotion; and
- (d) review the basis of reporting the number of physical attendance of HKDC's programmes after consulting with CreateHK.

Administration of Nurturing Programme of Hong Kong Young Design Talents

2.21 The Nurturing Programme of Hong Kong Young Design Talents was launched in 2012. It provides financial sponsorship to the awardees of the following two award categories under DFA Hong Kong Young Design Talent Award (Note 10) to undergo work attachments or studies outside Hong Kong:

- (a) ***CreateSmart Young Design Talent Award.*** The Award is for design practitioners. The awardees will receive sponsorship of up to \$500,000 to undergo work attachments outside Hong Kong for 6 to 12 months; and
- (b) ***CreateSmart Young Design Talent Special Award.*** The Award is for design practitioners or design graduates. The awardees will receive sponsorship of up to \$250,000 to undergo work attachments outside Hong Kong for 6 to 12 months or studies outside Hong Kong for 6 to 18 months.

The sponsorship covers the costs directly related to the work attachments or studies outside Hong Kong, including airfares (round-trip economy class), lodging, living expenses and any other costs approved by HKDC.

Delays in commencement of work attachments or studies outside Hong Kong

2.22 Awardees of the CreateSmart Young Design Talent Award and CreateSmart Young Design Talent Special Award are required to commence their work attachments by the end of September in the year following the year of the award or to commence their studies by the end of February of the second year after the year

Note 10: *DFA Hong Kong Young Design Talent Award is an award programme under DFA Awards (see para. 2.2(b)). It aims to identify and nurture up-and-coming design practitioners and design graduates aged from 18 to 35. There are five categories of awards. Apart from CreateSmart Young Design Talent Award and CreateSmart Young Design Talent Special Award, the other three categories of awards are PolyU School of Design Young Design Talent Award, HKDI Young Design Talent Award and Young Design Talent Special Mention Award. These three awards are not funded by CSI.*

of the award. In the period from 2019-20 to 2021-22, there were 34 awardees. Audit noted that, up to 28 February 2023:

- (a) 7 (21%) had commenced work attachments or studies before the deadlines stipulated at the time of the awards (original deadlines);
- (b) 10 (29%) had commenced work attachments or studies after the original deadlines. The delays from the original deadlines ranged from 4 to 28 months (averaging 12 months); and
- (c) 17 (50%) awardees had not commenced work attachments or studies. Due to the coronavirus disease (COVID-19) epidemic, HKDC had postponed the deadlines to 31 March 2023 for work attachments and 30 September 2023 for studies.

2.23 In view of the recent discontinuance of most of the anti-epidemic measures against the COVID-19 epidemic, Audit considers that HKDC needs to:

- (a) urge the awardees to commence their work attachments or studies outside Hong Kong as soon as possible; and
- (b) take measures to facilitate the awardees to commence work attachments or studies, for example, by speeding up the processing of revised work attachment or study plans and providing assistance in connecting with the employers or institutions where appropriate.

Need to enforce undertakings to return to Hong Kong and work for a Hong Kong design business

2.24 Awardees of the CreateSmart Young Design Talent Award and the CreateSmart Young Design Talent Special Award receiving sponsorships for work attachments or studies outside Hong Kong are required to fulfil the requirements of the undertakings signed upon their confirmation to receive the awards. The undertakings stipulated that:

- (a) the awardees need to contribute to the development of Hong Kong's design and creative industries by:

Flagship programmes

- (i) returning to Hong Kong after the completion of their work attachments or studies; and
 - (ii) working for a Hong Kong design business for not less than two consecutive years; and
- (b) HKDC has the right to rescind the award and claw back the sponsorships paid if the awardees failed to fulfil the requirements.

2.25 Of the 54 awardees who received the awards in the period from 2017-18 to 2021-22, up to 28 February 2023, 26 had completed their work attachments or studies outside Hong Kong. Audit noted that:

- (a) 25 (96%) of the 26 awardees had returned to Hong Kong after the completion of their work attachments or studies. The remaining one (4%) awardee had not returned to Hong Kong after the completion of his study. There was no documentary evidence showing that HKDC had taken enforcement actions against him;
- (b) from time to time, HKDC sent emails to the awardees enquiring them of their latest positions. However, HKDC did not have information on whether every awardee had fulfilled the requirement on working for a Hong Kong design business for not less than two consecutive years;
- (c) there was no mechanism in place to monitor the awardees' compliance of the requirements in the undertakings; and
- (d) no specific timeframe was set out in the undertakings for the awardees to fulfil the requirements.

2.26 Audit considers that HKDC needs to:

- (a) put in place a mechanism to monitor the compliance of and enforce awardees' undertakings to return to Hong Kong and work for Hong Kong design business for not less than two consecutive years after the completion of work attachments or studies outside Hong Kong; and

- (b) consider setting a timeframe for the awardees' fulfilment of the undertakings to return to Hong Kong and work for Hong Kong design business for not less than two consecutive years after the completion of work attachments or studies outside Hong Kong.

Audit recommendations

2.27 **Audit has *recommended* that the Executive Director, HKDC should:**

- (a) **urge the awardees to commence their work attachments or studies outside Hong Kong as soon as possible;**
- (b) **take measures to facilitate the awardees to commence work attachments or studies, for example, by speeding up the processing of revised work attachment or study plans and providing assistance in connecting with the employers or institutions where appropriate;**
- (c) **put in place a mechanism to monitor the compliance of and enforce awardees' undertakings to return to Hong Kong and work for Hong Kong design business for not less than two consecutive years after the completion of work attachments or studies outside Hong Kong; and**
- (d) **consider setting a timeframe for the awardees' fulfilment of the undertakings to return to Hong Kong and work for Hong Kong design business for not less than two consecutive years after the completion of work attachments or studies outside Hong Kong.**

Response from the Hong Kong Design Centre

2.28 The Executive Director, HKDC agrees with the audit recommendations. He has said that HKDC will:

- (a) **urge the awardees to commence their required work attachments or studies as soon as possible;**

Flagship programmes

- (b) take measures to facilitate the awardees to commence their work attachments or studies, e.g. by speeding up the processing of revised work attachment or study plans and providing assistance in connecting with the employers or institutions where appropriate;
- (c) develop a mechanism to monitor the compliance of the awardees, such as asking them to provide their boarding passes of returning flights to Hong Kong and updates of their work details or design projects; and
- (d) review the undertakings to include a timeframe for awardees' fulfilment of returning to Hong Kong and working for Hong Kong design business for not less than two consecutive years after the completion of work attachments or studies outside Hong Kong.

Evaluation of flagship programmes

Need to improve response rates and event selection mechanism for questionnaire surveys

2.29 Upon completion of a flagship programme, HKDC prepares a completion report with details on the result, performance and evaluation of the programme. HKDC collects feedback from participants of selected events of the flagship programmes through a questionnaire survey. For events conducted via online mode, the questionnaire surveys were conducted electronically by sending the questionnaires to the participants by emails or displaying a Quick Response code for the participants to complete the questionnaires online. Audit examined the records of the questionnaire surveys for four flagship programmes (Note 11) conducted in the period from 2017-18 to 2021-22 and noted that:

- (a) *questionnaire surveys not conducted for some events.* Questionnaire surveys were not conducted for some events of the flagship programmes. According to HKDC:

Note 11: *The Nurturing Programme of Hong Kong Young Design Talents was excluded from the analysis because most of the programme's activities were subsumed under the activities of DFA Awards and were covered by the questionnaire surveys for DFA Awards.*

- (i) the owners of some event venues (e.g. shopping malls) did not allow HKDC to conduct questionnaire surveys in any form due to the concern of disturbing the guests; and
- (ii) for some other events, the numbers of participants involved were too small to be statistically significant for reflecting the effectiveness of the respective programmes.

However, Audit noted that there was no documentary evidence showing the justifications for not selecting an event for the questionnaire surveys. There were also no guidelines on the selection criteria; and

- (b) ***low response rates in questionnaire surveys.*** The response rates of the questionnaire surveys were on the low side (see Table 3):
 - (i) ***2017-18 to 2019-20.*** The response rates of the questionnaire surveys conducted in the period from 2017-18 to 2019-20 ranged from 0.76% (DFA Awards in 2017-18) to 45.73% (Knowledge of Design Week in 2019-20); and
 - (ii) ***2020-21 and 2021-22.*** Some events of the flagship programmes were conducted via online mode or hybrid mode (i.e. both physical and online modes) in 2020-21 and 2021-22. The response rates of the questionnaire surveys conducted in 2020-21 and 2021-22 ranged from 0.3% (Fashion Asia Hong Kong in 2021-22) to 11.18% (DFA Awards in 2020-21).

Flagship programmes

Table 3

Response rates of questionnaire surveys of flagship programmes (2017-18 to 2021-22)

	2017-18	2018-19	2019-20	2020-21	2021-22
<i>BODW</i>					
No. of participants covered by surveys	5,082	4,616	(Note)	7,149	7,744
No. of respondents	750	517		118	129
Response rate	14.76 %	11.20%		1.65 %	1.67 %
<i>DFA Awards</i>					
No. of participants covered by surveys	99,405	138,182	34,714	8,437	6,382
No. of respondents	760	1,190	450	943	287
Response rate	0.76 %	0.86 %	1.30%	11.18 %	4.50 %
<i>Knowledge of Design Week</i>					
No. of participants covered by surveys	642	710	890	14,639	4,184
No. of respondents	248	261	407	172	199
Response rate	38.63 %	36.76%	45.73%	1.17%	4.76 %
<i>Fashion Asia Hong Kong</i>					
No. of participants covered by surveys	12,403	17,725	(Note)	56,466	41,621
No. of respondents	840	625		324	124
Response rate	6.77%	3.53%		0.57%	0.30%

Source: Audit analysis of HKDC records

Note: In 2019-20, BODW Summit, DFA Awards Presentation Ceremony and the programmes of Fashion Asia Hong Kong were cancelled due to the black-clad violence in 2019.

2.30 Audit considers that HKDC needs to:

- (a) take measures to improve the response rates of the questionnaire surveys for evaluation of events under the flagship programmes; and
- (b) improve the mechanism for selecting events of the flagship programmes for questionnaire surveys by:
 - (i) documenting the justifications for excluding an event from the questionnaire surveys; and
 - (ii) laying down the selection criteria for selecting events for conducting questionnaire surveys.

Need to monitor performance of service providers and business sponsors

2.31 HKDC procures services from various service providers (e.g. videography and photography services providers, and marketing and public relations agencies) for implementing the flagship programmes. In the period from 2017-18 to 2021-22, the value of each service contract ranged from several hundred dollars to \$3.7 million, with 5 of the service contracts having a value exceeding \$1.4 million (see Note 12 to para. 2.32(b)). In addition, HKDC secures in-kind sponsorship mainly in the form of services (e.g. television production services and market research services). In 2021-22, the in-kind sponsorship provided by business sponsors to the flagship programmes amounted to \$8.74 million. Some service providers provided services under service contracts and at the same time provided services as in-kind sponsorship in the capacity of business sponsors.

2.32 The Stores and Procurement Regulations of the Government are made by the Financial Secretary/Secretary for Financial Services and the Treasury under the Public Finance Ordinance (Cap. 2) for compliance by the public officers. They regulate matters relating to the management and procurement of government stores and services, and requirements on contract administration, which include:

Flagship programmes

- (a) effective monitoring mechanism shall be devised to ensure that a contractor or consultant performs to standard and complies with the terms of a contract; and
- (b) for contracts with a value exceeding the quotation limits (Note 12), performance of contractors or consultants should be evaluated:
 - (i) at least once every six months until completion of the contract for contracts lasting more than one year; and
 - (ii) upon completion of the contract for contracts lasting a year or less.

2.33 In response to Audit's enquiry, HKDC informed Audit in February 2023 that it had reviewed and evaluated its service providers with contracts exceeding \$1.4 million upon the completion of BODW in 2021 and 2022. However, Audit found that:

- (a) there was no documentary evidence showing that HKDC had evaluated the performance of the service providers and business sponsors; and
- (b) HKDC had not laid down guidelines on the monitoring of performance of service providers and business sponsors.

2.34 Although HKDC is not a government department hence not subject to the Stores and Procurement Regulations, there are merits for HKDC to devise a monitoring mechanism to ensure that service providers and business sponsors perform to standard and comply with the terms of a contract where applicable, making reference to the requirements set out in the Stores and Procurement Regulations. Audit considers that HKDC needs to establish a mechanism to monitor the performance of service providers and business sponsors of flagship programmes.

Note 12: *The quotation limit for the procurement of services, other than consultancy services and services for construction and engineering works, is \$1.4 million.*

Audit recommendations

- 2.35 **Audit has *recommended* that the Executive Director, HKDC should:**
- (a) **take measures to improve the response rates of the questionnaire surveys for evaluation of events under the flagship programmes;**
 - (b) **improve the mechanism for selecting events of the flagship programmes for questionnaire surveys by:**
 - (i) **documenting the justifications for excluding an event from the questionnaire surveys; and**
 - (ii) **laying down the selection criteria for selecting events for conducting questionnaire surveys; and**
 - (c) **establish a mechanism to monitor the performance of service providers and business sponsors of flagship programmes.**

Response from the Hong Kong Design Centre

2.36 The Executive Director, HKDC agrees with the audit recommendations. He has said that HKDC will:

- (a) adopt measures to promote the completion of questionnaire surveys to improve the response rates;
- (b) improve the mechanism for selecting events of the flagship programmes for questionnaire surveys by:
 - (i) documentation of the justifications for excluding an event from the questionnaire surveys; and
 - (ii) setting out the selection criteria for selecting events for conducting questionnaire surveys; and

Flagship programmes

- (c) in the review of the Corporate Governance Manual, establish a mechanism to monitor the performance of service providers and business sponsors of flagship programmes. The same recommendation as the one in paragraph 2.35(c) was made in the latest internal audit report, and appropriate actions have already been planned.

Project income and sustainability

2.37 According to the funding agreements between the Government and HKDC:

- (a) HKDC shall build up and enhance its revenue stream, and use its best endeavours to increase its income level to recoup the cost of the programmes funded by the Government; and
- (b) HKDC is required to meet the target Income-to-Expenditure (I/E) ratio (Note 13) for each financial year. The target I/E ratio shall be set by the Controlling Officer of CSI at his sole discretion and shall not be less than 17%.

Need to set challenging target I/E ratios

2.38 For the financial years from 2017-18 to 2021-22, the target I/E ratios increased from 20% in 2017-18 to 25% in 2019-20 and then decreased to 17% in 2021-22 (see Table 4). In every financial year from 2017-18 to 2021-22, HKDC has been able to exceed the target I/E ratio. Audit noted that although the actual I/E ratios were much higher than the targets in the period from 2017-18 to 2019-20, the target was reduced from 25% in 2019-20 to 20% in 2020-21 and further to 17% in 2021-22.

Note 13: *According to the funding agreements, the income and expenditure for the purpose of calculating I/E ratios are those in respect of four flagship programmes (i.e. BODW, DFA Awards, Knowledge of Design Week and Fashion Asia Hong Kong) and projects that are in line with HKDC's objectives:*

- (a) **Income.** *Income includes self-earned income (including Government funding provided in the form of service/contract/project fee), cash and in-kind sponsorship collected, and donations received; and*
- (b) **Expenditure.** *Expenditure includes expenditure incurred and in-kind sponsorship collected.*

Table 4

**Target I/E ratio and actual I/E ratio achieved by HKDC
(2017-18 to 2021-22)**

Financial year	Target	Actual
2017-18	20%	28.8%
2018-19	25%	28.1%
2019-20	25%	33.0%
2020-21	20%	33.5%
2021-22	17%	26.9%

Source: CreateHK records

Remarks: Higher I/E ratios were achieved in the period from 2018-19 to 2020-21 due to the income received from the Design District Hong Kong project commissioned by the Tourism Commission (see para. 3.45).

2.39 In response to Audit's enquiry, CreateHK informed Audit in February 2023 that:

- (a) it was CreateHK's intention to set a challenging target I/E ratio if situation warranted; and
- (b) CreateHK had taken into account the following considerations when less challenging targets (20% and 17% respectively) were set for 2020-21 and 2021-22:
 - (i) notwithstanding that the past performance of HKDC had been promising, there were uncertainties brought about by the COVID-19 epidemic; and
 - (ii) the Design District Hong Kong project, which had contributed significantly to HKDC's income in calculating the I/E ratio in the

Flagship programmes

period from 2018-19 to 2020-21, had been completed in 2020-21 and would no longer contribute to the income in 2021-22.

2.40 Audit considers that CreateHK needs to set a challenging target I/E ratio for HKDC taking into account the actual I/E ratios achieved in preceding years with a view to encouraging HKDC to use its best endeavours to increase its income level to recoup the cost of the programmes funded by the Government.

Need to explore measures to improve I/E ratios of flagship programmes

2.41 Although target I/E ratio has been set for HKDC as a whole, no target I/E ratio was set to specifically monitor the financial sustainability of the flagship programmes. Four flagship programmes, namely BODW, DFA Awards, Knowledge of Design Week and Fashion Asia Hong Kong, are included in the calculation of HKDC's I/E ratio (see Note 13 to para. 2.37(b)). As the financial sustainability of the four flagship programmes will have impact on the achievements of the target I/E ratio set for HKDC as a whole, Audit analysed the overall I/E ratio of the four flagship programmes and I/E ratios of individual programmes (see Table 5). Audit noted that in the period from 2017-18 to 2021-22:

- (a) the overall I/E ratio of the four flagship programmes decreased by 14.6 percentage points from 35.7% to 21.1%;
- (b) there were decreases in I/E ratios of individual programmes of all the four flagship programmes, ranging from 5.1 percentage points to 20.2 percentage points; and
- (c) the income of DFA Awards and Fashion Asia Hong Kong decreased by \$0.6 million and \$0.4 million respectively (Note 14), notwithstanding that the expenditure increased by \$4.9 million and \$6.8 million respectively.

Note 14: *According to HKDC, the reasons for the decrease in income included sponsors' reluctance to offer sponsorships in recent years due to their financial status under the COVID-19 epidemic.*

Table 5

I/E ratios of four flagship programmes
(2017-18 to 2021-22)

Flagship programme	2017-18	2018-19	2019-20 (Note)	2020-21	2021-22	Change from 2017-18 to 2021-22
BODW						
Income (\$ million)	5.1	5.2	0.5	4.6	6.5	+1.4
Expenditure (\$ million)	13.5	17.1	18.3	22.0	28.5	+15.0
I/E ratio (%)	37.8	30.4	2.7	20.9	22.8	-15.0
DFA Awards						
Income (\$ million)	3.2	2.8	3.0	2.1	2.6	-0.6
Expenditure (\$ million)	7.9	6.7	11.2	10.9	12.8	+4.9
I/E ratio (%)	40.5	41.8	26.8	19.3	20.3	-20.2
Knowledge of Design Week						
Income (\$ million)	1.0	1.1	1.9	1.1	2.2	+1.2
Expenditure (\$ million)	2.8	3.0	6.5	5.4	7.2	+4.4
I/E ratio (%)	35.7	36.7	29.2	20.4	30.6	-5.1
Fashion Asia Hong Kong						
Income (\$ million)	2.8	2.7	0.1	2.3	2.4	-0.4
Expenditure (\$ million)	9.7	10.0	9.6	14.6	16.5	+6.8
I/E ratio (%)	28.9	27.0	1.0	15.8	14.5	-14.4
Overall						
Income (\$ million)	12.1	11.8	5.5	10.1	13.7	+1.6
Expenditure (\$ million)	33.9	36.8	45.6	52.9	65.0	+31.1
I/E ratio (%)	35.7	32.1	12.1	19.1	21.1	-14.6

Source: Audit analysis of HKDC records

Note: In 2019-20, BODW Summit, DFA Awards Presentation Ceremony and the programmes of Fashion Asia Hong Kong scheduled for early December 2019 were cancelled due to the black-clad violence in 2019. The expenditure for the three flagship programmes concerned comprised manpower and overhead costs as well as project costs incurred for preparing the events.

Flagship programmes

2.42 With a view to improving the overall I/E ratio, Audit considers that HKDC needs to:

- (a) explore measures to improve I/E ratios of BODW, DFA Awards, Knowledge of Design Week and Fashion Asia Hong Kong; and
- (b) endeavour to increase the amount of income generated from DFA Awards and Fashion Asia Hong Kong.

Need to improve administration of sponsorship

2.43 According to the funding agreement signed between the Government and HKDC in March 2019, HKDC may accept sponsorships and donations provided that the terms and conditions as may be imposed by the sponsors and donors are consistent with the objectives of HKDC. Audit noted that in the period from 2017-18 to 2021-22:

- (a) ***Cash sponsorship.*** The amount of cash sponsorship received by HKDC for the flagship programmes decreased by \$1.5 million (34%) from \$4.42 million in 2017-18 to \$2.92 million in 2021-22; and
- (b) ***In-kind sponsorship.*** The amount of in-kind sponsorship received by HKDC for the flagship programmes increased by \$4.09 million (88%) from \$4.65 million in 2017-18 to \$8.74 million in 2021-22. Examples of in-kind sponsorship included complimentary television production services and market research services.

2.44 Audit examined HKDC's sponsorship records for the five flagship programmes conducted in the period from 2019-20 to 2021-22. Audit noted that:

- (a) ***No guidelines for handling sponsorship.*** HKDC did not lay down guidelines on the procedures for handling sponsorships. As a result, there were variations in HKDC's handling of sponsorships. While customised agreements detailing the terms and conditions for the provision of sponsorships were signed with some sponsors, sponsorship reply forms confirming the values and types of sponsorship were signed with other sponsors; and

- (b) *Some sponsorship reply forms were signed after sponsored programmes had commenced.* Audit examined 100 sponsorship reply forms of the flagship programmes. Audit noted that 36 (36%) of the 100 sponsorship reply forms were signed by the sponsors after the commencement dates of the sponsored programmes, with delays ranging from 1 to 338 days (averaging 85 days).

2.45 Audit considers that HKDC needs to:

- (a) issue guidelines on the procedures for handling sponsorships; and
- (b) take measures to ensure that the sponsorship reply forms are signed before the sponsored programmes commence.

Audit recommendations

2.46 Audit has *recommended* the Head of Create Hong Kong should set a challenging target I/E ratio for HKDC taking into account the actual I/E ratios achieved in preceding years with a view to encouraging HKDC to use its best endeavours to increase its income level to recoup the cost of the programmes funded by the Government.

2.47 Audit has *recommended* that the Executive Director, HKDC should:

- (a) explore measures to improve I/E ratios of BODW, DFA Awards, Knowledge of Design Week and Fashion Asia Hong Kong;
- (b) endeavour to increase the amount of income generated from DFA Awards and Fashion Asia Hong Kong;
- (c) issue guidelines on the procedures for handling sponsorships; and
- (d) take measures to ensure that the sponsorship reply forms are signed before the sponsored programmes commence.

Response from the Government

2.48 The Head of Create Hong Kong agrees with the audit recommendation. He has said that CreateHK has been constantly reviewing the target I/E ratio, and will work closely with HKDC for setting a more challenging and achievable target I/E ratio in future.

Response from the Hong Kong Design Centre

2.49 The Executive Director, HKDC agrees with the audit recommendations. He has said that HKDC will:

- (a) make its best endeavours to improve the I/E ratios;
- (b) explore means to generate more income from its flagship programmes as much as possible;
- (c) issue a guideline for handling sponsorship-related requirements. Indeed, the same recommendation as the one in paragraph 2.47(c) was made in the latest internal audit report, and appropriate actions have already been planned; and
- (d) adopt measures to ensure that signed sponsorship reply forms are submitted before the commencement of the programmes.

PART 3: OTHER PROGRAMMES AND PROJECTS

3.1 This PART examines HKDC's work on implementation of other programmes and projects, focusing on the following areas:

- (a) incubation programmes (paras. 3.2 to 3.25);
- (b) projects funded by CSI outside the dedicated funding (paras. 3.26 to 3.44);
and
- (c) Design District Hong Kong (paras. 3.45 to 3.53).

Incubation programmes

3.2 Pursuant to the Government's strategic direction of nurturing talent and facilitating start-ups, HKDC was commissioned to implement two incubation programmes funded by CSI's dedicated funding. The two programmes, namely DIP and FIP, offer incubatees with financial assistance, working space, mentorship and training programmes, and other incubation services. In 2021-22, HKDC's expenditures on DIP and FIP were \$22.22 million and \$5.14 million respectively.

3.3 **DIP.** DIP was launched in 2006 (Note 15). It offers incubation services to design start-ups over a two-year incubation period to help them build up business network, publicise products and conduct market promotions. Since the launch of DIP in 2006 and up to 31 December 2022, the programme had admitted 353 incubatees. Of the 353 incubatees, 272 (77%) have graduated from the programme. The current phase of DIP, i.e. DIP Phase 4 (DIP IV) was launched on 1 July 2020 and was expected to be completed on 30 June 2025.

3.4 **FIP.** FIP was launched in 2016. It is a programme dedicated to inspiring, empowering and supporting emerging fashion designers and brands with an incubation period of two years. FIP helps up-and-coming fashion designers in promoting and

Note 15: *DIP was launched by the Hong Kong Science and Technology Parks Corporation in 2006. In May 2012, HKDC took over the administration of DIP.*

Other programmes and projects

exploring opportunities, and connecting with business partners around the world. Since the launch of FIP in 2016 and up to 31 December 2022, the programme had admitted 30 incubatees. Of the 30 incubatees, 20 (67%) have graduated from the programme. The current phase of FIP, i.e. FIP Phase 2 (FIP II), was launched on 1 July 2020 and was expected to be completed on 31 March 2025.

3.5 The eligibility requirements for applying for DIP and FIP and other key features of the programmes as at 31 December 2022 are shown in Table 6.

Table 6

**Eligibility requirements and key features of DIP and FIP
(31 December 2022)**

	DIP	FIP
Major eligibility requirements	The applicant must have: (a) a company incorporated in Hong Kong for not more than three years and still in its early stage of development; and (b) in the company at least two full-time staff based in Hong Kong with at least one of them as the major shareholder who must be a designer in a recognised design discipline.	The applicant must have: (a) a registered fashion-related business or brand, which is at least three years old and implements fashion design activities; and (b) exhibited or showcased at least two collections, preferably internationally.
Provision of financial assistance	Up to \$280,000	Up to \$250,000
Participation fee payable by incubatees	Nil	\$1,700 per month

Source: Audit analysis of HKDC records

Need to review provision of working spaces to incubatees

3.6 During the two-year incubation period, DIP and FIP provide incubatees with ready-to-use working spaces in either the Wong Chuk Hang or Kowloon Bay

Other programmes and projects

incubation centres. For DIP, the working spaces are provided to the incubatees free of charge for the first year and at a monthly rate of \$13 per net square foot (for incubation rooms) or \$900 (for co-working spaces) in the second year of the incubation period. For FIP, the working spaces are provided free of charge throughout the two-year incubation period. The package is inclusive of management fees, government rent and rates, utilities and Internet charges. The incubatees can also make use of services and common facilities such as meeting rooms, and specified office and telecommunication equipment in the incubation centres free of charge.

3.7 In 2021-22, HKDC's expenditure relating to the provision of working spaces and maintenance of incubation centres was \$6.42 million (see Table 7).

Table 7

**HKDC's expenditure relating to provision of working spaces
(2021-22)**

	Expenditure (\$)		
	DIP	FIP	Overall
Rental, charges and expenses (Note)	5,638,169	450,769	6,088,938
Renovation, set-up and equipment	328,062	0	328,062
Total			6,417,000

Source: Audit analysis of HKDC records

Note: The rental, charges and expenses included rental and management fees, government rent and rates, utilities, telecommunications and centre facilities expenses related to the individual working spaces and the common facilities areas in the incubation centres, deducted by the rental borne by DIP incubatees.

3.8 There are four types of working spaces, including 24 incubation rooms with restroom (Type A), 31 incubation rooms (Type B), and 14 co-working spaces (Types C and D). In total, the two incubation centres provide 69 working spaces (see Table 8 and Photographs 3 to 6).

Table 8

**Working spaces in Wong Chuk Hang and Kowloon Bay incubation centres
(31 December 2022)**

Type of working spaces		Location	Minimum size (Gross square foot)	Working spaces		
				DIP	FIP	Total
				(Number)		
<i>Incubation room</i>						
A	Incubation room with restroom	Wong Chuk Hang	490	24	0	24
B	Incubation room	Kowloon Bay	258	21	10	31
Subtotal				45	10	55
<i>Co-working space</i>						
C	Open space with fixed desk	Wong Chuk Hang	193	6	0	6
D		Kowloon Bay	132	8	0	8
Subtotal				14	0	14
Total				59	10	69

Source: Audit analysis of HKDC records

Photograph 3

**A Type A working space — incubation room with restroom
(Wong Chuk Hang)**



Source: HKDC records

Photograph 4

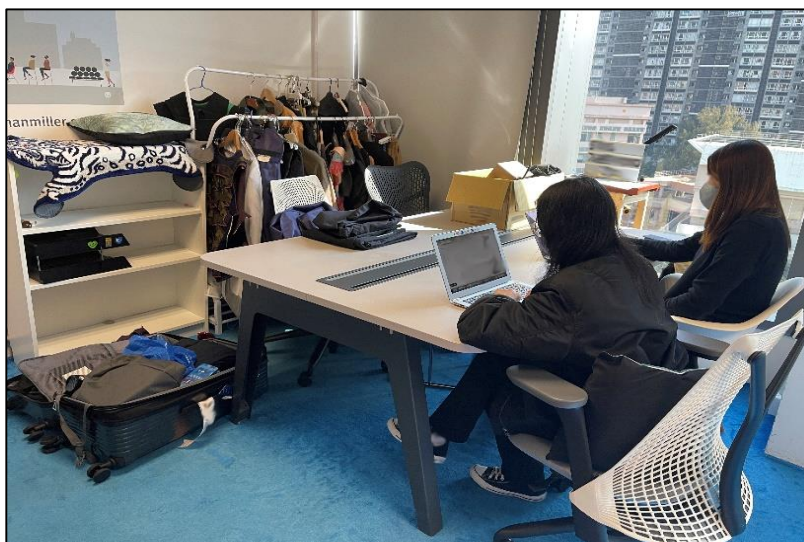
**Type B working spaces — incubation rooms
(Kowloon Bay)**



Source: HKDC records

Photograph 5

**A Type C working space — open space with fixed desk
(Wong Chuk Hang)**



Source: HKDC records

Photograph 6

**A Type D working space — open space with fixed desk
(Kowloon Bay)**



Source: HKDC records

Other programmes and projects

3.9 In 2019, to facilitate the planning for FIP II, CreateHK engaged a consultant to carry out an evaluation study on the effectiveness of FIP. In the evaluation study report issued in January 2020:

- (a) the consultant stated that:
 - (i) the working spaces were severely underused by the incubatees because the incubatees considered that the working spaces were:
 - too small and had weak soundproof installation; and
 - too far from central business district and not preferable for meeting guests;
 - (ii) as a result, some of the working spaces were used only as a photography studio or a warehouse; and
 - (iii) few incubatees came back to work in the incubation centre and FIP failed to cultivate the collaborative and creative atmosphere; and
- (b) the consultant recommended that:
 - (i) the provision of working spaces should be redesigned, for example, more flexibility should be provided to incubatees to choose the size of working space (i.e. without working space, small working space or large working space) and pay the respective rent;
 - (ii) the environment of the working spaces should be revamped. For example, more open space should be provided to nurture a more cooperative design environment; and
 - (iii) HKDC could organise talks or events occasionally. These renovations could attract incubatees, alumni and students to the incubation centre and promote idea exchange among themselves.

3.10 In response to Audit's enquiry, HKDC informed Audit in February 2023 that HKDC:

- (a) noted the incubatees' feedback in the evaluation study on FIP conducted in 2019. HKDC agreed that there was room for improvement regarding the working spaces;
- (b) noted that incubatees might have different needs in regard of their working spaces. After the evaluation study, HKDC had discussed with newly joined incubatees, who had expressed their needs for working spaces to support their businesses;
- (c) encouraged incubatees to actively meet others and develop business outside the incubation centres. HKDC noticed that most of the incubatees arrived at the incubation centres in the early morning for preparation, left in the afternoon for meeting potential clients, and returned in the late evening to continue with their work; and
- (d) had conducted inspections regularly to monitor the overall utilisation of the working spaces, although the results of the inspections were not documented.

Audit noted that other than the above, HKDC had not taken follow-up actions on the consultant's comments and recommendations.

3.11 Audit reviewed the use of the working spaces by the incubatees and found that:

- (a) HKDC did not maintain records on the utilisation of the working spaces in the incubation centres by the incubatees. As the incubatees were not required to sign in when accessing the venue, there were no records on how often the incubatees worked in the working spaces; and
- (b) the utilisation was low. Audit visited the incubation centres four times in the period from October to December 2022:

Other programmes and projects

- (i) on 28 October 2022, Audit visited the two incubation centres together with HKDC's staff. Audit found that:
- in the Kowloon Bay incubation centre, there were persons present in 1 (3%) of the 31 Type B incubation rooms and 1 (13%) of the 8 Type D co-working spaces. No persons were seen in the remaining 37 working spaces;
 - no persons were seen in all the 24 Type A and all the 6 Type C working spaces in the Wong Chuk Hang incubation centre; and
 - overall speaking, there were persons present in only 2 (3%) of the 69 working spaces visited; and
- (ii) on 5, 19 and 20 December 2022, Audit visited 8 Type A working spaces in the Wong Chuk Hang incubation centre. In the three visits, Audit found that there were persons present in 2 (25%), 3 (38%) and 5 (63%) of the 8 working spaces visited respectively.

FIP requires that the applicants must have a registered fashion-related business or brand, which is at least three years old. It needs to be well justified to provide the incubatees with working spaces given that they are already in business for at least three years and should already have their own working premises.

3.12 Audit considers that HKDC needs to:

- (a) review the justifications for the provision of working spaces to the incubatees, in particular to FIP incubatees;
- (b) review whether the provision of working spaces meets the incubatees' needs;
- (c) closely monitor the utilisation of working spaces; and
- (d) take measures to ensure that the results of the inspections to the incubation centres are documented and taken into account in the reviews of the provision of working spaces.

Some working spaces were vacant for a long period of time

3.13 Incubatees for DIP and FIP are recruited all year round. HKDC processed DIP and FIP applications in accordance with its intake plan endorsed by CreateHK and having regard to the expected vacancy in working spaces. In 2018, CreateHK asked HKDC to make necessary arrangements to ensure that the vacancy period (i.e. the time between the move-out date of the previous incubatee and the move-in date of the incoming incubatee) of an individual working space would not exceed seven calendar days. CreateHK told HKDC that leaving working space vacant for over a month without legitimate reasons could be tantamount to wastage of public funds and was unacceptable.

3.14 In the period from 2018-19 to 2021-22, the number of working spaces ranged from 61 (April 2018 to June 2019) to 69 (July 2019 to March 2022). Audit examined the vacancy of working spaces in the four-year period from 2018-19 to 2021-22. Audit noted that:

- (a) in 3 of the 4 years (i.e. 2018-19, 2019-20 and 2020-21), there were working spaces with vacancy period exceeding 7 calendar days;
- (b) two working spaces (1 in 2018-19 and 1 in 2020-21) had a vacancy period exceeding 7 calendar days but less than 1 month;
- (c) 6 to 23 working spaces in each of the 3 years had a vacancy period of 1 month or more. The length of the vacancy period ranged from 1 to 7 months in a year, averaging 3 months (see Table 9); and

Table 9

Number of working spaces with vacancy period of 1 month or more
(2018-19 to 2020-21)

Length of vacancy period (Month)	Number of working spaces		
	2018-19	2019-20	2020-21
1 to < 2	1	11	—
2 to < 3	2	1	2
3 to < 4	—	3	2
4 to < 5	3	—	19
5 to < 6	—	1	—
6 to < 7	—	—	—
7	—	1	—
Total	6	17	23
Average length of vacancy period (Month)	2.8	2.0	3.7

Source: Audit analysis of HKDC records

- (d) the total vacant working-space-months (i.e. the sum of the number of months vacant for each working space) ranged from 17 to 86 each year (see Table 10).

Table 10

Number of vacant working-space-months
(2018-19 to 2020-21)

Type of working spaces		Location	Number of vacant working-space-months (Note)		
			2018-19	2019-20	2020-21
Incubation room					
A	Incubation room with restroom	Wong Chuk Hang	—	18	36
B	Incubation room	Kowloon Bay	5	11	35
Co-working space					
C	Open space with fixed desk	Wong Chuk Hang	—	2	8
D		Kowloon Bay	12	3	7
Total			17	34	86

Source: Audit analysis of HKDC records

Note: The number of vacant working-space-months refers to the sum of the number of months vacant for each working space.

3.15 Audit noted that the vacancy of working spaces was particularly severe in 2019-20 and 2020-21. Audit examined HKDC's work plan and records and noted that:

- (a) in February 2019, owing to the expectation of insufficient working spaces to accommodate the target number of incubatees in DIP Phase 3 (DIP III), approval had been sought from CreateHK by HKDC for renting additional space for 8 Type A incubation rooms in Wong Chuk Hang for the period from 1 June 2019 to 30 June 2021:

Other programmes and projects

- (i) in August 2019, HKDC invited 17 existing incubatees who would be graduating soon to extend their room rental in the period from September 2019 to March 2020 at market rate. In September 2019, 2 of the 17 incubatees agreed that they would extend the room rental. One incubatee extended for 1 month and another for 5 months; and
 - (ii) with the additional 8 incubation rooms available since 1 June 2019, new incubatees were allocated to the new incubation rooms, leaving 8 existing incubation rooms vacant after the then existing incubatees moved out; and
- (b) in March 2020, HKDC sought CreateHK's approval for admitting the incubatees of DIP IV and FIP II and arranging their moving-in to the working spaces on 1 April 2020. CreateHK informed HKDC in the same month that the request could not be acceded because, among others, some plans and reports required for the 2020-21 funding cycle under the \$300 million dedicated funding was not yet finalised by HKDC or approved by CreateHK. With CreateHK's approval, HKDC had postponed the commencement of DIP IV and FIP II from 1 April to 1 July 2020. During the vacancy period, HKDC temporarily opened some incubation rooms to DIP III and FIP Phase 1 (FIP I) incubatees' common use.

3.16 Audit considers that HKDC needs to:

- (a) continue to monitor the allocation of working spaces in the incubation centres, particularly when launching the new phases of DIP and FIP; and
- (b) draw experience from the previous incubatee admission and working space allocation arrangements with a view to improving the planning for working space allocation and minimising the vacancy period of working spaces.

Delays in submission of plans and reports

3.17 Since the launch of DIP III and FIP I on 1 August 2016 and up to 31 December 2022, HKDC has been required by the funding agreements between the Government and HKDC to submit 44 plans and reports to CreateHK. The 44 plans and reports comprised 5 three-year business plans, 6 annual plans, 10 operational

reports and 1 completion report each for DIP III and FIP I, i.e. $(5 + 6 + 10 + 1) \times 2 = 44$. Audit reviewed HKDC's records of submission and noted that 28 (64%) of the 44 plans and reports were submitted late, with delays ranging from 1 to 115 days, averaging 37 days (see Table 11).

Table 11

**Delays in submission of plans and reports for DIP III and FIP I
(1 August 2016 to 31 December 2022)**

Delay (Days)	Three-year business plan	Annual plan	Operational report	Completion report	Total
No delay	2	4	8	2	16 (36%)
1 to <30	6	6	8	—	20 (46%)
30 to <90	—	—	1	—	1 (2%)
≥90 (Note)	2	2	3	—	7 (16%)
Total	10	12	20	2	44 (100%)

Source: Audit analysis of HKDC records

Note: The longest delay was 115 days, which was the delay in the submission of a three-year business plan, an annual plan, and an operational report of DIP III and FIP I.

3.18 Audit considers that HKDC needs to take measures to ensure that the three-year business plans, annual plans, operational reports and completion reports are submitted to CreateHK in a timely manner in accordance with the deadlines stipulated in the funding agreements.

Other programmes and projects

Admission of DIP graduates as FIP incubatees

3.19 According to the funding agreements between the Government and HKDC:

- (a) the admission criteria for DIP and FIP are different:
 - (i) DIP applicants should have a company incorporated in Hong Kong for not more than three years; and
 - (ii) FIP applicants must have track records of at least three years; and
- (b) existing DIP incubatees who have not yet graduated are not eligible to apply for FIP.

3.20 In the period from August 2016 to December 2022, 30 incubatees (15 in FIP I and 15 in FIP II) were admitted to FIP. Audit found that:

- (a) ***High percentage of FIP incubatees were DIP graduates.*** In FIP I, 6 (40%) of the 15 incubatees were DIP graduates. In FIP II, the number and percentage of DIP graduates was even higher. Of the 15 FIP II incubatees, 14 (93%) were DIP graduates. Only 1 (7%) of the 15 FIP II incubatees was not DIP graduate; and
- (b) ***DIP incubatees not yet graduated were admitted to FIP.*** In late June 2022, the applications from 3 DIP incubatees who had not yet graduated were approved for admission to FIP, contrary to the requirement of the funding agreements. These DIP incubatees graduated on 31 July 2022 (see para. 3.19(b)).

3.21 In response to Audit's enquiry, CreateHK and HKDC informed Audit in February 2023 that:

- (a) FIP accepted applications from both DIP incubatees and the public;
- (b) similar to other applicants, DIP graduates were subject to the scrutiny of the admission panels; and

- (c) the furthering of incubational support as provided in FIP could be viewed as a motivation for DIP incubatees, encouraging them to work more intensely to build up their foundation at DIP, getting more well-prepared to qualify for the admission to FIP where their skill-set and other aspects of running a design business would be enhanced.

3.22 In Audit's view, the large number of DIP graduates being admitted to FIP may not be compatible with the original intention of launching DIP and FIP because:

- (a) by admitting a DIP graduate into FIP, HKDC will provide a total of four years (two years for DIP and another two years for FIP) of incubation services to the incubatee. With a high percentage of FIP incubatees being DIP graduates, FIP virtually became an extension of DIP;
- (b) the provision of such a long period of incubation services to incubatees may not be conducive to the achievement of the objectives of DIP and FIP; and
- (c) there are merits for HKDC to admit FIP incubatees with diversified backgrounds other than those graduated from DIP.

3.23 Audit considers that HKDC should:

- (a) review whether the admission of a high percentage of FIP incubatees from DIP graduates is conducive to the achievement of the objectives of DIP and FIP;
- (b) explore the merits of admitting FIP incubatees with a more diversified background, including admitting more FIP incubatees who are not DIP graduates; and
- (c) take measures to ensure that applications for FIP from existing DIP incubatees who have not yet graduated are not approved.

Audit recommendations

- 3.24 **Audit has *recommended* that the Executive Director, HKDC should:**
- (a) **review the justifications for the provision of working spaces to the incubatees, in particular to FIP incubatees;**
 - (b) **review whether the provision of working spaces meets the incubatees' needs;**
 - (c) **closely monitor the utilisation of working spaces;**
 - (d) **take measures to ensure that the results of the inspections to the incubation centres are documented and taken into account in the reviews of the provision of working spaces;**
 - (e) **continue to monitor the allocation of working spaces in the incubation centres, particularly when launching the new phase of DIP and FIP;**
 - (f) **draw experience from the previous incubatee admission and working space allocation arrangements with a view to improving the planning for working space allocation and minimising the vacancy period of working spaces;**
 - (g) **take measures to ensure that the three-year business plans, annual plans, operational reports and completion reports are submitted to CreateHK in a timely manner in accordance with the deadlines stipulated in the funding agreements;**
 - (h) **review whether the admission of a high percentage of FIP incubatees from DIP graduates is conducive to the achievement of the objectives of DIP and FIP;**
 - (i) **explore the merits of admitting FIP incubatees with a more diversified background, including admitting more FIP incubatees who are not DIP graduates; and**

- (j) take measures to ensure that applications for FIP from existing DIP incubatees who have not yet graduated are not approved.

Response from the Hong Kong Design Centre

3.25 The Executive Director, HKDC agrees with the audit recommendations. He has said that HKDC will:

- (a) review the current mechanism of the provision of working spaces to the incubatees;
- (b) subject to (a), review the design parameters of the working spaces to better meet the needs of the incubatees;
- (c) conduct regular inspections to monitor the utilisation of working spaces;
- (d) document the results of inspections and take into account the results when reviewing the provision of working spaces;
- (e) review the allocation of working spaces in the incubation centres when launching the new phase of DIP and FIP;
- (f) review the previous admission and space allocation arrangements to improve the planning for working space allocation and to minimise the vacancy period of working spaces. He explained that the prolonged black-clad violence in 2019 and COVID-19 epidemic had affected the take-up and occupancy rate of the working spaces in 2019-20 and 2020-21;
- (g) submit the required plans and reports in a timely manner;
- (h) review the future admission mechanism of FIP incubatees;
- (i) explore measures to admit FIP incubatees with diversified background and enhance promotion of the programme to designers who are not DIP graduates; and

- (j) ensure that all applications comply with the stipulated requirements.

Projects funded by CreateSmart Initiative outside the dedicated funding

3.26 CSI funds projects with objectives that are in line with CSI's strategic directions to drive the development of the creative industries, namely:

- (a) nurturing talents and facilitating start-ups;
- (b) exploring markets; and
- (c) promoting Hong Kong as Asia's creative capital and fostering a creative atmosphere in the community.

3.27 ***Application for CSI funding.*** Applicants should normally be locally registered institutions or organisations, including local academic institutes, industry support organisations, trade and industry associations, professional bodies, research institutes and companies (established or incorporated under the Hong Kong laws including the Companies Ordinance (Cap. 622)). A project generally lasts for less than one year. Applications are accepted throughout the year. The applications are vetted by CreateHK as CSI Secretariat and assessed by CSI Vetting Committee (Note 16). After the application assessments, CSI Vetting Committee will make recommendations to PSCST on the approvals of applications. CSI Guide, issued by CreateHK, provides information on the application for CSI funding.

3.28 ***HKDC projects funded by CSI outside the dedicated funding.*** In the period from 1 April 2017 to 31 December 2022, 9 HKDC projects were funded by CSI outside the dedicated funding. As at 31 December 2022, 8 of the 9 projects had been completed. The amount of funding approved for each project ranged from \$867,000 to \$9.9 million.

Note 16: *CSI Vetting Committee comprises professionals, representatives from the private sector, academics and other relevant members of the public. Its functions are to assess applications, make recommendations to PSCST, and monitor and review the quality of approved projects.*

Funding applications not submitted in a timely manner

3.29 According to CSI Guide:

- (a) CSI Secretariat's processing time for funding application is 50 clear working days after receiving all the required information from HKDC; and
- (b) if HKDC chooses to incur/commit any expenditure for the projects under application before funding approval is confirmed, it will have to bear its own risk and pay for the incurred/committed expenditure itself in case the funding applications are rejected or only partially approved subsequently.

3.30 Audit reviewed HKDC's records on the submission of project applications and project commencements in the period from 1 April 2017 to 31 December 2022. Audit noted that:

- (a) 8 (89%) of the 9 projects commenced before receiving funding approvals; and
- (b) for 5 (63%) of the 8 projects commenced before receiving funding approvals, HKDC submitted the funding applications to CreateHK less than 50 clear working days before the project commencements, ranging from 0 to 43 clear working days before project commencements, averaging 14 clear working days.

3.31 Audit considers that HKDC needs to take measures to ensure that funding applications are submitted to CreateHK at least 50 clear working days prior to project commencements.

Progress reports accepted after completion of projects

3.32 The planned duration of 2 of the 9 projects were over 1 year. According to CSI Guide and the project agreements signed between Government and HKDC, for the 2 projects:

Other programmes and projects

- (a) HKDC is required to submit to CreateHK progress reports that contain details on the progress and financial positions of the projects for the first half of the project durations; and
- (b) the progress reports should be submitted by the end of the following month after the reporting period.

3.33 CSI Secretariat and CSI Vetting Committee are responsible for the vetting and assessment of the progress reports respectively. PSCST will accept the progress reports based on the recommendation of CSI Vetting Committee. Audit reviewed the acceptance of progress reports of the 2 projects and found that the progress reports were accepted 3 days and one month respectively after the projects have been completed.

3.34 In response to Audit's enquiry, CreateHK informed Audit in February 2023 that:

- (a) for the processing of progress reports, it was usually necessary for CreateHK to carry out rounds of clarifications on points of doubts and to obtain supplementary information before the progress reports were finalised. The timing for the acceptance of the progress reports depended very much on when full information was available; and
- (b) for one of the projects, the situation of COVID-19 epidemic was severe when the progress report was submitted and CreateHK was unable to conduct physical panel meetings. Considerable time was taken in clarifying members' comments and seeking their agreements to the recommendations by way of circulation, which lengthened the processing time. Furthermore, CreateHK was transferred to CSTB on 1 July 2022 and some time was taken to sort out the line of command under the new government structure, which had contributed to the delays in the acceptance of the progress reports.

3.35 Audit considers that CreateHK needs to take measures to ensure that progress reports are processed in a timely manner and accepted before the completion of projects so that any comments on the progress and financial positions of the projects can be addressed before project completion.

Long time taken in the revision and acceptance of completion reports

3.36 According to CSI Guide:

- (a) HKDC is required to submit completion report and audited accounts to CSI Secretariat within 4 months from the project completion date;
- (b) HKDC will be informed of the evaluation result within 50 clear working days after receipt of full information of the completion reports; and
- (c) the final instalment of CSI funding will be disbursed to HKDC upon PSCST's acceptance of the completion reports.

3.37 Audit reviewed the processing of the completion reports of the 8 completed projects (see para. 3.28), of which 7 have been accepted as at 31 December 2022. Audit found that:

- (a) ***Long time taken to revise completion reports.*** Upon receipt of the completion reports submitted by HKDC, CSI Secretariat will conduct vetting, and seek applicants' clarifications and revisions of the reports when necessary. Audit noted that HKDC had taken 44 to 154 days (averaging 93 days) to submit the revised completion reports after receiving CreateHK's comments; and
- (b) ***Long time taken to accept completion reports.*** For 2 (29%) of the 7 accepted completion reports, the stipulated time of informing applicants of the results within 50 clear working days was not met, with delays of 20 and 43 clear working days respectively (averaging 31.5 clear working days). The delays arose because long time had been taken to accept the reports before informing the applicants.

3.38 In response to Audit's enquiry, CreateHK informed Audit in February 2023 that:

- (a) there had been many rounds of clarifications between CreateHK and HKDC during the period between HKDC's first submission of completion reports and the submission of revised reports. For some projects, the

Other programmes and projects

work-from-home arrangement for both CreateHK and HKDC arising from the situation of COVID-19 epidemic had restricted the communication between CreateHK and HKDC in the processing of completion reports; and

- (b) for one of the projects in paragraph 3.37(b), the submission was made only after the previous batch of completion reports were accepted with a view to capturing the amount of funding available before proceeding with the next batch of completion reports. For the other project, the delay was caused by the long time taken in clarifying the comments and seeking the consensus of CSI Vetting Committee members by way of circulation.

3.39 Audit considers that CreateHK needs to take measures to ensure that:

- (a) completion reports requiring revisions are resubmitted by HKDC in a timely manner; and
- (b) completion reports are processed and accepted in a timely manner.

3.40 Audit considers that HKDC needs to take measures to ensure that completion reports requiring revisions are revised and resubmitted to CreateHK in a timely manner.

Audit recommendations

3.41 Audit has *recommended* that the Head of Create Hong Kong should take measures to ensure that:

- (a) **progress reports are processed in a timely manner and accepted before the completion of projects so that any comments on the progress and financial positions of the projects could be addressed before project completion;**
- (b) **completion reports requiring revisions are resubmitted by HKDC in a timely manner; and**
- (c) **completion reports are processed and accepted in a timely manner.**

3.42 Audit has *recommended* that the Executive Director, HKDC should take measures to ensure that:

- (a) funding applications are submitted to CreateHK at least 50 clear working days prior to project commencements; and**
- (b) completion reports requiring revisions are revised and resubmitted to CreateHK in a timely manner.**

Response from the Government

3.43 The Head of Create Hong Kong agrees with the audit recommendations. He has said that CreateHK will:

- (a) accord higher priority to putting up progress reports, particularly those for projects with duration over one year, for discussion at physical panel meetings for effective deliberations;**
- (b) continue to closely monitor the implementation of approved projects through liaising with project grantees and conducting site visits to project events, and provide advice to project grantees as and when improvement areas are identified in the interim before formal acceptance of progress reports;**
- (c) set a shorter but reasonable response time for each round of questions issued to grantees and closely monitor the progress to ensure the timely submission of the required revision; and**
- (d) closely monitor the processing of completion reports to ensure that the grantees will be informed of the evaluation result within 50 clear working days after receipt of full information of the completion reports.**

Response from the Hong Kong Design Centre

3.44 The Executive Director, HKDC agrees with the audit recommendations. He has said that HKDC will:

Other programmes and projects

- (a) submit funding applications with sufficient working days prior to project commencements; and
- (b) submit the revised reports to CreateHK according to the stipulated submission deadline.

Design District Hong Kong

3.45 In 2018, HKDC was commissioned by the Tourism Commission to organise a three-year creative tourism project, namely Design District Hong Kong. Design District Hong Kong aimed to:

- (a) support the development of creative tourism and boost tourism;
- (b) uphold the vision to establish Hong Kong as a centre of design excellence in Asia; and
- (c) enhance the livability in the districts and strengthen Hong Kong's unique identity.

The project comprised various place-making artworks and creative tourism events to enhance the appeal of Wan Chai and Sham Shui Po Districts.

3.46 An agreement was signed between the Tourism Commission and HKDC to provide funding of up to \$60 million to HKDC for organising the Design District Hong Kong project in the period from 1 April 2018 to 31 March 2021. Due to the outbreak of the COVID-19 epidemic, a supplementary agreement was signed to extend the project period to 30 September 2021.

Need to ensure that annual reports and quarterly reports are submitted in a timely manner

3.47 According to the funding agreement between the Tourism Commission and HKDC, HKDC shall submit to the Tourism Commission:

- (a) an annual report, accompanied by the financial statements, by 30 April each year, showing the position as at 31 March of the respective year. If the project is completed prior to 31 March of the year, an annual report should be submitted showing the position as at the project completion date; and
- (b) a quarterly report, accompanied by the financial statements, for the first, second and third quarters of each financial year by the end of July, October and January respectively. Submission of quarterly report for the fourth quarter of the financial year is not required because the contents are covered in the annual report.

3.48 Audit reviewed HKDC's records on the submission of annual reports and quarterly reports in the period from 1 April 2018 to 30 September 2021. Audit noted that:

- (a) of the 3 annual reports due in the period:
 - (i) 2 (67%) were submitted late, with delays of 10 and 5 days respectively. The financial statements that should accompany the annual reports were submitted 21 and 18 days after the deadlines; and
 - (ii) 1 (33%), which should cover the year ended 31 March 2021, was not submitted. Instead:
 - a quarterly report was submitted 3 days after the annual report submission deadline; and
 - an annual report covering the period from 1 April 2020 to 31 July 2021 was submitted in August 2021. The financial statements contained therein covered the period from 1 April 2020 to 30 June 2021. There was no documentary evidence showing that approval had been obtained for changing the period covered in the annual report and financial statements contained therein; and
- (b) of the 8 quarterly reports due in the period:

Other programmes and projects

- (i) 3 (38%) were submitted late, with delays ranging from 3 to 26 days, averaging 15 days; and
- (ii) for 2 (25%) of the quarterly reports (including 1 that was submitted late), the financial statements that should accompany the quarterly reports were submitted 17 and 20 days after the deadlines.

3.49 Audit considers that HKDC needs to take measures to ensure that annual reports and quarterly reports are submitted in a timely manner.

Need to ensure that Steering Committee meetings are held according to the requirements stipulated in funding agreement

3.50 According to the funding agreement, HKDC shall convene a Steering Committee responsible for overseeing the implementation of the Design District Hong Kong project. The Steering Committee shall meet at quarterly intervals, or at any time upon the request by HKDC or the Tourism Commission. Audit reviewed the records of Steering Committee meetings in the period from 1 April 2018 to 30 September 2021. Audit noted that no meetings were held in the period from 18 November 2020 to 30 September 2021. However, there was no documentary evidence showing the justifications for not holding the Steering Committee meetings as required by the funding agreement.

3.51 Audit considers that HKDC needs to take measures to ensure that, for future projects, Steering Committee meetings are held according to the requirements stipulated in the funding agreements.

Audit recommendations

3.52 **Audit has recommended that the Executive Director, HKDC should take measures to ensure that:**

- (a) **annual reports and quarterly reports are submitted in a timely manner; and**

- (b) **for future projects, Steering Committee meetings are held according to the requirements stipulated in the funding agreements.**

Response from the Hong Kong Design Centre

3.53 The Executive Director, HKDC agrees with the audit recommendations. He has said that HKDC will:

- (a) submit the annual reports and quarterly reports according to the stipulated submission deadlines; and
- (b) arrange necessary meetings in accordance with the stipulated requirements.

PART 4: OTHER ISSUES

4.1 This PART examines other issues of HKDC, focusing on the following areas:

- (a) safeguarding national security (paras. 4.2 to 4.5);
- (b) corporate governance (paras. 4.6 to 4.21);
- (c) compliance with funding agreements (paras. 4.22 to 4.27);
- (d) staff management (paras. 4.28 to 4.33); and
- (e) HKDC's website (paras. 4.34 to 4.38).

Safeguarding national security

Need to strengthen regulation over matters concerning the safeguarding of national security

4.2 The Law of the People's Republic of China on Safeguarding National Security in the Hong Kong Special Administrative Region (National Security Law) was implemented on 30 June 2020. The National Security Law stipulates that:

- (a) it is the constitutional duty of the Hong Kong Special Administrative Region to safeguard national security;
- (b) the executive authorities of the Hong Kong Special Administrative Region shall effectively prevent, suppress and impose punishment for any act or activity endangering national security in accordance with the National Security Law and other relevant laws; and
- (c) the Hong Kong Special Administrative Region shall strengthen its work on safeguarding national security and prevention of terrorist activities. The Government of the Hong Kong Special Administrative Region shall take

necessary measures to strengthen public communication, guidance, supervision and regulation over matters concerning national security, including those relating to schools, universities, social organisations, the media, and the Internet.

4.3 Audit noted that the funding agreements between the Government and HKDC had not incorporated guidelines and requirements related to the safeguarding of national security. Audit considers that CSTB needs to incorporate guidelines and requirements in future funding agreements to strengthen regulation over matters concerning the safeguarding of national security.

Audit recommendation

4.4 Audit has *recommended* that the Secretary for Culture, Sports and Tourism should incorporate guidelines and requirements in future funding agreements to strengthen regulation over matters concerning the safeguarding of national security.

Response from the Government

4.5 The Secretary for Culture, Sports and Tourism agrees with the audit recommendation. He has said that in fact, CSTB has already implemented the relevant recommendation through an updated funding agreement signed with HKDC in March 2023.

Corporate governance

Need to improve attendance of some Directors in Board meetings

4.6 HKDC's Board is responsible for steering and overseeing HKDC's operations. There are three classes of Directors in HKDC:

- (a) ***Class A.*** Five Directors are nominated to represent the five design associations;

Other issues

- (b) **Class B.** A minimum of five Directors are elected from the design/cultural/creative sectors, business/industry sectors, and professional/academics/industry support organisations; and
- (c) **Class C.** A maximum of two Directors are appointed by the Government.

As at 31 December 2022, there were 24 Directors (including the Chairman), comprising 5 Class A, 18 Class B and 1 Class C Directors.

4.7 HKDC's Corporate Governance Manual provides guidance to HKDC to operate economically, efficiently and effectively. According to the Manual, the major duties and obligations of the Directors are to:

- (a) attend and participate in meetings of the Board and its committees; and
- (b) undertake diligent analysis of all proposals placed before the Board, and to make sound comments, recommendations and decisions that are in the best interest of HKDC.

4.8 In the period from 2017-18 to 2021-22, 5 Board meetings were held in each year. In each year during the five-year period, the overall attendance rates of the Directors ranged from 55% to 78% (averaging 65%). Among the three classes of Directors, the attendance rates of Class B Directors were relatively low, ranging from 49% to 74% (averaging 61%) (see Table 12).

Table 12

**Attendance rate at Board meetings
(2017-18 to 2021-22)**

Year	Attendance rate of Directors			
	Class A	Class B	Class C	Overall
2017-18	64%	50%	100%	55%
2018-19	72%	49%	100%	57%
2019-20	60%	59%	100%	61%
2020-21	60%	74%	100%	72%
2021-22	88%	73%	100%	78%
Average	69%	61%	100%	65%

Source: Audit analysis of HKDC records

4.9 Audit considers that CreateHK needs to closely monitor the attendance rates of Directors at the Board meetings and, when necessary, take measures to encourage Directors to avoid absences from the Board meetings as far as possible.

Need to ensure that Board members comply with requirements on declaration of interest

4.10 A conflict of interest situation arises when the private interest (both the financial and personal interests) of a Board member competes or conflicts with the interest of the Board. According to HKDC's Corporate Governance Manual, all Board members are required to follow a two-tier reporting system for managing potential conflict of interests, as follows:

Other issues

- (a) ***Submission of Register of Members' Interest forms.*** The Board members shall register in writing their personal interest, direct or indirect, pecuniary or otherwise, by submitting the Register of Members' Interest forms at the time of first appointment and annually thereafter. Declaration of interests, including directorships of companies, remunerated employments and shareholdings in companies, is required; and
- (b) ***Declaration of interests at meetings.*** If a Board member has any direct personal or pecuniary interest in any matter under consideration by the Board, he must, as soon as practicable after he has become aware of it, disclose to the Chairman (or the Board) prior to the discussion of the matter.

4.11 Audit examined the records of submission of the Register of Members' Interest forms by Board members in the period from 1 January 2018 to 31 December 2022. Audit noted that:

- (a) ***Submission of Register of Members' Interest forms at the time of first appointment.*** Of the 20 Board members having first appointment in the period:
 - (i) HKDC had not issued requests to 11 (55%) for submission of Register of Members' Interest forms; and
 - (ii) 14 (70%) had not submitted the Register of Members' Interest forms for first appointment, including the 11 members to whom the requests for submission had not been issued by HKDC (see (a)(i) above). There was no documentary evidence showing that HKDC had followed up with the Board members on the outstanding forms; and
- (b) ***Annual submission of Register of Members' Interest forms.*** Of the 126 annual Register of Members' Interest forms due for submission in the period:
 - (i) HKDC had not issued requests to the Board members for submission of 25 (20%) forms; and

- (ii) 50 (40%) had not been submitted by the Board members, including 15 for which the requests for submission had not been issued by HKDC (see (b)(i) above). There was no documentary evidence showing that HKDC had followed up with the Board members on the outstanding forms.

4.12 Managing conflict of interest is important to good governance and maintaining public trust. Audit considers that HKDC needs to take measures to ensure that the Register of Members' Interest forms are submitted by the Board members in a timely manner.

Delays in serving meeting agenda to Board members

4.13 HKDC's Corporate Governance Manual requires that agenda of the Board meeting shall be served to the Board members at least three days in advance of the meeting. Audit reviewed HKDC's records on serving meeting agenda to the Board members in the period from 2017-18 to 2021-22. Audit noted that for 6 (24%) of the 25 Board meetings held in the period, the requirement could not be met. The delays ranged from 1 to 2 days.

4.14 Audit considers that HKDC needs to take measures to ensure that meeting agenda is served to the Board members within the stipulated timeframe.

Late submission of and long time taken in endorsements of three-year business plans and annual plans

4.15 According to the funding agreements between the Government and HKDC, HKDC shall submit three-year business plans and annual plans by stipulated deadlines for CSTB's endorsements. Audit reviewed the records for submissions and endorsements of HKDC's three-year business plans and annual plans in the six-year period from 2017-18 to 2022-23 and noted that:

- (a) for 3 (50%) of the 6 years, the three-year business plans and annual plans were submitted later than the stipulated deadlines or the extended deadline agreed by CreateHK. The delays ranged from 11 to 272 days (averaging

Other issues

100 days) for the three-year business plans and 7 to 17 days (averaging 12 days) for the annual plans; and

- (b) for all the 6 years, the endorsements of the three-year business plans and annual plans were obtained after the period covered by the plans had commenced. The time periods from the start of the period to the endorsements of the three-year business plans and annual plans ranged from 1 to 264 days (averaging 82 days) and from 1 to 107 days (averaging 39 days) respectively.

4.16 Audit considers that CreateHK and HKDC need to take measures to ensure that the three-year business plans and annual plans are submitted in a timely manner and endorsements are obtained from CSTB prior to the start of the period concerned.

Audit recommendations

4.17 Audit has *recommended* that the Head of Create Hong Kong should closely monitor the attendance rates of Directors at the Board meetings and, when necessary, take measures to encourage Directors to avoid absences from the Board meetings as far as possible.

4.18 Audit has *recommended* that the Executive Director, HKDC should take measures to ensure that:

- (a) the Register of Members' Interest forms are submitted by the Board members in a timely manner; and
- (b) meeting agenda is served to the Board members within the stipulated timeframe.

4.19 Audit has *recommended* that the Head of Create Hong Kong and the Executive Director, HKDC should take measures to ensure that the three-year business plans and annual plans are submitted in a timely manner and endorsements are obtained from CSTB prior to the start of the period concerned.

Response from the Government

4.20 The Head of Create Hong Kong agrees with the audit recommendations. He has said that CreateHK:

- (a) has been closely monitoring the attendance rates of Directors at the Board/Committee meetings. The attendance rates of Directors were one of the factors for considering the previous re-appointments of Class B Directors of the Board by the then Secretary for Commerce and Economic Development;
- (b) notes that HKDC has been making endeavours to secure the attendance of Directors before the meetings, and will offer the option of attendance by online conferencing if the Director is not physically available for the meeting;
- (c) will continue to closely monitor the attendance rates of Directors at the Board/Committee meetings, and actively communicate with the Board Chairman and HKDC to encourage/facilitate Director's attendance, and take into account the attendance rates of Directors when making recommendations to the Secretary for Culture, Sports and Tourism on re-appointments;
- (d) has been closely monitoring HKDC's submissions of its three-year business plans and annual plans in accordance with the deadlines stipulated in the funding agreements, and provides timely comments/guidance to facilitate HKDC's submissions; and
- (e) will continue to closely monitor HKDC's submissions of the plans with a view to obtaining CSTB's endorsements prior to the start of the period concerned.

Response from the Hong Kong Design Centre

4.21 The Executive Director, HKDC agrees with the audit recommendations. He has said that HKDC:

Other issues

- (a) had included the declaration of interests at every Board/Committee meeting since 2021 after conducting the review on the Corporate Governance Manual. Measures will also be taken to ensure the submissions of Register of Members' Interest forms by the Board members in a timely manner;
- (b) will ensure the circulation of agenda to Board members within the stipulated timeframe; and
- (c) will ensure the timely submissions of the three-year business plans and annual plans as required.

Compliance with funding agreements

Need to ensure compliance with funding agreements

4.22 In July 2020, the Head of Create Hong Kong informed the then Permanent Secretary for Commerce and Economic Development (Communications and Creative Industries) (PSCCI — see Note 3 to para. 1.5) that:

- (a) in March 2020, a resigned staff of HKDC wrote to CreateHK alleging that, among others, HKDC had mistakenly treated its staff salary paid by the Government as HKDC's in-kind sponsorship required in the Design District Hong Kong project commissioned by the Tourism Commission;
- (b) based on HKDC's latest projection, it had pitched a sum of \$3.8 million (comprising manpower of \$2.79 million, and overhead and administrative costs of \$1.01 million) charged under the CSI funding provided in the period from 2018-19 to 2020-21 as its in-kind sponsorship into the Design District Hong Kong project; and
- (c) HKDC's pitching of the \$3.8 million funding as in-kind contribution to the Design District Hong Kong project without the Controlling Officer (i.e. PSCCI)'s approval was a breach of HKDC's funding agreement with the Government.

In August 2020, PSCCI issued a warning letter to urge HKDC's Board Chairman to tackle the non-compliance and breach of the funding agreement regarding using the CSI funding to support the Design District Hong Kong project (Note 17).

4.23 Audit noted that in the period from 2019-20 to 2021-22, apart from the warning letter issued in August 2020, CreateHK also expressed its concern on HKDC's non-compliance with the funding agreements signed between the Government and HKDC:

- (a) in August 2019, CreateHK issued a letter to inform HKDC of PSCCI's retrospective approval of the creation of a new budget item for 2019-20 as requested by HKDC. CreateHK stated that this was yet another case of non-compliance of HKDC in administering Government fund in accordance with the agreements signed between the Government and HKDC, and considered that the repeated occurrence of similar non-compliance cases in recent years in spite of CreateHK's multiple repeated reminders via letters, emails and in various HKDC meetings had been worrying. HKDC was strongly reminded once again to properly seek prior approval in a timely manner, review the overall reporting and monitoring mechanism, and take remedial actions promptly to ensure compliance with formal procedures and avoid similar cases from recurring; and
- (b) in January 2022, CreateHK wrote to HKDC to express serious concern over two cases of unauthorised re-deployment of funds from the designated bank accounts of two CSI projects by HKDC in 2020 (with repayments subsequently made to the designated bank accounts within the same year). HKDC was strongly urged to critically review its existing accounting and financing procedures and put in place all necessary internal controls and safeguards to forestall any future non-compliance.

Note 17: *In October 2020, HKDC admitted that it was not aware of the need to seek PSCCI's prior approval for using the CSI funding to support the Design District Hong Kong project by way of in-kind sponsorship, and wrote to seek retrospective approval from PSCCI accordingly. In view of the nature of the project which was in line with HKDC's mission and its positive impacts created in the community, CreateHK recommended and PSCCI granted a retrospective approval for HKDC's in-kind sponsorship contribution to the project.*

Other issues

4.24 In response to Audit's enquiry, CreateHK informed Audit in December 2022 that:

- (a) to strengthen HKDC's corporate governance, particularly its capacity in compliance with the Government requirements, the Deputy Executive Director position was created in October 2018 to assist the Executive Director in this regard; and
- (b) as endorsed by HKDC's Board and approved by the Controlling Officer, HKDC had since 2021-22 outsourced its internal audit functions to a well-established major accounting firm focusing on, among others, funds management, which helped identify its internal control deficiencies or non-compliance as well as areas for improvement. This internal audit exercise was conducted annually where the engaged accounting firm reported directly to HKDC's Audit Committee.

4.25 Audit considers that HKDC needs to ensure compliance with funding agreements between the Government and HKDC, including:

- (a) monitoring the effectiveness of outsourced internal audit functions and ensuring that any audit findings identified through the annual internal audit exercise will be followed up effectively; and
- (b) exploring measures to prevent recurrence of cases of non-compliance in administering Government fund in accordance with the agreements signed between the Government and HKDC.

Audit recommendations

4.26 **Audit has *recommended* that the Executive Director, HKDC should ensure compliance with funding agreements between the Government and HKDC, including:**

- (a) **monitoring the effectiveness of outsourced internal audit functions and ensuring that any audit findings identified through the annual internal audit exercise will be followed up effectively; and**

- (b) **exploring measures to prevent recurrence of cases of non-compliance in administering Government fund in accordance with the agreements signed between the Government and HKDC.**

Response from the Hong Kong Design Centre

4.27 The Executive Director, HKDC agrees with the audit recommendations. He has said that:

- (a) the proposed internal audit plans are reviewed annually. An action plan following the audit reports will also be submitted to each Audit Committee meeting for endorsement and for monitoring the progress of the follow-up actions; and
- (b) HKDC has planned to establish and maintain a compliance checklist, which lists out and defines the written requirements in each of the agreements signed with the Government.

Staff management

High staff turnover rates and vacancy rates

4.28 ***Staff turnover rates.*** HKDC has started to compile annual staff turnover rates in 2019-20. Audit reviewed HKDC's staff turnover rates in the period from 2019-20 to 2021-22. Audit noted that overall speaking, the staff turnover rates were high, ranging from 21.3% in 2020-21 to 48.4% in 2021-22 (averaging 36.4%) (see Table 13).

Table 13

**Annual staff turnover rates of HKDC
(2019-20 to 2021-22)**

	2019-20	2020-21	2021-22	Average
Staff turnover rate	39.5%	21.3%	48.4% (Note)	36.4%

Source: Audit analysis of HKDC records

Note: The staff turnover rate for 2021-22 has excluded the staff employed under the Job Creation Scheme, whose employment period ranged from 5 to 12 months. If these staff were included, the turnover rate for 2021-22 would be 80.5%.

Remarks: The staff turnover rates have excluded part-time staff and interns, whose employment period was usually less than 6 months.

4.29 **Staff vacancy rates.** As at 31 December 2022, HKDC has an establishment of 104 staff (including 28 positions funded by the Job Creation Scheme). As at 31 December 2022, 24 (23.1%) of the 104 positions were vacant (including 7 (25%) of the 28 Job Creation Scheme-funded positions). Audit examined the vacancy rates of positions (other than those funded by the Job Creation Scheme) in the period from 1 April 2017 to 31 December 2022. Audit noted that:

- (a) the staff vacancy rates as at the end of each financial year in the period from 2017-18 to 2021-22 ranged from 6.6% in 2021 to 15.2% in 2018, averaging 10.9%; and
- (b) there was a significant increase in staff vacancy rate from 6.6% as at 31 March 2021 to 12.2% as at 31 March 2022 and 22.4% as at 31 December 2022.

4.30 In response to Audit's enquiry, CreateHK informed Audit in February 2023 that:

- (a) HKDC has set up a Human Resources Review Task Force in November 2022 for conducting a holistic review on HKDC's human resources issues and practices. The task force comprised representatives from CreateHK and HKDC's Board, and an external human resources professional; and
 - (b) the Human Resources Review Task Force will examine, among others, the reasons behind the high staff turnover and vacancy rates, and provide advice and recommendations for HKDC's follow-up as appropriate.
- 4.31 Audit considers that HKDC needs to:
- (a) closely monitor the work of the Human Resources Review Task Force, and ensure that the review on HKDC's human resources issues and practices is completed in a timely manner; and
 - (b) in the light of the results of the human resources review, take measures to address the issues of high staff turnover rates and high staff vacancy rates.

Audit recommendations

- 4.32 **Audit has *recommended* that the Executive Director, HKDC should:**
- (a) **closely monitor the work of the Human Resources Review Task Force, and ensure that the review on HKDC's human resources issues and practices is completed in a timely manner; and**
 - (b) **in the light of the results of the human resources review, take measures to address the issues of high staff turnover rates and high staff vacancy rates.**

Response from the Hong Kong Design Centre

- 4.33 The Executive Director, HKDC agrees with the audit recommendations. He has said that the high staff turnover rates and the recent significant increase in staff vacancy rate have been discussed in various Finance and Administration Committee

meetings. HKDC will further work with the recently established dedicated Human Resources Review Task Force to ascertain the reasons behind and take measures to address the issues.

Hong Kong Design Centre's website

Need to ensure contents in HKDC's website are up-to-date

4.34 As part of the Government's community initiatives to enhance the effectiveness in information dissemination through the Internet both for the public and private sectors by way of Government leadership, the Office of the Government Chief Information Officer (OGCIO) has published guidelines on accessibility requirements and best practices for the design of government web pages (Note 18). According to OGCIO's guidelines:

- (a) it is the responsibility of Bureaux/Departments to ensure that information uploaded onto the Internet is up-to-date;
- (b) external links should be checked regularly to ensure that they still work; and
- (c) a work schedule, containing a comprehensive list of updating frequencies thus determined, should be compiled for follow-up by all staff involved in the updating of the websites.

4.35 HKDC's website provides the public with information about HKDC's programmes, news and publications in the design industry, and various resources for the design professionals. In November 2022, Audit examined the contents on HKDC's website and noted that 98 (25%) of the 387 external links in the "news and publications" section could not be accessed. The 98 links remained non-functional in January 2023. The links were related to news and publications in the period from June 2013 to October 2021.

Note 18: *OGCIO's guidelines on accessibility requirements and best practices include Guidelines on Dissemination of Information through Government Websites, Technical Notes on Website Development and Maintenance, and Common Look and Feel Guidelines and Design Specifications.*

4.36 Although HKDC's website is not a government website, there are merits for HKDC to consider adopting OGCIO's guidelines and best practices for the design of government web pages to enhance the effectiveness in information dissemination by its website. Audit considers that HKDC needs to review the contents of its website regularly and take measures to ensure that the contents are up-to-date.

Audit recommendation

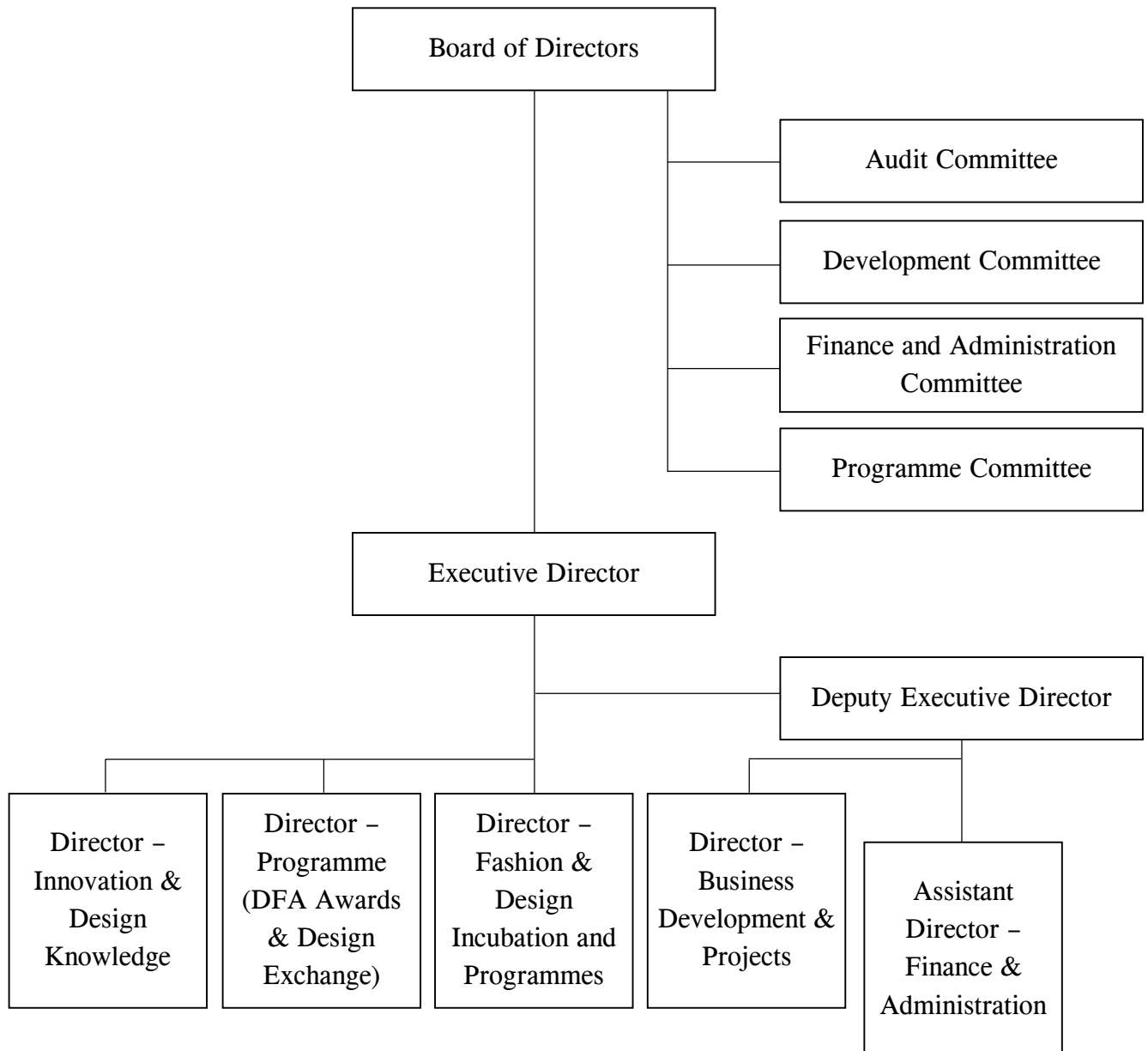
4.37 **Audit has *recommended* that the Executive Director, HKDC should review the contents of HKDC's website regularly and take measures to ensure that the contents are up-to-date.**

Response from the Hong Kong Design Centre

4.38 The Executive Director, HKDC agrees with the audit recommendation. He has said that:

- (a) HKDC will review the contents of its website regularly and keep all the contents up-to-date; and
- (b) all the invalid links will be removed or updated accordingly.

**Hong Kong Design Centre:
Organisation chart (extract)
(31 December 2022)**



Source: Audit analysis of HKDC records

Acronyms and abbreviations

Audit	Audit Commission
BODW	Business of Design Week
CreateHK	Create Hong Kong
CSI	CreateSmart Initiative
CSTB	Culture, Sports and Tourism Bureau
DIP	Design Incubation Programme
FIP	Fashion Incubation Programme
HKDC	Hong Kong Design Centre
I/E	Income-to-Expenditure
OGCIO	Office of the Government Chief Information Officer
PSCCI	Permanent Secretary for Commerce and Economic Development (Communications and Creative Industries)
PSCST	Permanent Secretary for Culture, Sports and Tourism

CHAPTER 5

Education Bureau

Maintenance and improvement of school premises for aided schools

**Audit Commission
Hong Kong
31 March 2023**

This audit review was carried out under a set of guidelines tabled in the Provisional Legislative Council by the Chairman of the Public Accounts Committee on 11 February 1998. The guidelines were agreed between the Public Accounts Committee and the Director of Audit and accepted by the Government of the Hong Kong Special Administrative Region.

Report No. 80 of the Director of Audit contains 8 Chapters which are available on our website at <https://www.aud.gov.hk>



Audit Commission
6th Floor, High Block
Queensway Government Offices
66 Queensway
Hong Kong

Tel : (852) 2867 3423
Fax : (852) 2824 2087
E-mail : enquiry@aud.gov.hk

MAINTENANCE AND IMPROVEMENT OF SCHOOL PREMISES FOR AIDED SCHOOLS

Contents

	Paragraph
EXECUTIVE SUMMARY	
PART 1: INTRODUCTION	1.1 – 1.8
Audit review	1.9
General response from the Government	1.10
Acknowledgement	1.11
PART 2: CONTRACT MANAGEMENT	2.1
Monitoring of quality of contractor services	2.2 – 2.16
Audit recommendations	2.17
Response from the Government	2.18
Assessment of Term Consultants' performance	2.19 – 2.25
Audit recommendations	2.26
Response from the Government	2.27

	Paragraph
PART 3: MAJOR REPAIRS PROJECTS	3.1
Assessment of Major Repairs applications	3.2 – 3.15
Audit recommendations	3.16
Response from the Government	3.17
Monitoring of Major Repairs works	3.18 – 3.26
Audit recommendations	3.27
Response from the Government	3.28
Asbestos-containing materials in school premises	3.29 – 3.33
Audit recommendations	3.34
Response from the Government	3.35
Flagpoles on school premises	3.36 – 3.40
Audit recommendations	3.41
Response from the Government	3.42
 PART 4: EMERGENCY REPAIRS PROJECTS	 4.1 – 4.2
Submission of Emergency Repairs requests by schools	4.3 – 4.10
Audit recommendations	4.11
Response from the Government	4.12
Processing of Emergency Repairs requests and monitoring of repair works	4.13 – 4.20
Audit recommendations	4.21
Response from the Government	4.22

	Paragraph
PART 5: IMPROVEMENT PROGRAMMES	5.1
Improvement programme for “Matchbox-style schools”	5.2 – 5.9
Audit recommendation	5.10
Response from the Government	5.11
Additional Air-conditioning Installation for Schools	5.12 – 5.23
Audit recommendations	5.24
Response from the Government	5.25
Time-limited Minor Works Programme	5.26 – 5.32
Audit recommendations	5.33
Response from the Government	5.34
 Appendices	 Page
A : Education Bureau’s School Premises Maintenance Section: Organisation chart (extract) (31 December 2022)	93
B : Acronyms and abbreviations	94

MAINTENANCE AND IMPROVEMENT OF SCHOOL PREMISES FOR AIDED SCHOOLS

Executive Summary

1. As at 31 December 2022, there were 844 aided schools in Hong Kong. The Education Bureau (EDB), headed by the Secretary for Education, is responsible for implementing maintenance and improvement projects approved under non-recurrent Government subventions of school premises of aided schools. For repair items each costing \$3,000 or more for primary schools and special schools, or \$8,000 or more for secondary schools, schools may submit Major Repairs (MR) applications and Emergency Repairs (ER) applications to EDB to carry out the required repair works. EDB awards term consultancy agreements to Term Consultants (TCs) and maintenance term contracts to Maintenance Term Contractors (MTCs) to handle applications and to deliver maintenance and improvement works under MR projects, ER projects and other improvement projects. In the financial years from 2017-18 to 2021-22, 4,186 MR projects and 34,991 ER projects were approved, and expenditure of \$5,018.2 million and \$1,837.8 million respectively had been incurred.

2. In the period from 2017 to 2021, the Government launched various improvement programmes for the school premises of aided schools. Up to 31 March 2022, the three improvement programmes that had incurred the largest amount of expenditures were Additional Air-conditioning Installation for Schools (3,815 projects were approved and a total expenditure of \$695.1 million had been incurred), Time-limited Minor Works Programme (FUS) (748 projects were approved and a total expenditure of \$427.9 million had been incurred) and Improvement programme for “Matchbox-style schools” (26 projects were approved and a total expenditure of \$106.9 million had been incurred). The Audit Commission (Audit) has recently conducted a review of EDB’s work on maintenance and improvement of school premises for aided schools.

Contract management

3. *Room for improvement in conducting Comprehensive Site Checks (CSCs).* Audit reviewed the 8,601 CSCs conducted in the period from January 2021 to

Executive Summary

September 2022 and noted that: (a) for some sub-regions, the numbers of works orders checked were less than the requirements; (b) of the 1,567 notifications issued by EDB to TCs on unsatisfactory cases, TCs submitted their replies for 1,128 (72%) cases with delays. The average delay was 90 days, ranging from 1 to 476 days. Up to 31 October 2022, TCs had not yet submitted their replies for 253 (16%) cases, which were already overdue for 12 to 634 days; and (c) 2,666 (31%) of the 8,601 CSCs were conducted after the completion of the works, contrary to EDB's guidelines. The delays between the date of completion and date of CSCs ranged from 1 to 963 days (averaging 82 days) (para. 2.3).

4. ***Room for improvement in conducting Technical Assurance Audits (TAAs).*** Audit reviewed 7,157 works orders with TAAs conducted in the period from 1 January 2021 to 15 December 2022 and noted that: (a) EDB had not promulgated guidelines on when TAAs should be completed after the completion of works. On average, EDB took 156 days to complete TAAs after completion of works; and (b) of the 1,002 works orders with responses from TCs on observations identified in TAAs due for submission, many were submitted after the due date or were not yet submitted. As at 15 December 2022, TCs submitted their responses for 354 (35%) works orders 1 to 462 days (averaging 58 days) later than the stipulated time of 14 calendar days, and TCs had not submitted their responses to EDB for 29 (3%) works orders. The responses for the 29 works orders were overdue for 3 to 275 days (para. 2.6).

5. ***Room for improvement in conducting Quality Assurance Audits (QAAs).*** Audit noted that projects were not selected for QAAs according to the requirement stipulated in the guidelines which was effective since August 2020 (i.e. one completed project should be selected every two months) or the target promulgated in January 2022 (i.e. three completed projects should be selected every two months): (a) in the 17-month period from August 2020 to December 2021, 1 project was selected for QAA; and (b) in the 5-month period from January 2022 to May 2022, 3 projects were selected for QAAs (all 3 were selected in January 2022) (paras. 2.8 to 2.10).

6. ***Delays in submission of dimension books by MTCs.*** MTCs are required to submit a dimension book for each works order to TCs within 90 days after the certified completion date of the works order. According to EDB, if MTCs fail to submit the dimension books on or before the due date, EDB will claw back all or part of the interim payments made. The payments clawed back will be released to MTCs

Executive Summary

upon submission of the outstanding dimension books. Audit noted that of the 28,426 works orders that were certified completed in the period from 1 January 2020 to 30 June 2022, the dimension books of 8,308 (29%) were submitted late. The average delay was 71 days, ranging from 1 to 661 days. In all the 10 delay cases reviewed by Audit, the clawbacks were made long after the due dates for dimension book submission, ranging from 498 to 695 days (averaging 568 days) after the due dates and after MTCs had submitted the outstanding dimension books. In 7 (70%) of the 10 cases, the clawbacks and the releases of payment clawed back were made on the same day, and in 1 (10%) of the 10 cases, the release of clawback was made before the interim payments had actually been clawed back (paras. 2.12 to 2.15).

7. ***Room for improvement in conducting customer satisfaction surveys.*** TCs are required to conduct quarterly customer satisfaction surveys for every school in their regions and submit quarterly customer satisfaction reports to EDB. Audit reviewed the four surveys conducted in the period from March 2021 to February 2022 and noted that the response rates were on the low side, ranging from 7% to 38% (averaging 18%). Furthermore, TCs are required to visit and contact schools who gave unsatisfactory ratings in the surveys and submit reports of the visits and the proposed improvement actions to be taken to EDB. There was no documentary evidence showing that TCs had complied with the requirements for 7 (28%) of the 25 schools that gave unsatisfactory ratings for the quarter from September to November 2021 (para. 2.19).

Major Repairs projects

8. ***Need to review the thresholds of minimum repairs cost under MR projects and ER projects.*** According to the regulations of MR projects and ER projects, schools cannot apply for repair items costing less than \$3,000 for primary schools and special schools, and less than \$8,000 for secondary schools. Audit noted that these thresholds had not been reviewed or revised at least for more than 13 years since April 2009 and EDB had no information on how these thresholds were derived, the rationale behind the setting of two different thresholds, and when these thresholds were last reviewed or revised (para. 3.6).

9. ***Different recommendations given for similar applications.*** In May 2020, EDB issued guidelines stating that schools should consider adding a lid for squat-type toilets or replacing them with pedestal toilets. Audit noted that TCs gave different assessments on similar MR applications for 51 works items of replacement of the

Executive Summary

squat-type toilets in the 2021-22 MR cycle. Of the 51 works items, 6 (12%) were assessed by TCs as ER items instead of MR items, 26 (51%) were rated as repair items which were essential and were approved as MR items (i.e. carried out one year after the applications were submitted) and 19 (37%) were rated as desirable repair items or improvement items. Of these 19 items, 6 (32%) were rejected by EDB. However, there was no documentary evidence indicating the reasons for the difference in the assessments of these 51 works items (paras. 3.9 and 3.11).

10. ***Need to improve repairs for defective fire doors.*** Audit noted a case where fire doors with safety concerns were handled as MR instead of ER. Moreover, there was no documentary evidence showing that TC had provided justifications for replacing the two wooden fire doors by stainless steel doors, which were more expensive than wooden fire doors. In another case, although there were major differences between the seriousness of the defects described by the school and the assessment results of TC on the defective fire doors, TC did not document the details of the defects to repudiate the seriousness of the defects described by the school (para. 3.14).

11. ***Room for improvement in documentation regarding project completion dates.*** Audit examined 40 works orders issued by TCs to MTCs for MR cycles from 2020-21 to 2022-23 and found that for 37 (93%) works orders, the target completion dates set were later than the project completion dates agreed with the schools as recorded in EDB's computer system by 31 to 227 days (averaging 123 days). According to EDB, for these 37 works orders, the TCs concerned had verbally agreed the revised project completion dates with the schools. Audit noted that for 30 (81%) of the 37 works orders, there was no documentary evidence: (a) showing the factors accounting for the difference between the target completion dates set by TCs for the works orders and the original project completion dates agreed with the schools; and (b) showing that the revised target completion dates of the works orders were agreed with the schools (paras. 3.19 to 3.21).

12. ***Need to closely monitor asbestos-containing materials (ACMs) remaining in some school premises.*** In 2005, the Government completed an exercise to remove all ACMs with imminent risk to public health from school premises. In June 2006, EDB informed the Panel on Education of the Legislative Council that the remaining ACMs in school premises were in good conditions and of insignificant risk to public health, and it intended to complete the removal of all ACMs from all school premises by the end of the 2011/12 school year. In 2014, EDB found that ACMs still existed

Executive Summary

in 14 schools and requested them to engage registered asbestos consultants to investigate the conditions of ACMs in their school premises every two years. In some cases, the consultants identified damages in the building elements of school premises covering ACMs, which might cause possible leakages of ACMs. Up to January 2023, ACMs still existed in the school premises of 11 (79%) of the 14 schools (paras. 3.30, 3.31 and 3.33).

13. ***Need to carry out flagpole repairs and enhancement works in a timely manner.*** Starting from 1 January 2022, all primary and secondary schools must display national flag on each school day and conduct a national flag raising ceremony in each week. Audit noted that schools with only one flagpole which had become inoperable needed to rely on movable flagpoles to meet the requirements because requests for repairing defective flagpoles as MR would only be carried out in the following MR cycle. Furthermore, schools should display the regional flag alongside the national flag if there were adequate flagpoles. Based on the results of the review conducted in 2021, EDB launched a special improvement works programme in 2021-22 covering 42 selected schools to help them to install new flagpoles. Of the 82 approved applications for flagpoles installations in the 2022-23 MR cycle, the installation works for 22 (27%) had not yet been completed up to 18 November 2022 (paras. 3.36, 3.38 and 3.39).

Emergency Repairs projects

14. ***Need to consolidate ER requests as far as practicable.*** Audit examined the ER requests recommended for repairs in the period from 2019-20 to 2021-22. Audit noted that there were more than 6,000 ER requests each year and some schools needed frequent ER works. Audit reviewed the ER requests and noted that there were cases where repairs were requested separately within a short period of time and were carried out under separate projects. Such requests could have been consolidated and covered by one single works project to minimise disturbance to the schools and to improve economy and efficiency of the repairs (paras. 4.3 and 4.4).

15. ***Some schools need assistance to determine if works required is within ER ambit.*** Audit analysed the ER requests submitted by schools in the period from 2019-20 to 2021-22, and noted that a considerable percentage (ranging from 17% to 25%) of ER requests submitted were not recommended for repairs. Audit examined 20 ER requests submitted by schools in 2021-22 which were not recommended for repairs, and found that 10 (50%) requests were clearly not within the ambit of ER

Executive Summary

projects. Of the 10 requests, the estimated costs of repair items in 5 (50%) requests were much below the thresholds of ER projects (see para. 1) and the repair items in 5 (50%) requests were not of ER nature (paras. 4.8 and 4.9).

16. *Need to expedite finalisation of ER reports.* In September 2020, EDB set a target of 15 days for TCs to finalise their ER reports after the date of first submission. Audit examined the ER reports finalised in the period from 2019-20 to 2021-22 and noted that long time was taken to finalise the ER reports. The time taken ranged from 0 to 442 days, averaging 32 days. Furthermore, in the six-month period from October 2021 to March 2022, EDB returned 4,073 ER reports submitted by TCs for their revisions. Audit found that 3,042 (75%) ER reports were returned to TCs for revisions because of missing or incorrect necessary information in the ER reports (paras. 4.14 and 4.15).

17. *ER requests not followed up within stipulated time.* The time for conducting site visits, completing temporary repairs and completing final repairs for the three categories of ER requests are stipulated in the maintenance term contracts. In the period from 2019-20 to 2021-22, many ER requests were not followed up by MTCs within the stipulated time: (a) site visits for 2,762 (10%) of 28,346 ER requests; (b) temporary repairs for 614 (3%) of 20,956 ER requests; and (c) final repairs for 9,887 (48%) of 20,437 ER requests (paras. 4.18 and 4.19).

Improvement programmes

18. *Need to provide assistance to matchbox-style schools before reprovisioning.* As at 31 December 2022, there were 23 matchbox-style schools. In 2017, EDB commenced an improvement programme to address the common problems of matchbox-style schools premises, which was completed in 2019. Audit noted that some common problems of the schools (e.g. inadequate space for the schools' operations) were not covered by the improvement works completed in 2019. These schools needed to be reprovisioned or expanded in order to fully address the issues of insufficient space and facilities in the long run. In the six-year period from 2017 to 2022, 19 matchbox-style schools applied for reprovisioning and only 5 (26%) of their applications were successful (paras. 5.3, 5.5, 5.6, 5.8 and 5.9).

Executive Summary

19. ***Incorrect information communicated to schools.*** According to the meeting minutes of two meetings held in May 2021 on two MR projects and three meetings held in May 2022 on three MR projects between EDB, schools and the TC, schools were advised of incorrect information relating to applications for repairs or replacement of air-conditioning systems. The incorrect information might have misled schools into giving up submitting MR applications or ER applications for repairing or replacing the air-conditioning systems installed in the eligible facilities under “Additional Air-conditioning Installation for Schools” (paras. 5.14 and 5.15).

20. ***Need to provide assistance to schools on applications for repairs or replacement of air-conditioning systems.*** Audit examined 10 MR applications submitted in the 2021-22 MR cycle. In 3 (30%) applications, the TCs considered that the schools’ requests for repairing or replacing air-conditioning systems were of ER nature and advised the schools to submit their applications as ER requests if necessary. Submission of requests as MR applications or as ER applications would bring about different results. For ER projects, applications can be made anytime during the year and the works are required to be completed at a maximum of 12 calendar days. For MR projects, applications can only be made at the beginning of every financial year. There was a need for EDB to provide assistance to schools on applications for repairs or replacement of air-conditioning systems (e.g. by providing examples of approved MR projects and approved ER projects of repairs or replacement of air-conditioning systems) (paras. 5.18, 5.20 and 5.21).

21. ***Need to draw experience from air-conditioning system repair or replacement projects.*** In the period from March 2017 to June 2022, EDB identified 28 cases of air-conditioning system repair or replacement projects with workmanship issues. In various quarterly meetings between EDB and TCs, EDB brought the cases to the attention of TCs and urged them to exercise prudence in conducting their site inspections for early identification of irregularities on site and early rectification of unsatisfactory works (para. 5.22).

22. ***Need to ensure feasibility study reports of improvement projects include all important project information.*** For items approved under FUS, TCs submit feasibility study reports, which include key project information (e.g. estimated costs of the works items) to EDB. Different TCs included different information in their feasibility study reports. Audit examined 30 feasibility study reports of FUS projects conducted in the period from 2020-21 to 2021-22, and noted that some important project information (e.g. project completion dates agreed with schools, details of

Executive Summary

materials to be used and related cost estimates) was not included in 19 (63 %) feasibility study reports (paras. 5.30 and 5.31).

Audit recommendations

23. Audit recommendations are made in the respective sections of this Audit Report. Only the key ones are highlighted in this Executive Summary. Audit has *recommended* that the Secretary for Education should:

Contract management

- (a) in conducting CSCs, ensure that:
 - (i) the number of works orders checked is not less than the requirement;
 - (ii) TCs submit in a timely manner their replies on the arrangement to rectify the unsatisfactory areas; and
 - (iii) CSCs are conducted before the works are completed (para. 2.17(a));
- (b) promulgate guidelines on the timeliness of completing TAAs after completion of works (para. 2.17(b));
- (c) for works orders with observations identified in TAAs, ensure that TCs submit responses to EDB on the follow-up actions in a timely manner (para 2.17(c));
- (d) select projects for QAAs according to the Guidelines on Spot Checks and endeavour to achieve the target promulgated in January 2022 (para. 2.17(d));
- (e) ensure that dimension books are submitted and interim payments are clawed back in a timely manner, and releases of clawbacks are made after interim payments have actually been clawed back (para. 2.17(e));

Executive Summary

- (f) consider using electronic means to facilitate schools in submitting customer satisfaction survey questionnaires (para. 2.26(a));
- (g) ensure that TCs visit the schools who have given unsatisfactory ratings in the surveys at the soonest time, and submit to EDB reports of the visits and the proposed improvement actions to be taken (para. 2.26(b));

Major Repairs projects

- (h) review whether it is justified to set two different thresholds for the applications for repairs submitted by primary and special schools and those by secondary schools, and consider setting a single threshold for applications submitted by all types of schools (para. 3.16(a) and (b));
- (i) ensure that justifications are provided by TCs for making different recommendations for similar applications (para. 3.16(d));
- (j) ensure that fire doors with safety concerns are repaired as soon as possible, and TCs provide detailed information of their assessments on fire door repairs applications (para. 3.16(e));
- (k) improve the documentation regarding project completion dates (para. 3.27(a));
- (l) ensure that prompt actions are taken to follow up possible leakages of ACMs identified in asbestos investigations (para. 3.34(a));
- (m) ensure that flagpoles repairs are carried out in a timely manner and consider stepping up efforts to assist schools in installing additional flagpoles (para. 3.41(a) and (b));

Emergency Repairs projects

- (n) consolidate ER requests into one single works project as far as practicable (para. 4.11(a) and (b));

Executive Summary

- (o) **provide assistance to schools to help them have a clear understanding on the ambit of ER projects (para. 4.11(d));**
- (p) **help TCs submit all necessary and accurate information in ER reports (para. 4.21(a));**
- (q) **ensure that follow-up actions for ER requests are completed by MTCs within the stipulated time (para. 4.21(b));**

Improvement programmes

- (r) **explore the way forward to help matchbox-style schools deal with the issues of insufficient space and facilities (para. 5.10);**
- (s) **ensure that the information relating to applications for repairs or replacement of air-conditioning systems are communicated to schools accurately (para. 5.24(a));**
- (t) **provide assistance to schools on applications for repairs or replacement of air-conditioning systems (para. 5.24(b));**
- (u) **draw experience from the air-conditioning system repair or replacement projects (para. 5.24(c)); and**
- (v) **ensure that the feasibility study reports of improvement projects include all important project information (para. 5.33(b)).**

Response from the Government

24. The Secretary for Education agrees with the audit recommendations.

PART 1: INTRODUCTION

1.1 This PART describes the background to the audit and outlines the audit objectives and scope.

Background

1.2 As at 31 December 2022, there were 844 aided schools (Note 1) in Hong Kong. The Education Bureau (EDB), headed by the Secretary for Education, is responsible for implementing maintenance and improvement projects approved under non-recurrent Government subventions of school premises of aided schools through the School Premises Maintenance Section and four Regional Education Offices (REOs — Note 2):

- (a) *School Premises Maintenance Section.* The Section is led by a Chief Maintenance Surveyor. As at 31 December 2022, the Section had a staff establishment and strength of 141 and 136 respectively (see Appendix A for an extract of the organisation chart of the School Premises Maintenance Section as at 31 December 2022). The Section is responsible for:
 - (i) coordinating the processing of applications for maintenance and improvement works, including bidding for funding through the annual Resource Allocation Exercises, preparing call circulars for applications, assessing and estimating the cost of the works items proposed by schools;
 - (ii) implementing maintenance and improvement projects, which include Major Repairs (MR) projects (see para. 1.5), Emergency Repairs (ER) projects (see para. 1.6) and ad-hoc school renovation/alteration/improvement projects; and

Note 1: *Aided schools are fully subvented by the Government. They are mostly run by religious, charitable or clan organisations. The 844 aided schools comprised 422 primary schools, 358 secondary schools and 64 special schools.*

Note 2: *There are four REOs covering four regions, namely Hong Kong, Kowloon, New Territories East and New Territories West.*

Introduction

- (iii) overseeing and managing consultants and contractors (e.g. Term Consultants (TCs) and Maintenance Term Contractors (MTCs)) appointed for implementing maintenance and improvement projects; and
- (b) **REOs.** REOs are responsible for screening MR applications and providing comments on ER applications each costing \$200,000 or more (Note 3).

Maintenance of school premises

1.3 It is the responsibility of the schools to regularly inspect the school premises and take prompt actions to keep the school premises in good conditions, for the well-being of their students. Repair items each costing less than \$3,000 for primary schools and special schools, or less than \$8,000 for secondary schools are carried out by the schools themselves (Note 4). In addition, EDB provides school premises maintenance and repairs support to aided schools through MR projects and ER projects. For repair items each costing \$3,000 or more for primary schools and special schools, or \$8,000 or more for secondary schools, schools may submit MR applications and ER applications to EDB to carry out the required repair works. The repair works are funded by two block votes, one under the General Revenue Account and the other under the Capital Works Reserve Fund (Note 5). The repair projects are mainly implemented by EDB, as follows:

Note 3: *In addition to providing support for maintenance and improvement of school premises, REOs coordinate with other EDB Sections to provide a full range of professional support services to schools, such as school administration, curriculum development, learning and teaching, student guidance and psychological services. According to EDB, as REOs' staff are multi-tasked, it is not feasible to provide a breakdown of staff resources solely for the work on provision of support for maintenance and improvement of school premises.*

Note 4: *Repair items each costing less than \$3,000 for primary schools and special schools, or less than \$8,000 for secondary schools are absorbed in grants provided by EDB to aided schools to meet their daily operating expenses excluding salaries.*

Note 5: *The two block votes are Head 156 Subhead 900 – Codes of Aid for existing schools – maintenance, repairs and minor improvement (block vote), and Head 708 Subhead 8100QX – Alterations, additions, repairs and improvements to education subvented buildings.*

- (a) *Estate aided schools (Note 6).* Since 1 April 2014, the Housing Department had ceased to be works agent of EDB on the implementation of approved repair projects for estate aided schools; and
- (b) *Non-estate aided schools (Note 7).* Projects approved before 2019-20 with estimated cost exceeding \$2 million each are implemented by the Architectural Services Department while those not exceeding \$2 million are implemented by EDB. Since 1 April 2019, EDB has taken up the implementation of approved repair projects at non-estate aided schools with estimated cost exceeding \$2 million each from the Architectural Services Department.

1.4 EDB awards three term consultancy agreements and six maintenance term contracts to handle applications and to deliver maintenance and improvement works under MR projects, ER projects and other improvement projects. Details of the term consultancy agreements and maintenance term contracts for the service period from 1 January 2020 to 31 December 2022 are shown in Table 1.

Note 6: *Estate aided schools are aided schools located inside the boundary of public housing estates. As at 31 December 2022, there were 213 estate aided schools.*

Note 7: *Non-estate aided schools are aided schools located outside the boundary of public housing estates. As at 31 December 2022, there were 631 non-estate aided schools.*

Introduction

Table 1

**Term consultancy agreements and maintenance term contracts
(2020 to 2022)**

Contract areas	Term consultancy agreement		Maintenance term contract	
	Agreement (Note 1)	Expenditure (Note 2) (\$ million)	Contract (Note 1)	Expenditure (Note 3) (\$ million)
Central & Western, Wan Chai, Hong Kong East and Southern	A	107.4	1	574.6
Islands, Yau Tsim & Mong Kok and Kowloon City			2	460.9
Sham Shui Po, Tsuen Wan and Kwai Chung & Tsing Yi	B	147.6	3	748.2
Tuen Mun and Yuen Long			4	705.9
Kwun Tong, Sai Kung and Wong Tai Sin	C	197.0	5	728.7
Sha Tin, Tai Po and North			6	873.6
Total		452.0		4,091.9

Source: Audit analysis of EDB records

Table 1 (Cont'd)

Note 1: Term consultancy agreements A, B and C were awarded to three TCs. Maintenance term contracts 1 and 5, 2 and 4, and 3 and 6 were respectively awarded to three MTCs.

Note 2: The expenditure represented fees paid to TCs up to 31 January 2023.

Note 3: The expenditure represented value of works paid to MTCs up to 31 January 2023. In addition to these amounts, the value of works amounting to \$1,565.9 million had been assigned to MTCs.

1.5 **MR projects.** The scope of works under MR projects, apart from providing repairs to impaired items, includes improvement of school premises through, for example, retrofitting of lighting systems, paving of non-slip floor tiles, improvement of ventilation systems, replacement of surfacing materials, etc. EDB, in considering the works items proposed by the schools, gives priority to essential items (e.g. items involving safety and health requirements). In the financial years from 2017-18 to 2021-22, 4,186 MR projects were approved and expenditure of \$5,018.2 million had been incurred (see Table 2).

Table 2**Number of MR projects approved and expenditure incurred
(2017-18 to 2021-22)**

Year	Number of MR projects approved	Expenditure (Note) (\$ million)
2017-18	840	784.7
2018-19	834	1,049.2
2019-20	835	1,040.2
2020-21	839	1,066.9
2021-22	838	1,077.2
Total	4,186	5,018.2

Source: Audit analysis of EDB records

Note: The expenditures comprised expenditures incurred by projects approved in the financial year and by on-going projects approved in previous financial years.

Remarks: Each MR project approved covered repair works items approved for one school for the financial year. For schools with a boarding section, the school section and boarding section of the school require separate approvals.

1.6 **ER projects.** The scope of emergency repair works covers builder's works (e.g. repairing defects in structural elements, pipe bursting, etc.) and building services (e.g. repairing defective fire service installation, defective electrical equipment or accessories, etc.) elements. In the financial years from 2017-18 to 2021-22, 34,991 ER projects were approved and expenditure of \$1,837.8 million had been incurred (see Table 3).

Table 3

**Number of ER projects approved and expenditure incurred
(2017-18 to 2021-22)**

Year	Number of ER projects approved	Expenditure (Note) (\$ million)
2017-18	7,023	341.5
2018-19	7,304	419.6
2019-20	6,006	398.1
2020-21	7,761	372.1
2021-22	6,897	306.5
Total	34,991	1,837.8

Source: Audit analysis of EDB records

Note: The expenditures comprised expenditures incurred by projects approved in the financial year and by on-going projects approved in previous financial years.

Improvement programmes of school premises

1.7 In the period from 2017 to 2021, the Government launched various improvement programmes for the school premises of aided schools (see Table 4).

Table 4**Improvement programmes for school premises of aided schools
(31 March 2022)**

Programme	Number of projects approved	Expenditure up to 31 March 2022 (\$ million)
1. Additional Air-conditioning Installation for Schools	3,815	695.1
2. Time-limited Minor Works Programme	748	427.9
3. Improvement programme for “Matchbox-style schools”	26	106.9
4. Installation of lifts for public sector schools	132	90.6
5. Replacement of manual operated water taps with motion sensor operated ones for aided schools	596	32.2
6. Inspection and Repair Services for Aided Schools in accordance with Mandatory Building Inspection Scheme and Mandatory Window Inspection Scheme	811	11.2
7. Installation of flagpoles	41	1.1
8. Installation of ventilation systems	864	0
Total	7,033	1,365.0

Source: *Audit analysis of EDB records*

1.8 Up to 31 March 2022, the three improvement programmes for school premises of aided schools that had incurred the largest amount of expenditures were:

- (a) ***Additional Air-conditioning Installation for Schools.*** Before 2017, Government would only install air-conditioning systems in rooms used for teaching purpose of aided schools suffering from noise caused by traffic or aircraft. In the 2017 Policy Address, the Chief Executive of the Hong Kong Special Administrative Region (Chief Executive) announced that, in order to create a better learning environment, the Government would provide air-conditioning systems for standard teaching facilities (including classrooms and special rooms), student activity centres and assembly halls in all public sector schools. In 2018, EDB launched a new programme namely “Additional Air-conditioning Installation for Schools”. For air-conditioning systems installed in rooms or facilities which are used directly for teaching and learning or scheduled with regular student activities, schools can submit MR applications or ER applications for repairs or replacement of the air-conditioning systems. Up to 31 March 2022, a total expenditure of \$695.1 million had been incurred; and
- (b) ***Improvement programmes for schools not built according to current provision standards.*** Of the 844 aided schools (see para. 1.2), 208 were built according to current provision standards. The remaining 636 schools were built in different periods according to the standards prevailing at the time of their construction. The following two improvement programmes aimed to improve the teaching and learning environment and facilities of the 636 schools:
- (i) ***Time-limited Minor Works Programme.*** In the 2019 Policy Address, in light of the experience gained through the Improvement programme for “Matchbox-style schools” (see (ii) below), the Chief Executive announced that the Government had reserved \$1 billion to take forward a time-limited minor works programme under which simple minor internal conversion works would be carried out at some 600 aided school premises constructed according to past building standards to facilitate more flexible use of existing space by schools, thereby enhancing the teaching and learning environment and efficacy. In 2019 and 2020, aided schools were invited to submit two rounds of applications. Up to 31 March 2022, 748 projects were approved for 475 schools, and a total expenditure of \$427.9 million had been incurred; and

- (ii) ***Improvement programme for “Matchbox-style schools”.*** Over the years, the teaching and learning environment of “Matchbox-style schools” (Note 8) had been a matter of concern among Legislative Council (LegCo) Members, the education sector and parents. In a tripartite meeting held in mid-2016, EDB, the Panel on Education of LegCo and the school sector (i.e. the Subsidized Primary Schools Council) agreed to first tackle the major problems resulting from the unique architectural design of these schools by implementing five improvement measures (Note 9). In the 2017 Policy Address, the Chief Executive announced that the Government would allocate additional resources to improve the facilities of these schools. Since the summer of 2017, EDB had progressively implemented improvement works for the aided primary schools operating in matchbox-style school premises. Relevant works were completed in 2019. Up to 31 March 2022, a total expenditure of \$106.9 million had been incurred.

Audit review

1.9 In October 2022, the Audit Commission (Audit) commenced a review of EDB’s work on maintenance and improvement of school premises for aided schools. This audit has focused on the following areas:

- (a) contract management (PART 2);
- (b) Major Repairs projects (PART 3);
- (c) Emergency Repairs projects (PART 4); and

Note 8: *EDB refers the “Matchbox-style schools” to those primary schools operating in cuboidal shaped school premises constructed between mid-1960s and 1980 at public housing estates.*

Note 9: *The improvement measures included: (a) replacement with sound-proof doors and double-glazed window system in classrooms; (b) installation of mechanical ventilation system at internal corridors; (c) installation of openable windows at staircase landings with grille walls; (d) installation of acoustic wall lining at classrooms for mounting modern teaching aids; and (e) installation of moveable partitions on both sides of covered playgrounds and provision of mechanical ventilation system.*

- (d) improvement programmes (PART 5).

Audit has found room for improvement in the above areas and has made a number of recommendations to address the issues.

General response from the Government

1.10 The Secretary for Education on the whole agrees with the audit recommendations. She has said that EDB appreciates Audit's efforts in examining the maintenance and improvement of school premises for aided schools, making balanced observations and positive recommendations. EDB will continue to assist schools to repair and maintain their premises with a view to enhancing the learning and teaching environment. In light of the audit recommendations, EDB will make refinements as necessary.

Acknowledgement

1.11 Audit would like to acknowledge with gratitude the full cooperation of the staff of EDB during the course of the audit review.

PART 2: CONTRACT MANAGEMENT

2.1 This PART examines management of contracts related to maintenance and improvement projects, focusing on the following areas:

- (a) monitoring of quality of contractor services (paras. 2.2 to 2.18); and
- (b) assessment of TCs' performance (paras. 2.19 to 2.27).

Monitoring of quality of contractor services

Room for improvement in conducting Comprehensive Site Checks

2.2 According to its Guidelines on Spot Checks, EDB conducts Comprehensive Site Checks (CSCs) for ER and MR works orders before their completion, aiming to:

- (a) check the quality and workmanship of MTCs' works;
- (b) check the quality of TCs' supervision on MTCs' works; and
- (c) maintain communication and working relationship with schools' representatives, and understand their concerns and point of views on the performance of TCs and MTCs.

2.3 ER and MR works are classified into building services and builder's works (see para. 1.6). Audit reviewed the 8,601 CSCs (4,025 for works orders of building services and 4,576 for works orders of builder's works) conducted in the 21-month period from January 2021 to September 2022 and noted that:

- (a) ***Numbers of works orders checked less than required.*** EDB has divided the schools into 6 sub-regions for CSCs on building services and 7 sub-regions for CSCs on builder's works. According to the Guidelines on Spot Checks, for each sub-region, EDB shall conduct CSCs for a specified number of works orders of building services and builder's works (ranging from 20 to 30) every month. Different sub-regions have different specified

numbers of works orders. Audit found that for some sub-regions, the numbers of works orders checked were less than required:

- (i) ***Building services.*** For 3 (50%) of the 6 sub-regions, the numbers of works orders checked were less than required in 1 month. The numbers of works orders checked in that month were 60% to 97% (averaging 84%) of the requirement; and
 - (ii) ***Builder's works.*** For 5 (71%) of the 7 sub-regions, the numbers of works orders checked were less than required in some months. In the 5 sub-regions:
 - for 1 (20%) sub-region, the number of works orders checked was less than required in 1 month. The number of works orders checked in that month was 97% of the requirement;
 - for 1 (20%) sub-region, the numbers of works orders checked were less than required in 2 months. The numbers of works orders checked in these 2 months were 70% and 93% (averaging 82%) of the requirement respectively; and
 - for the remaining 3 (60%) sub-regions, the numbers of works orders checked were less than required in 3 months. The numbers of works orders checked in these 3 months were 63% to 97% (averaging 86%) of the requirement;
- (b) ***Delays in responding to EDB's notifications.*** According to the Guidelines on Spot Checks, EDB needs to notify TCs of unsatisfactory cases (i.e. cases with "poor" or "very poor" aspects) identified in CSCs so that TCs will take follow-up actions. Upon receipt of notifications from EDB, TCs are required to follow up the unsatisfactory cases and reply to EDB on the actions to be taken to rectify the unsatisfactory areas within 14 calendar days. During the period, EDB issued 1,567 notifications to TCs for the unsatisfactory cases identified. Of the 1,567 notifications:
- (i) TCs submitted their replies for 1,128 (72%) cases with delays. The average delay was 90 days, ranging from 1 to 476 days (see Table 5); and

Table 5

**Delays in submission of TCs' replies to EDB
after receiving notifications
(January 2021 to September 2022)**

Delay (Day)	Number of cases
≤ 30	363 (32%)
> 30 to ≤ 90	324 (29%)
> 90 to ≤ 150	218 (19%)
> 150 to ≤ 365	209 (19%)
> 365 (Note)	14 (1%)
Total	1,128 (100%)

Source: Audit analysis of EDB records

Note: The longest delay was 476 days.

- (ii) up to 31 October 2022, TCs had not yet submitted their replies for 253 (16%) cases. The replies were already overdue for 12 to 634 days (averaging 182 days); and
- (c) **CSCs conducted long after the completion of works.** According to the Guidelines on Spot Checks, CSCs should be conducted before the works are completed. Of the 8,601 CSCs, 2,666 (31%) were conducted after the completion of the works. The delays between the date of completion and date of CSCs ranged from 1 to 963 days (averaging 82 days). In 7 cases, CSCs were conducted more than 730 days (i.e. two years) after the works were completed (see Table 6).

Table 6

**Delays in conducting CSCs
(January 2021 to September 2022)**

Delay (Day)	Number of CSCs
≤ 30	925 (35%)
> 30 to ≤ 90	926 (35%)
> 90 to ≤ 150	422 (15%)
> 150 to ≤ 365	328 (12%)
> 365 to ≤ 730	58 (2%)
> 730 (Note)	7 (1%)
Total	2,666 (100%)

Source: Audit analysis of EDB records

Note: The longest delay was 963 days.

2.4 Audit considers that EDB needs to, in conducting CSCs, take measures to ensure that:

- (a) the number of works orders checked is not less than the requirement;
- (b) TCs submit in a timely manner their replies on the arrangement to rectify the unsatisfactory areas; and
- (c) CSCs are conducted before the works are completed.

Room for improvement in conducting Technical Assurance Audits

2.5 EDB conducts Technical Assurance Audits (TAAs) to monitor the quality of MTCs' works. According to the Guidelines on Spot Checks:

- (a) at least 30% of completed works orders are required to be selected every two weeks for checking;
- (b) for cases with observations, notifications are required to be sent to TCs for taking follow-up actions; and
- (c) TCs are required to follow up the cases with observations within 14 calendar days after receiving the notifications, and submit responses to EDB on the details of the proposed corrective actions and the expected completion dates. If TCs' follow-up actions are unsatisfactory, EDB will bring up the cases for discussion in district meetings and/or monthly progress meetings.

2.6 Audit reviewed 7,157 works orders with TAAs conducted in the period from 1 January 2021 to 15 December 2022. Audit noted that:

- (a) ***TAAs completed long after completion of works.*** EDB had not promulgated guidelines on when TAAs should be completed after the completion of works:
 - (i) ***Works orders not selected promptly for TAAs.*** The time period between the date of completion of works and the date of selecting the works orders for TAAs ranged from 1 to 1,112 days (averaging 83 days). Of the 7,157 works orders, 4,692 (66%) were selected more than 30 days after completion of works (see Table 7);

Table 7

**Time period between the date of completion of works and
the date of selecting the works orders for TAAs
(1 January 2021 to 15 December 2022)**

Time period (Day)	Number of works orders
≤ 30	2,465 (34%)
> 30 to ≤ 90	2,689 (38%)
> 90 to ≤ 150	1,082 (15%)
> 150 (Note)	921 (13%)
Total	7,157 (100%)

Source: Audit analysis of EDB records

Note: The longest time period was 1,112 days.

- (ii) **TAAs not commenced promptly.** The time period between the date of selecting the works orders and the date of starting TAAs ranged from 0 to 597 days (averaging 59 days) (Note 10). Of the 7,157 works orders, TAAs for 3,776 (53%) were commenced more than 30 days after the works orders were selected (see Table 8); and

Note 10: For TAAs commenced on the date of selecting the works orders, the time period was referred to as 0 day.

Table 8

**Time period between the date of selecting the works orders and
the date of starting TAAs
(1 January 2021 to 15 December 2022)**

Time period (Day)	Number of works orders
≤ 30	3,381 (47%)
> 30 to ≤ 90	2,161 (30%)
> 90 to ≤ 150	916 (13%)
> 150 (Note)	699 (10%)
Total	7,157 (100%)

Source: Audit analysis of EDB records

Note: The longest time period was 597 days.

- (iii) **Long time taken to complete TAAs.** The time taken to complete TAAs ranged from 0 to 441 days (averaging 14 days) (Note 11). For 804 (11%) of the 7,157 works orders, EDB took more than 30 days to complete TAAs (see Table 9);

Note 11: For TAAs commenced and completed on the same day, the time taken was referred to as 0 day.

Table 9

**Time taken to complete TAAs
(1 January 2021 to 15 December 2022)**

Time taken (Day)	Number of works orders
≤ 30	6,353 (89%)
> 30 to ≤ 90	679 (9%)
> 90 to ≤ 150	84 (1%)
> 150 (Note)	41 (1%)
Total	7,157 (100%)

Source: Audit analysis of EDB records

Note: The longest time taken was 441 days.

On average, EDB took 156 (83 (see para. 2.6(a)(i)) plus 59 (see para. 2.6(a)(ii)) plus 14 (see para. 2.6(a)(iii))) days to complete TAAs after completion of works. In Audit's view, if TAAs are not completed shortly after completion of works, the conditions of the completed works may have deteriorated or new defects may have arisen and hence the conditions at the time of conducting TAAs may not reflect the quality of MTCs' works; and

- (b) ***Responses from TCs on observations identified in TAAs not timely submitted.*** According to the Guidelines on Spot Checks, TCs are required to follow up the cases with observations within 14 calendar days after receiving EDB's notifications and submit responses to EDB. The responses should include the details of the proposed corrective actions and the expected completion dates. Of the 7,157 works orders, EDB notified TCs on 1,012 works orders with observations. Of the 1,012 works orders, 10 were not yet due for submission as at 15 December 2022. According to EDB, it had reminded TCs to follow up the cases with observations in various occasions. However, of the 1,002 works orders with responses due

Contract management

for submission, many were submitted after the due date or were not yet submitted. As at 15 December 2022:

- (i) for 354 (35%) works orders, TCs submitted their responses later than the stipulated time of 14 calendar days. The average delay was 58 days, ranging from 1 to 462 days (see Table 10); and

Table 10

**Delays in submission of TCs' responses to EDB
(1 January 2021 to 15 December 2022)**

Delay (Day)	Number of works orders
≤ 15	95 (27%)
> 15 to ≤ 45	119 (34%)
> 45 to ≤ 75	55 (16%)
> 75 to ≤ 105	30 (8%)
> 105 (Note)	55 (15%)
Total	354 (100%)

Source: Audit analysis of EDB records

Note: The longest delay was 462 days.

- (ii) TCs had not submitted their responses to EDB for 29 (3%) works orders. Up to 15 December 2022, the responses for the 29 works orders were overdue for 3 to 275 days.

2.7 Audit considers that EDB needs to:

- (a) promulgate guidelines on the timeliness of completing TAAs after completion of works; and

- (b) for works orders with observations identified in TAAs, take measures to ensure that TCs submit responses to EDB on the follow-up actions in a timely manner.

Room for improvement in conducting Quality Assurance Audits

2.8 EDB conducts Quality Assurance Audits (QAAs) on various aspects (e.g. reports, materials and works quality) of completed projects. In August 2020, the following requirements were added to the Guidelines on Spot Checks:

- (a) one completed project is required to be selected every two months from the project list for QAAs;
- (b) observations are required to be reported in management meetings as agenda items; and
- (c) based on the results of QAAs, EDB staff are required to take follow-up actions with TCs or MTCs.

2.9 In January 2022, in addition to the requirement stipulated in the Guidelines on Spot Checks, EDB promulgated a target on the number of projects selected for QAAs, which was that three completed projects should be selected every two months. According to EDB, this was an internal target and was promulgated on a trial basis.

2.10 Audit noted that projects were not selected for QAAs according to the requirement or the target:

- (a) in the 17-month period from August 2020 to December 2021, 1 project was selected for QAA; and
- (b) in the 5-month period from January 2022 to May 2022, 3 projects were selected for QAAs (all 3 were selected in January 2022).

2.11 Audit considers that EDB needs to select projects for QAAs according to the Guidelines on Spot Checks and endeavour to achieve the target promulgated in January 2022.

Delays in submission of dimension books by MTCs

2.12 According to the maintenance term contracts, MTCs are required to submit a dimension book (Note 12) for each works order to TCs within 90 days after the certified completion date of the works order. TCs are required to check the information in the dimension book before making the final payment.

2.13 Audit analysed the 28,426 works orders that were certified completed in the period from 1 January 2020 to 30 June 2022 and found that:

- (a) the dimension books of 8,308 (29%) of the 28,426 works orders were submitted late. The average delay was 71 days, ranging from 1 to 661 days; and
- (b) the dimension books of 124 works orders were submitted more than 365 days after the due dates (see Table 11).

Note 12: *A dimension book contains information (e.g. quantities of material used and measurements) of the works done for a works order.*

Table 11

**Delays in submission of dimension books
(1 January 2020 to 30 June 2022)**

Delay (Day)	Number of works orders
≤ 30	3,687 (44%)
> 30 to ≤ 180	3,763 (45%)
> 180 to ≤ 365	734 (9%)
> 365 (Note)	124 (2%)
Total	8,308 (100%)

Source: Audit analysis of EDB records

Note: The longest delay was 661 days.

2.14 For works orders with a cost estimate exceeding \$10,000, MTCs are entitled to apply for interim payments for works completed, up to a ceiling of 85% of the approved cost estimate of the works order. According to EDB, if MTCs fail to submit the dimension books on or before the due date (see para. 2.12), EDB will claw back all or part of the interim payments made. The payments clawed back will be released to MTCs upon submission of the outstanding dimension books.

2.15 Audit reviewed 10 cases with delays in submission of dimension books for more than 365 days and noted that:

- (a) in all the 10 cases, the clawbacks were made long after the due dates for dimension book submission, ranging from 498 to 695 days (averaging 568 days) after the due dates. Furthermore, the clawbacks were made after MTCs had submitted the outstanding dimension books;
- (b) in 2 (20%) cases, the releases of payment clawed back were made 23 and 26 days respectively after the dates of clawbacks;

Contract management

- (c) in 7 (70%) cases, the clawbacks and the releases of payment clawed back were made on the same day, rendering the clawbacks meaningless; and
 - (d) in 1 (10%) case, the release of “clawback” was made before the interim payments had actually been clawed back. As a result, an extra payment was made to MTC in addition to the amount due to MTC. Six days afterwards, EDB clawed back the extra payment from MTC.
- 2.16 Audit considers that EDB needs to take measures to ensure that:
- (a) dimension books are submitted by MTCs in a timely manner;
 - (b) interim payments are clawed back in a timely manner from MTCs who fail to submit the dimension books on time; and
 - (c) releases of clawbacks are made after interim payments have actually been clawed back.

Audit recommendations

- 2.17 Audit has *recommended* that the Secretary for Education should:
- (a) **in conducting CSCs, take measures to ensure that:**
 - (i) **the number of works orders checked is not less than the requirement;**
 - (ii) **TCs submit in a timely manner their replies on the arrangement to rectify the unsatisfactory areas; and**
 - (iii) **CSCs are conducted before the works are completed;**
 - (b) **promulgate guidelines on the timeliness of completing TAAs after completion of works;**

- (c) **for works orders with observations identified in TAAs, take measures to ensure that TCs submit responses to EDB on the follow-up actions in a timely manner;**
- (d) **select projects for QAAs according to the Guidelines on Spot Checks and endeavour to achieve the target promulgated in January 2022; and**
- (e) **take measures to ensure that:**
 - (i) **dimension books are submitted by MTCs in a timely manner;**
 - (ii) **interim payments are clawed back in a timely manner from MTCs who fail to submit the dimension books on time; and**
 - (iii) **releases of clawbacks are made after interim payments have actually been clawed back.**

Response from the Government

2.18 The Secretary for Education agrees with the audit recommendations. She has said that:

- (a) the focus of this audit review was on works conducted during the period from 1 January 2020 to 31 December 2022, when Hong Kong was hard hit by the coronavirus disease (COVID-19) epidemic. Despite the unprecedented challenges, EDB had been working closely with TCs and relevant parties to proceed with necessary works as far as practicable. It is noteworthy that the total number of CSCs conducted in the period for works orders of building services works were 4,025, far exceeding the requirement of 3,780 and the total CSCs conducted in the period for works orders of builder's works were 4,576, also exceeding the requirement of 4,200. Understandably, the delivery of the work was indeed not evenly distributed across the months. However, the waves of COVID-19 pandemic had rendered it necessary to implement social distancing rules including intermittent suspension of face-to-face schooling, introduction of "special school holidays" around March 2022, work-from-home arrangements and stringent restrictions on entry to schools. As a result, EDB staff, and consultants and contractors hired by EDB alike, could not

Contract management

have access to the school premises during prolonged period. The substantial shortage of manual labour for maintenance works at that time owing to the epidemic situation and quarantine requirement further aggravated the situation. All in all, the work progress and monitoring work had inevitably been affected. In fact, once the epidemic situation improved, EDB expedited the work to exceed the relevant requirements;

- (b) EDB has reminded TCs to submit the outstanding replies on CSCs and TAAs cases through various channels, for example, monthly progress meetings, bi-weekly district meetings and frequent emails. EDB will continue to explore other measures to remind TCs to submit in a timely manner their replies on the arrangement to rectify the unsatisfactory areas;
- (c) EDB would explore measures to ensure that CSCs are conducted before the works are completed;
- (d) EDB would prepare guidelines on the timeliness of completing TAAs;
- (e) as at 28 February 2023, 16 QAAs had been conducted and 3 QAAs were in progress, which was more than the required 15 QAAs as set since the implementation of the Guidelines on Spot Checks in August 2020. EDB would continuously endeavour to achieve the target;
- (f) EDB would explore measures to ensure that dimension books are submitted by MTCs in a timely manner and ensure that interim payments are clawed back in a timely manner from MTCs who fail to submit the dimension books on time; and
- (g) measures have already been taken to ensure that releases of clawbacks are made after interim payments have actually been clawed back.

Assessment of Term Consultants' performance

Room for improvement in conducting customer satisfaction surveys

2.19 TCs are required under the term consultancy agreements to conduct quarterly customer satisfaction surveys for every school in their regions and submit

quarterly customer satisfaction reports to EDB. TCs send the survey questionnaires to schools by fax or by email. As the questionnaires are not e-fillable (i.e. cannot be filled in by electronic means directly), schools have to print the questionnaires on paper if the questionnaires are sent to schools by email. Completed questionnaires have to be submitted by fax or by email with the scanned questionnaires attached. Audit reviewed the four surveys conducted by the three TCs in the period from March 2021 to February 2022 and noted that:

- (a) **Low response rate.** The response rates were on the low side, ranging from 7% to 38% (averaging 18%) (see Table 12); and

Table 12

**Response rates of customer satisfaction surveys
(March 2021 to February 2022)**

Survey period	TC A	TC B	TC C	Overall
March to May 2021	21 %	15 %	11 %	15 %
June to August 2021	23 %	38 %	7 %	22 %
September to November 2021	24 %	28 %	13 %	21 %
December 2021 to February 2022	16 %	23 %	7 %	15 %
Average	21 %	26 %	10 %	18 %

Source: Audit analysis of EDB records

Remarks: TCs issued a total of 3,476 customer satisfaction survey questionnaires to schools and received 637 questionnaires from schools.

- (b) **No documentary evidence showing that unsatisfactory cases had been followed up.** According to the term consultancy agreements, TCs are required to visit and contact schools who gave unsatisfactory ratings (i.e. rating lower than 5 on a 10 points scale from 1 (least satisfied) to 10 (most satisfied)) in the surveys at the soonest time, and submit reports of the visits and the proposed improvement actions to be taken to EDB. Audit analysed the customer satisfaction surveys for the quarter from

September to November 2021 and noted that 25 (14%) of the 183 schools gave unsatisfactory ratings to some items. For 7 (28%) of the 25 schools, there was no documentary evidence showing that TCs had visited them and proposed improvement actions to be taken.

2.20 Audit considers that EDB needs to:

- (a) consider using electronic means (e.g. conducting the survey online) to facilitate schools in submitting customer satisfaction survey questionnaires with a view to boosting the response rate; and
- (b) take measures to ensure that TCs visit the schools who have given unsatisfactory ratings in the surveys at the soonest time, and submit to EDB reports of the visits and the proposed improvement actions to be taken.

Room for improvement in assessing TCs' performance

2.21 EDB follows the requirements set by the Architectural and Associated Consultants Selection Board (Note 13) in assessing TCs' performance on various aspects, including:

- (a) quality of recommendations under feasibility/investigation stage;
- (b) quality of design, technical considerations, cost estimates, tender documents/drawings and tender assessment under design and contract stage;
- (c) supervision of contractors under construction stage; and
- (d) general assessment on TCs' performance on areas such as programming, progress reports, and adherence to programme, achievement of objectives

Note 13: *The Architectural and Associated Consultants Selection Board was established to formalise procedures for the engagement and remuneration of architectural and associated consultants for government projects. It is chaired by the Director of Architectural Services. One of its terms of reference is to review the performance of the architectural and associated consultants.*

and targets, and planning, preparation and management of site investigation/field works.

The results of the assessments are reported in the quarterly performance reports issued by EDB. The reports will be provided to the Development Bureau for building up the past performance ratings of TCs, which will be taken into account in consultant selection exercises.

2.22 From time to time, EDB issues notification letters to TCs for issues that are considered unsatisfactory by EDB, such as poor results obtained from CSCs (see para. 2.3(b)). EDB stated in the notification letters that the issues would be continuously monitored and would be duly reflected in the performance reports for TCs.

2.23 Audit reviewed the 3 quarterly performance reports for the 3 TCs for the period from April to June 2022 and noted that although 181 notification letters (mainly for poor results obtained from CSCs) were issued to the 3 TCs during the period (see Table 13), such information was not reflected in the quarterly performance reports. There was no documentary evidence showing that EDB had taken into account the notification letters issued when assessing the performance of TCs.

Table 13

**Number of notification letters issued to TCs
(April to June 2022)**

TC	Number of notification letters issued
A	101
B	64
C	16
Total	181

Source: Audit analysis of EDB records

Contract management

2.24 In response to Audit's enquiry, EDB informed Audit in February 2023 that:

- (a) the notifications letters were only one of the considerations in preparation of the quarterly performance reports; and
- (b) EDB had taken into account the notification letters together with all other aspects of the performance of TCs in a holistic approach in assessing TCs' performance.

2.25 Audit considers that EDB needs to maintain documentary evidence showing that the nature and number of notification letters issued to TCs have been taken into account when assessing the performance of TCs.

Audit recommendations

2.26 **Audit has *recommended* that the Secretary for Education should:**

- (a) **consider using electronic means (e.g. conducting the survey online) to facilitate schools in submitting customer satisfaction survey questionnaires with a view to boosting the response rate;**
- (b) **take measures to ensure that TCs visit the schools who have given unsatisfactory ratings in the surveys at the soonest time, and submit to EDB reports of the visits and the proposed improvement actions to be taken; and**
- (c) **maintain documentary evidence showing that the nature and number of notification letters issued to TCs have been taken into account when assessing the performance of TCs.**

Response from the Government

2.27 The Secretary for Education agrees with the audit recommendations. She has said that:

- (a) EDB has already been enhancing the computer system for schools to submit the customer satisfaction survey questionnaires online. Reminders would also be sent via the computer system to schools for their completion of the customer satisfaction survey questionnaires;
- (b) all unsatisfactory cases had been followed up by TCs. EDB would remind TCs to timely submit the reports of visits; and
- (c) EDB would maintain documentary evidence showing that the nature and number of notification letters issued to TCs have been taken into account when assessing the performance of TCs.

PART 3: MAJOR REPAIRS PROJECTS

3.1 This PART examines the delivery of MR projects for aided schools by EDB, focusing on the following areas:

- (a) assessment of MR applications (paras. 3.2 to 3.17);
- (b) monitoring of MR works (paras. 3.18 to 3.28);
- (c) asbestos-containing materials in school premises (paras. 3.29 to 3.35); and
- (d) flagpoles on school premises (paras. 3.36 to 3.42).

Assessment of Major Repairs applications

3.2 EDB provides school premises maintenance and repairs support to aided schools through MR projects and ER projects. These projects cover repair works items each costing \$3,000 or more for primary schools and special schools, and \$8,000 or more for secondary schools. For works items costing less than these threshold amounts, schools have to carry out the works by themselves and charge the expenditure incurred to their own operating expenses covered by grants provided by EDB (see Note 4 to para. 1.3).

3.3 At the beginning of every financial year (i.e. in April or May), EDB issues a call circular for applications from schools for non-recurrent grants to carry out MR for the following financial year. Repair works for each application are carried out under one project, even though it may cover more than one works item. For each works item in the applications, the schools have to specify the location and details of repairs to be done and state the reasons for the repairs, preferably with supporting photos.

3.4 Upon receipt, EDB refers the applications to TCs, who conduct technical assessments on the applications to determine whether the works items are essential, desirable or not necessary, estimate the costs for the works items and provide comments as necessary on the technical aspects of the repairs. According to the

Guidelines on Major Repairs Assessment Mechanism for Aided Schools (hereinafter referred to as MR Assessment Guidelines) issued by EDB, items in MR applications submitted by schools will be assessed by TCs and rated as:

- (a) **RA.** Repair items which are essential;
- (b) **RB.** Repair items which are desirable but not essential;
- (c) **RC.** Repair items which are not necessary;
- (d) **MA.** Improvement items which are essential; and
- (e) **MB.** Improvement items which are desirable but not essential.

According to MR Assessment Guidelines, a high priority should be accorded to works items related to safety, health and hygiene, statutory compliance and security.

3.5 Taking into account the results of the technical assessment and the availability of funds, EDB considers each item in the applications and gives approval on an item-by-item basis. The schools concerned will be informed of the application results in April/May of the following financial year and a new MR cycle will commence in May/June of the same year. The related repair works will usually be carried out during the school's summer vacation (i.e. July to August).

Need to review the thresholds of minimum repairs cost under MR projects and ER projects

3.6 According to the regulations of MR projects and ER projects, schools cannot apply for repair items costing less than \$3,000 for primary schools and special schools, and less than \$8,000 for secondary schools. Audit noted that these thresholds had not been reviewed or revised at least for more than 13 years since April 2009 and EDB had no information on:

- (a) how these thresholds were derived and the rationale behind the setting of two different thresholds, namely one for primary schools and special schools, and another one for secondary schools; and

Major Repairs projects

- (b) when these thresholds were last reviewed or revised.

3.7 Audit considers that EDB needs to:

- (a) review whether it is justified to set two different thresholds for the applications for repairs submitted by primary and special schools and those by secondary schools;
- (b) in light of the review results, consider setting a single threshold for applications submitted by all types of schools; and
- (c) consider the merits of revising the thresholds to reflect the change in price level since the thresholds were last revised.

Different recommendations given for similar applications

3.8 EDB makes reference to TCs' technical assessments in considering whether to approve the applications submitted by schools. However, it is inevitable that TCs have to exercise their judgement in deriving the results of assessments. Audit reviewed similar applications for the replacement of squat-type toilets and noted that there is a need to take measures to address the inconsistent judgements exercised by TCs in their assessments of applications.

3.9 In May 2020, EDB issued guidelines to schools on prevention of spread of the COVID-19 in schools. The guidelines stated that:

- (a) after using the toilet, the toilet lid should be put down before flushing; and
- (b) in case that the toilets in the schools have no lid (e.g. squat-type toilets — see Photograph 1 for an example):
 - (i) the schools should consider adding a lid for the toilets or replacing them with pedestal toilets; and
 - (ii) students should avoid using the toilets in the schools for defecation.

Photograph 1

A squat-type toilet in a school



Source: EDB records

3.10 According to MR Assessment Guidelines (see para. 3.4), in some circumstances, a high priority may be given to some MR items that warrant special consideration with suitable justifications. Replacement of squat-type toilets due to hygiene issues was given in MR Assessment Guidelines as an example of such circumstances.

3.11 In the 2021-22 MR cycle, 47 schools submitted MR applications for 51 works items of replacement of the squat-type toilets in their schools as a preventive measure for the spread of COVID-19. Audit noted that TCs gave different assessments on these 51 similar works items:

- (a) 6 (12%) were assessed by TCs as ER items instead of MR items and the replacement works were carried out as ER;
- (b) 26 (51%) were rated as RA and were approved as MR items (i.e. carried out one year after the applications were submitted); and

Major Repairs projects

- (c) 19 (37%) were rated as RB, MA or MB. Of these 19 items, 6 (32%) were rejected by EDB. Of these 6 rejected items, the replacement works for 3 (50%) items were subsequently carried out as ER items.

Audit reviewed the 51 works items and noted that there was no documentary evidence indicating the reasons for the difference in the assessments.

3.12 Audit noted that different assessments on the applications brought about very different results to the schools concerned:

- (a) ***Replacement assessed as ER works was completed quickly.*** Replacement of squat-type toilets as ER was completed quickly. For instance, in June 2020, a school submitted its application as an MR item. TC advised the school to submit an ER request instead of MR. The replacement works were completed in January 2021 (i.e. 7 months after MR application was submitted);
- (b) ***Replacement not assessed as ER works took longer time to complete.*** Replacement of squat-type toilets rated as RA took long time to complete. For instance, in June 2020, a school submitted its application as an MR item. TC rated the replacement as RA. The replacement works commenced in July 2022 and were completed in August 2022 (i.e. 26 months after MR application was submitted); and
- (c) ***Some replacement repair works were rejected.*** Some replacements of squat-type toilets not assessed as ER or RA items were rejected by EDB.

3.13 Audit considers that EDB needs to take measures to ensure that justifications are provided by TCs for making different recommendations for similar applications.

Need to improve repairs for defective fire doors

3.14 According to the Buildings Department, fire doors protect the staircase from fire and smoke, and should have fire resisting property and self-closing device to keep them in a closed position. A common fire resisting deficiency is damaged fire

doors. Audit found that there was room for improvement in repairs for defective fire doors in schools:

- (a) ***Fire doors with safety concerns.*** In June 2020, a school submitted an MR application regarding defective wooden fire doors. Upon site inspection, TC concluded that the two fire doors were defective and dilapidated, and loose veneer sheets of the doors would cause danger to students and give rise to safety concerns. EDB approved the repairs as an MR item. Although the defective fire doors were repaired in August 2021 immediately following the announcement of MR application results, it was 14 months after MR application was submitted. The repairs could have been carried out in a more timely manner if handled under ER;
- (b) ***Justifications for replacing wooden fire doors by stainless steel doors not provided.*** One of the two wooden fire doors mentioned in (a) was exposed to rain while the other was not (see Photograph 2). TC recommended replacing both doors by stainless steel doors. TC stated that the wooden door located at external area was prone to be damaged by rainwater. Eventually, both doors were replaced by stainless steel doors at a cost of \$51,000. The cost of a stainless steel door was a few times as expensive as a wooden door. In response to Audit's enquiry, EDB informed Audit in February 2023 that the door not exposed to rain was replaced by a stainless steel door because it was exposed to the wet environment of the kitchen of the school canteen and was subject to heavy usage. However, Audit noted that there was no documentary evidence showing that TC had provided such justifications; and

Photograph 2

Two defective fire doors in a school



Source: EDB records

- (c) *Need to improve documentation for rejected fire door repairs.* In May 2020, a school submitted an MR application to repair defective fire doors (see Photograph 3). The school stated in the application that some of the fire doors were damaged seriously and their functionality was impaired. TC assessed that some fire doors were partially defective and rated the works item as RB (i.e. repairs item which was desirable but not essential). EDB rejected the application based on TC's assessment and no repair works were performed. Although there were major differences between the seriousness of the defects described by the school and the assessment results of TC, TC did not document the details of the defects to repudiate the seriousness of the defects described by the school.

Photograph 3

A defective fire door in a school



Source: EDB records

- 3.15 Audit considers that EDB needs to take measures to ensure that:
- (a) fire doors with safety concerns are repaired as soon as possible; and
 - (b) TCs provide detailed information of their assessments on fire door repairs applications.

Audit recommendations

- 3.16 **Audit has *recommended* that the Secretary for Education should:**
- (a) **review whether it is justified to set two different thresholds for the applications for repairs submitted by primary and special schools and those by secondary schools;**
 - (b) **in light of the review results, consider setting a single threshold for applications submitted by all types of schools;**
 - (c) **consider the merits of revising the thresholds to reflect the change in price level since the thresholds were last revised;**
 - (d) **take measures to ensure that justifications are provided by TCs for making different recommendations for similar applications; and**
 - (e) **take measures to ensure that:**
 - (i) **fire doors with safety concerns are repaired as soon as possible; and**
 - (ii) **TCs provide detailed information of their assessments on fire door repairs applications.**

Response from the Government

3.17 The Secretary for Education agrees with the audit recommendations. She has said that:

- (a) EDB would enhance the computer system to facilitate TCs to record the reasons of their recommendations; and
- (b) EDB would update the guidelines to remind TCs to provide a more detailed assessment as to whether fire doors have safety concerns, in which case they should be handled as ER.

Monitoring of Major Repairs works

Room for improvement in documentation regarding project completion dates

3.18 After an MR application is approved by EDB, TC will arrange a joint site visit with the representatives of EDB, the school and MTC to:

- (a) assess the conditions of the items to be repaired;
- (b) confirm and finalise the scope of works; and
- (c) agree the timetable of MR project, including the commencement date and completion date of the project.

The agreed completion dates of the projects are recorded in EDB's computer system.

3.19 For each approved MR project, TC will issue one or more works orders to MTC for works items of the project. TC will set a target completion date for each works order issued, which should not be later than the completion date agreed with the school for the whole project. To monitor the progress of MR works, EDB compares the progress of the works orders against the target completion dates set by TCs. Audit examined 40 works orders issued by TCs to MTCs for MR cycles from 2020-21 to 2022-23 and found that for 37 (93%) of the 40 works orders, the target completion dates set were later than the project completion dates agreed with the schools as recorded in EDB's computer system by 31 to 227 days (averaging 123 days) (see Table 14).

Table 14

**Length of time the target completion dates were later than the agreed completion dates recorded in EDB's computer system
(MR cycles in 2020-21 to 2022-23)**

Length of time (Day)	Number of works orders
Not later than the agreed completion dates	3 (7%)
1 to 60	2 (5%)
61 to 120	4 (10%)
121 to 180	29 (73%)
≥ 181 (Note)	2 (5%)
Total	40 (100%)

Source: Audit analysis of EDB records

Note: The longest time period was 227 days.

3.20 In response to Audit's enquiry, EDB informed Audit in February 2023 that:

- (a) the project completion dates agreed with schools as recorded in EDB's computer system were the preliminary schedules after coordination with schools at the early stage of the projects; and
- (b) the project completion dates would need to be further revised taking into account a host of factors including inclement weather, the pandemic situation (specific to 2020 to 2022 only), unexpected engineering findings and occurrence of hiccups in the course of works. For the 37 works orders mentioned in paragraph 3.19, the TCs concerned had verbally agreed the revised project completion dates with the schools.

3.21 Audit noted that:

- (a) the project completion dates recorded in EDB's computer system were the original dates agreed by the schools instead of the latest revised dates; and
- (b) for 30 (81%) of the 37 works orders with revised project completion dates verbally agreed (see para. 3.20(b)), there was no documentary evidence:
 - (i) showing the factors accounting for the difference between the target completion dates set by TCs for the works orders and the original project completion dates agreed with the schools; and
 - (ii) showing that the revised target completion dates of the works orders were agreed with the schools.

3.22 Audit considers that EDB needs to improve the documentation regarding project completion dates with a view to facilitating the monitoring of the progress of works projects.

Need to expedite finalisation of MR reports

3.23 According to the term consultancy agreements, for each approved MR project, TC is required to submit an MR report to EDB within 24 working days after TC's receipt of MR approval letters from EDB. MR report includes the following information:

- (a) TC's assessment on the scope of works for each works item;
- (b) estimated cost for each works item;
- (c) types, unit cost and quantities of the materials to be used for each works item; and
- (d) works commencement and completion dates agreed with the school.

Major Repairs projects

MR report is an important document which facilitates EDB to monitor the details and progress of MR project. Upon receipt of MR report from TC, EDB reviews the report and if necessary, requests TC to provide supplementary information or make necessary amendments.

3.24 Audit examined MR reports of 40 MR projects for MR cycles from 2020-21 to 2022-23 and noted that:

- (a) ***Late submission of MR reports.*** Of the 40 MR reports, 33 (83%) were submitted late (i.e. not within 24 working days after receipt of EDB's MR approval letter — see para. 3.23). The average delay was 40 working days (ranging from 26 to 61 working days); and
- (b) ***Long time taken to finalise MR reports.*** After the first submission of MR report, EDB staff will review the report and if necessary, request TC to provide supplementary information or make amendments (see para. 3.23) before finalisation. TCs took a long time (ranging from 86 to 315 days, averaging 206 days) to finalise MR reports after the first submission (see Table 15).

Table 15

**Time taken by TCs to finalise the 40 MR reports
(2020-21 to 2022-23)**

Time taken (Day)	Number of MR reports
≤ 100	3 (7%)
101 to 200	14 (35%)
201 to 300	16 (40%)
301 to 315	2 (5%)
Not yet finalised (Note)	5 (13%)
Total	40 (100%)

Source: Audit analysis of EDB records

Note: Up to 31 October 2022, the time taken since the first submission of the five MR reports ranged from 134 to 151 days (averaging 140 days).

3.25 Audit further examined MR reports of 20 of the 40 projects (see para. 3.24) and noted that on average, each of the 20 MR reports was returned to TC for revisions 3 times (ranging from 1 to 6 times). Audit analysed the reasons for returning the 20 MR reports and found that 18 (90%) of them were due to missing or incorrect necessary information in MR reports (see Table 16).

Table 16

**Analysis on reasons for returning MR reports to TCs for revisions
(2020-21 to 2022-23)**

Reason for returning MR reports	Number of MR reports
Missing or incorrect necessary information	18 (90%)
Insufficient justifications for repair items	8 (40%)
Sub-standard quality of MR reports	4 (20%)
Overall	20 (Note)

Source: Audit analysis of EDB records

Note: The total number of MR reports did not add up to 20 and the total percentage was larger than 100% because some were returned by EDB due to more than one reason.

3.26 Audit considers that EDB needs to take measures to help TCs submit all necessary and accurate information in MR reports so that the reports are finalised in a timely manner.

Audit recommendations

3.27 **Audit has recommended that the Secretary for Education should:**

- (a) **improve the documentation regarding project completion dates with a view to facilitating the monitoring of the progress of works projects; and**
- (b) **take measures to help TCs submit all necessary and accurate information in MR reports so that the reports are finalised in a timely manner.**

Response from the Government

3.28 The Secretary for Education agrees with the audit recommendations. She has said that:

- (a) EDB would remind TCs to improve the documentation regarding revised project completion dates agreed with schools; and
- (b) EDB would prepare guidance notes to assist TCs to improve the quality of their MR reports.

Asbestos-containing materials in school premises

3.29 Asbestos is a group of fibrous minerals that was widely used in construction of buildings. According to the Centre for Health Protection, exposure to asbestos can cause lung cancer and other diseases such as asbestosis (fibrosis of the lungs). In Hong Kong, a total ban on the import, transshipment, supply and use of all forms of asbestos was introduced in 2014. However, buildings built before the mid-1980s may have asbestos-containing materials (ACMs).

3.30 In 2005, the Government completed an exercise to remove all ACMs with imminent risk to public health from school premises. In June 2006, EDB informed the Panel on Education of LegCo that:

- (a) the remaining ACMs in school premises were in good conditions and of insignificant risk to public health. Provided they were properly managed and maintained, these low-risk ACMs needed not be removed immediately;
- (b) instead, they could be left in place undisturbed and removed at the time when major repairs for schools were carried out; and
- (c) to eliminate any possible risk, EDB intended to remove all ACMs completely from all school premises and planned to complete the removal by the end of the 2011/12 school year (a school year starts in September and ends in August of the following year).

Need to closely monitor ACMs remaining in some school premises

3.31 In 2014, EDB found that ACMs still existed in 14 schools. According to EDB, although ACMs existed in concealed building elements, they were not posing imminent health risks. EDB requested the 14 schools to engage registered asbestos consultants to investigate the conditions of ACMs in their school premises every two years. In some cases, the consultants identified damages in the building elements of school premises covering ACMs, which might cause possible leakages of ACMs. For instance:

- (a) in one school, in April 2021, the consultant identified damages in the ceramic floor tiles of the school premises concealing ACMs (see Photograph 4). The school submitted an ER request to repair the damages in the same month and the damages were repaired in May 2021; and

Photograph 4

Damage found in the ceramic floor tiles concealing ACMs



Source: EDB records

- (b) in another two schools, in February and April 2019 respectively, the consultants identified damages in the ceramic floor tiles of the school premises concealing ACMs. The schools informed EDB that they would arrange follow-up actions on their own. In the event, the asbestos investigation reports issued in 2021 indicated that the damages were repaired. There was no documentary evidence showing that the schools had taken prompt actions to repair the damages.

3.32 In response to Audit's enquiry, EDB informed Audit in February 2023 that:

- (a) it was the schools' responsibility to maintain the school premises in a safe and hygienic condition. EDB provided support to the schools for the carrying out of repair works under the prevailing ER and MR mechanism; and
- (b) the schools always had the liberty to carry out the repair works by themselves. In this event, the schools chose to carry out the works by themselves and they should be responsible for monitoring timely completion of the works.

3.33 Up to January 2023, only 3 (21%) of the 14 schools (see para. 3.31) had removed all ACMs in their school premises. ACMs still existed in the remaining 11 (79%) schools. Audit considers that EDB needs to:

- (a) closely monitor the results of the asbestos investigations conducted by consultants engaged by the schools. In collaboration with the schools concerned, take measures to ensure that prompt actions are taken to follow up possible leakages of ACMs identified in asbestos investigations; and
- (b) keep in view the conditions of ACMs as reflected by the results of the asbestos investigations and when necessary, consider whether there are merits of removing all ACMs completely from all school premises as planned in 2006 with a view to eliminating possible health risks.

Audit recommendations

- 3.34 **Audit has *recommended* that the Secretary for Education should:**
- (a) **closely monitor the results of the asbestos investigations conducted by consultants engaged by the schools. In collaboration with the schools concerned, take measures to ensure that prompt actions are taken to follow up possible leakages of ACMs identified in asbestos investigations; and**
 - (b) **keep in view the conditions of ACMs as reflected by the results of the asbestos investigations and when necessary, consider whether there are merits of removing all ACMs completely from all school premises as planned in 2006 with a view to eliminating possible health risks.**

Response from the Government

3.35 The Secretary for Education agrees with the audit recommendations. She has said that:

- (a) EDB has been coordinating with schools to take follow-up measures for the findings of asbestos investigations. These instances involve ACMs in concealed building elements without posing imminent health risks, and the removal of asbestos from concealed building elements might involve major works (e.g. removing the flooring of a certain room or even school hall) that would disrupt the operation of schools. EDB would urge schools to take prompt actions as far as practicable; and
- (b) when taking forward ER or MR works, EDB would continue to proactively remove ACMs if they are found at the same location requiring ER or MR.

Flagpoles on school premises

3.36 On 8 October 2021, the National Flag and National Emblem (Amendment) Ordinance (Amendment Ordinance) came into effect. According to the Amendment Ordinance, the Secretary for Education must give directions to specified schools for matters relating to the daily display of the national flag and the weekly conduct of a

national flag raising ceremony. In the same month, EDB issued EDB Circular No. 11/2021 to all schools. According to the Circular, fostering students' sense of national identity is a key learning goal of primary and secondary education. The Circular stipulates that:

- (a) all primary schools and secondary schools must educate students on the history and spirit of the national flag and national emblem, the regulation of displaying and using the national flag, and the etiquette to be followed in a national flag raising ceremony; and
- (b) starting from 1 January 2022, all primary and secondary schools must:
 - (i) display the national flag on:
 - each school day (except for inclement weather conditions such as tropical cyclones and/or heavy persistent rain); and
 - the New Year's Day (1 January), the Hong Kong Special Administrative Region (HKSAR) Establishment Day (1 July) and the National Day (1 October); and
 - (ii) conduct a national flag raising ceremony:
 - in each week (except for school holidays during which no such ceremony can be held); and
 - on the New Year's Day, the HKSAR Establishment Day and the National Day, or on the preceding or following school day of these days.

The Amendment Ordinance does not impose a similar arrangement for displaying the regional flag of the HKSAR.

Major Repairs projects

3.37 EDB's guidelines relating to flagpole repairs include the following:

- (a) ***MR Assessment Guidelines.*** The guidelines stated that flagpole repairs could be classified as essential MR. Schools having the needs to repair defective flagpoles could submit applications in the annual MR cycle and, once approved, the repairs would be carried out in the following financial year; and
- (b) ***Guidelines on Handling ER Requests requiring Special Attention.*** The guidelines stated that TCs, when processing ER applications, needed to consider whether delay in carrying out the repairs would cause any political sensitivity or press concerns (e.g. defective flagpole affecting special ceremony on the National Day). In such case, the repairs should be classified as an Emergent ER.

Need to carry out flagpole repairs and enhancement works in a timely manner

3.38 Under the MR Assessment Guidelines, requests for repairing defective flagpoles as MR would only be carried out in the following MR cycle (see para. 3.37(a)). Therefore, schools with only one flagpole which has become inoperable need to rely on movable flagpoles to meet the requirements stipulated in EDB Circular No. 11/2021 (see para. 3.36).

3.39 Furthermore, although there is no legal requirement on display of regional flags at schools, EDB Circular No. 11/2021 promulgates that schools should display the regional flag alongside the national flag if there are adequate flagpoles. In 2021, EDB conducted a review on the installation of flagpoles at schools, including the number of flagpoles installed and whether any flagpoles were installed at undesirable locations. Based on the results of the review, in 2021-22, EDB launched a special improvement works programme to help schools to install new flagpoles and the programme covered 42 selected schools. Total expenditure incurred in the financial year amounted to \$1.1 million. In the 2022-23 MR cycle, EDB approved 123 applications for flagpoles installations. Audit noted that up to 18 November 2022, 41 (33%) of the 123 applications were withdrawn by the schools. The flagpoles installation works for 22 (27%) of the remaining 82 applications had not yet been completed.

3.40 Audit considers that EDB needs to:

- (a) take measures to ensure that flagpoles repairs are carried out in a timely manner to facilitate schools in complying with the requirements relating to the daily display of the national flag and the weekly conduct of a flag raising ceremony; and
- (b) consider stepping up efforts to assist schools in installing additional flagpoles, with a view to facilitating schools which would like to display the regional flag alongside the national flag to do so as far as practicable, taking into account the physical constraints and technical feasibility of each case.

Audit recommendations

3.41 Audit has *recommended* that the Secretary for Education should:

- (a) **take measures to ensure that flagpoles repairs are carried out in a timely manner to facilitate schools in complying with the requirements relating to the daily display of the national flag and the weekly conduct of a flag raising ceremony; and**
- (b) **consider stepping up efforts to assist schools in installing additional flagpoles, with a view to facilitating schools which would like to display the regional flag alongside the national flag to do so as far as practicable, taking into account the physical constraints and technical feasibility of each case.**

Response from the Government

3.42 The Secretary for Education agrees with the audit recommendations. She has said that currently, all schools are able to meet the requirements under the Amendment Ordinance and EDB Circular No. 11/2021. That notwithstanding, EDB would continue to take measures to ensure that repairs of inoperable flagpoles would be carried out as ER instead of MR to expedite the works. In rare cases, movable flagpoles would also be deployed to ensure legal compliance. As to the display of regional flag, although there is no legal requirement on its daily display at schools,

Major Repairs projects

EDB has already been facilitating schools to install additional flagpoles as far as practicable. EDB would continue to adopt a pragmatic approach on the installation of additional flagpoles, upon application and subject to physical constraints and technical feasibility at respective school sites.

PART 4: EMERGENCY REPAIRS PROJECTS

4.1 This PART examines the delivery of ER projects for aided schools by EDB, focusing on the following areas:

- (a) submission of ER requests by schools (paras. 4.3 to 4.12); and
- (b) processing of ER requests and monitoring of repair works (paras. 4.13 to 4.22).

Background

4.2 The provision of maintenance and repairs support to aided schools through ER projects involves the following steps (see Figure 1):

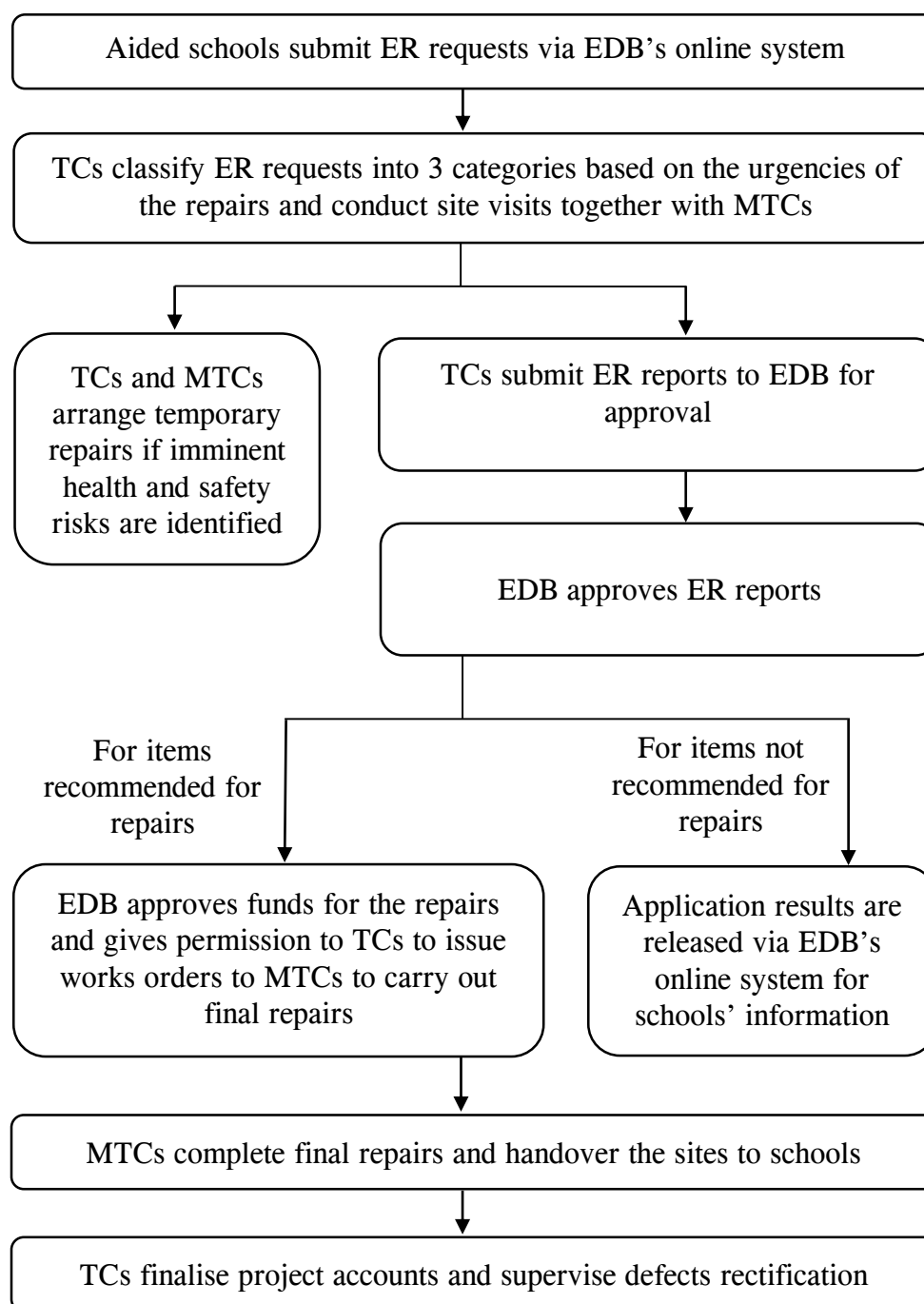
- (a) ***Submission of ER requests.*** Aided schools in need of ER submit ER requests via EDB's online system;
- (b) ***Classification of ER request categories and arrangement of temporary repairs.*** TCs classify ER requests into three categories (Emergent requests, Urgent requests and General requests) based on the urgencies of the repairs and conduct site visits together with MTCs. During site visits, temporary repairs will be arranged if imminent health and safety risks are identified. TCs also advise the schools on the details of the repairs to be carried out, and the anticipated commencement and completion dates for the repairs;
- (c) ***Submission and approval of ER reports.*** TCs submit ER reports for EDB's approval. For each item in ER requests, TCs recommend in the reports whether repairs should be carried out. For items not recommended for repairs, after EDB accepts TCs' recommendations, the results are released via its online system for the schools' information. For items recommended for repairs, after ER reports are approved, EDB will approve funds for the repairs and give permission to TCs to issue works orders for instructing MTCs to carry out final repairs (i.e. the repairs in addition to the temporary repairs); and

Emergency Repairs projects

- (d) *Completion of final repairs and finalisation of project accounts.* MTCs complete final repairs and handover the sites to schools. TCs finalise the project accounts and supervise defects rectification during the maintenance period.

Figure 1

Procedures for delivery of ER projects



Source: Audit analysis of EDB records

Submission of Emergency Repairs requests by schools

Need to consolidate ER requests as far as practicable

4.3 Audit examined the ER requests recommended for repairs in the three-year period from 2019-20 to 2021-22. Audit noted that there were more than 6,000 ER requests each year and some schools needed frequent ER works. For 2019-20, 2020-21 and 2021-22, the number of schools with more than 20 requests for the year was 16, 40 and 20 respectively (see Table 17).

Table 17

**Analysis on ER requests recommended for repairs
(2019-20 to 2021-22)**

Number of ER requests recommended for repairs	Number of schools		
	2019-20	2020-21	2021-22
≤ 10	644	532	582
11 to 20	155	254	225
21 to 30	14 } 16	34 } 40	20 } 20
> 30	2 }	6 }	0 }
Total	815	826	827

Source: Audit analysis of EDB records

Remarks: In the three-year period from 2019-20 to 2021-22, the largest number of ER requests by a school recommended for repairs was 38, 37 and 29 respectively.

4.4 Audit reviewed the ER requests and noted that there were cases where repairs were requested separately within a short period of time and were carried out under separate projects. Such requests could have been consolidated and covered by one single works project to minimise disturbance to the schools and to improve economy and efficiency of the repairs:

- (a) **School A.** In early June 2021, School A submitted an ER request for repairing the concrete spalling defects at the ceiling of a toilet. Although it can be seen from the photographs submitted that there was concrete spalling at the wall of the toilet, the request only covered the spalling at the ceiling. In early August 2021 (i.e. 2 months after the first ER request), School A submitted another ER request for repairing the concrete spalling defects at the wall of the same toilet. The repairs could have been more cost effective and caused less disturbance to the school if they were consolidated and covered by one single works project; and
- (b) **School B.** In mid-September 2020, School B submitted an ER request for repairing the concrete spalling defects at the ceiling of a classroom. Four days after submitting the first ER request, School B submitted another ER request for repairing the water seepage defects at the ceiling and walls of the same classroom. The repairs for the two ER requests were covered by two separate works orders. The repairs could have been more cost effective and caused less disturbance to the school if they were consolidated and covered by one single works project.

4.5 To enhance cost effectiveness and minimise disturbance to the schools, Audit considers that EDB needs to:

- (a) remind the schools in need of ER works to stay vigilant in their inspections with a view to undertaking ER works in one single works project for rectifying the defects as far as practicable; and
- (b) consolidate into one single works project as far as practicable ER requests received from the same school within a short period of time.

Need to improve the list of examples of ER in aided schools

4.6 Unlike MR projects, EDB did not issue guidelines on the ambit of ER projects. EDB promulgated on its website a list of examples of emergency repairs in aided schools for schools' reference. The list contains about 30 examples of repair items under the ER projects. Examples set out in the list include ER for damages of builder's works items (e.g. structural elements and doors) and ER for damages of building services installation (e.g. fire services installation and water supply system). The list was last updated more than 13 years ago in February 2010. Audit noted that

Emergency Repairs projects

the term consultancy agreements also include examples for ER works. Audit compared the items in the term consultancy agreements against the items in the list and found that many common items were not included in the list, such as repairs of paving blocks and washing basins (Note 14). Over the years, schools have submitted ER requests that were not commonly seen in the past, for example, replacement of malfunctioned pillar water taps with motion sensor water taps in toilets of schools due to the concern of COVID-19 epidemic and replacement of air-conditioning systems in eligible facilities of school premises under the programme “Additional Air-conditioning Installation for Schools” (see para. 5.13).

4.7 Audit considers that EDB needs to update the list of examples of emergency repairs regularly with a view to providing more useful examples to schools on repair items within the scope of ER projects.

Some schools need assistance to determine if works required is within ER ambit

4.8 Audit analysed the ER requests submitted by schools in the period from 2019-20 to 2021-22, and noted that a considerable percentage (ranging from 17% to 25%) of ER requests submitted were not recommended for repairs (see Table 18).

Note 14: *Other items not included in the list as identified by Audit include ER for damages of defective blinds at special schools, exhaust fans, metal bollards, anti-slip quarry tiles, acoustic plasters and security systems.*

Table 18

**ER requests not recommended for repairs
(2019-20 to 2021-22)**

ER request	2019-20	2020-21	2021-22
Submitted (a)	8,929	10,242	9,175
Not recommended for repairs (b)	2,188	1,983	1,546
Percentage not recommended for repairs (c)=(b)÷(a)×100 %	25 %	19 %	17 %

Source: Audit analysis of EDB records

4.9 Audit examined 20 ER requests submitted by schools in 2021-22 which were not recommended for repairs, and found that 10 (50%) requests were clearly not within the ambit of ER projects. The salient features of the 10 requests were as follows:

- (a) **Estimated costs much below the thresholds.** For 5 (50%) requests, the estimated costs of repair items were much below the thresholds of ER projects (i.e. \$3,000 or above for primary schools and special schools, and \$8,000 or above for secondary schools), such that the schools were required to arrange for repairs by themselves. The 5 requests were not recommended for repairs because the estimated costs of repairs were on average 86% (ranging from 72% to 97%) below the thresholds of ER projects. In one example, the school submitted an ER request for repairing the missing mosaic tiles at an external wall (see Photograph 5(a)). The request was not recommended for repairs because the estimated cost of repairs was 95% below the threshold of ER projects. In another example, the school submitted an ER request for repairing the loosened artificial granite tiles at a corridor (see Photograph 5(b)). The request was not recommended for repairs because the estimated cost of repairs was 97% below the threshold of ER projects; and

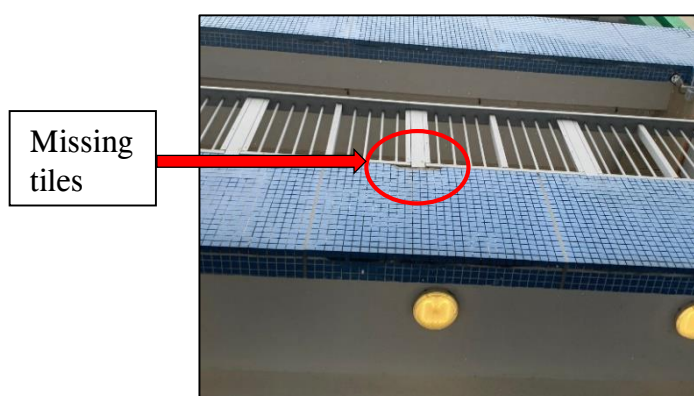
Emergency Repairs projects

- (b) ***Repair items not of ER nature.*** For the remaining 5 (50%) requests, the repair items were not of ER nature and were not recommended for repairs. In one example, the school submitted an ER request for repairing the ceiling as there was peeling off of paint. However, after conducting a site visit, the TC considered that it was just peeling off of paint and there was no imminent danger (see Photograph 5(c)). As a result, the request was not recommended for repairs.

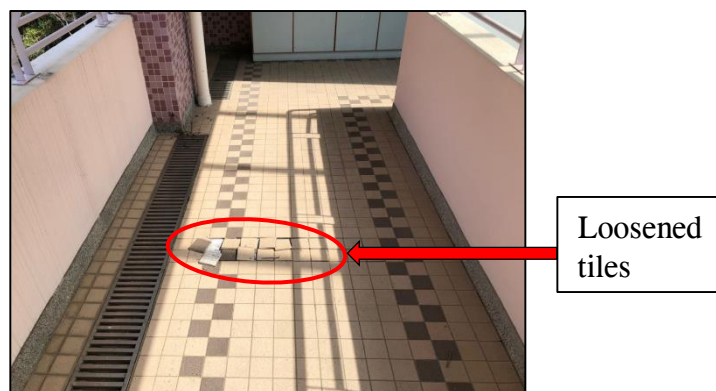
Photographs 5(a) to (c)

Examples of ER requests clearly not within the ambit of ER projects

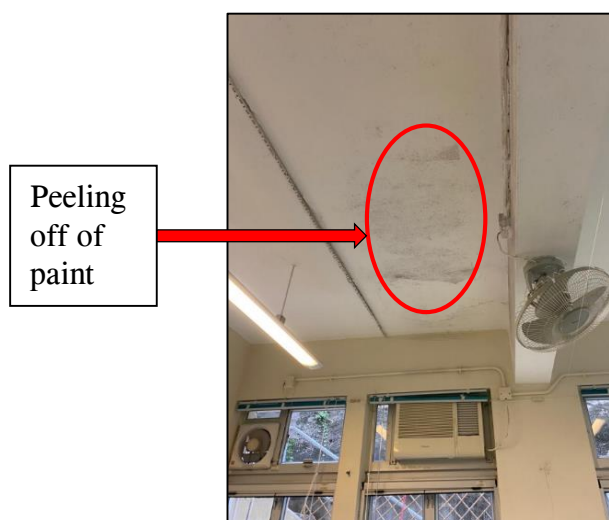
(a) Repairs of missing mosaic tiles



(b) Repairs of loosened artificial granite tiles



(c) Repairs of ceiling with peeling off of paint



Source: EDB records

4.10 In Audit's view, the processing of ER requests that are clearly not within the ambit of ER projects, not only affects the efficiency of EDB and TCs in assisting schools in real need of ER, but also causes delays to schools in making alternative arrangements for the repairs. Audit considers that EDB needs to take measures to provide assistance to schools (e.g. by disseminating examples of ER requests clearly

Emergency Repairs projects

not within the ambit of ER projects for schools' reference) to help them have a clear understanding on the ambit of ER projects.

Audit recommendations

- 4.11 **Audit has *recommended* that the Secretary for Education should:**
- (a) **remind the schools in need of ER works to stay vigilant in their inspections with a view to undertaking ER works in one single works project for rectifying the defects as far as practicable;**
 - (b) **consolidate into one single works project as far as practicable ER requests received from the same school within a short period of time;**
 - (c) **update the list of examples of emergency repairs regularly with a view to providing more useful examples to schools on repair items within the scope of ER projects; and**
 - (d) **take measures to provide assistance to schools (e.g. by disseminating examples of ER requests clearly not within the ambit of ER projects for schools' reference) to help them have a clear understanding on the ambit of ER projects.**

Response from the Government

4.12 The Secretary for Education agrees with the audit recommendations. She has said that guidance notes including updated examples of ER items and the ambit of ER would be prepared to assist schools in submitting ER requests.

Processing of Emergency Repairs requests and monitoring of repair works

Need to expedite finalisation of ER reports

4.13 According to the term consultancy agreements, TCs are required to submit ER reports to EDB within 1 working day for Emergent requests, 3 working days for Urgent requests and 6 working days for General requests. In the three-year period from 2019-20 to 2021-22, 93.9%, 96.8% and 97.5% of ER reports were submitted within the stipulated time respectively. For items not recommended for repairs, after EDB accepts TCs' recommendations, the results are released via its online system for the schools' information (see para. 4.2(c)). For items recommended for repairs, EDB approves the ER reports before giving permission to TCs to issue works orders for instructing MTCs to carry out final repairs (see para. 4.2(c)).

4.14 Upon receipt of ER reports from TCs, EDB reviews the reports and may request TCs to provide supplementary information or make necessary amendments. In September 2020, EDB set a target of 15 days for TCs to finalise their ER reports after the date of first submission. Audit examined the ER reports finalised in the period from 2019-20 to 2021-22 and noted that long time was taken to finalise the ER reports. The time taken ranged from 0 to 442 days, averaging 32 days (Note 15) (see Table 19).

Note 15: *For the cases which EDB took 0 days to finalise the ER reports, the ER reports were finalised on the same day as the date of receiving the ER reports by EDB.*

Table 19**Time taken to finalise ER reports
(2019-20 to 2021-22)**

Time taken (Day)	2019-20		2020-21		2021-22	
	Number of ER reports	%	Number of ER reports	%	Number of ER reports	%
≤15	3,902	43	5,828	55	5,918	64
16 to 30	1,307	14	1,715	16	1,293	14
31 to 45	827	9	855	8	620	7
46 to 60	602	7	580	5	453	5
> 60 (Note)	2,449	27	1,668	16	899	10
Total	9,087	100	10,646	100	9,183	100

Source: Audit analysis of EDB records

Note: The longest time taken was 442 days.

4.15 In the six-month period from October 2021 to March 2022, EDB returned 4,073 ER reports submitted by TCs for their revisions. Audit found that 3,042 (75%) ER reports were returned to TCs for revisions because of missing or incorrect necessary information in the ER reports (see Table 20).

Table 20

**Analysis on reasons for returning ER reports
to TCs for revisions
(October 2021 to March 2022)**

Reason for returning ER reports	Number of ER reports
Missing or incorrect necessary information	3,042 (75%)
Failure to address EDB's comments in preceding submission	215 (5%)
Insufficient justifications for repair items	734 (18%)
Other reasons	655 (16%)
Overall	4,073 (Note)

Source: Audit analysis of EDB records

Note: The total number of ER reports did not add up to 4,073 and the total percentage was larger than 100% because some were returned by EDB due to more than one reason.

4.16 In Audit's view, the long time taken to finalise ER reports was less than satisfactory because:

- (a) for items recommended for repairs, it would delay the carrying out of final repairs for restoring the school premises concerned in good conditions; and
- (b) for items not recommended for repairs, it would delay the schools concerned to arrange their own repairs, and leave the damages or defects unrectified for a long period of time.

4.17 Audit considers that EDB needs to take measures to help TCs submit all necessary and accurate information in ER reports so that the reports are finalised in a timely manner.

Emergency Repairs projects

ER requests not followed up within stipulated time

4.18 The time for conducting site visits, completing temporary repairs and completing final repairs for the three categories of ER requests are stipulated in the maintenance term contracts (see Table 21).

Table 21

Stipulated time for completing follow-up actions for ER requests

Follow-up action	ER request category	Stipulated time for completion after ER request submission
Conducting site visit	Emergent	24 hours
	Urgent	1 working day
	General	5 working days
Completing temporary repairs	Emergent	24 hours
	Urgent	1 calendar day
	General	5 calendar days
Completing final repairs	Emergent	24 hours
	Urgent	3 calendar days
	General	12 calendar days

Source: Audit analysis of EDB records

4.19 Audit analysed the time for completing follow-up actions for ER requests by MTCs against the stipulated time in the period from 2019-20 to 2021-22, and noted that:

- (a) **Site visits.** Of site visits conducted for 28,346 ER requests, 2,762 (10%) were not conducted within the stipulated time. For Emergent requests, of site visits of 6 requests, 4 (67%) were not conducted within the stipulated time (see Table 22);

Table 22

**Analysis on timeliness in conducting site visits by MTCs
(2019-20 to 2021-22)**

Year	Category	Number of ER requests submitted (a)	Number of ER requests not completed within stipulated time (b)	Percentage of ER requests not completed within stipulated time (c) = (b) ÷ (a) × 100%
2019-20	Emergent	3	2	67%
	Urgent	831	175	21%
	General	8,095	933	12%
	Subtotal	8,929	1,110	12%
2020-21	Emergent	2	1	50%
	Urgent	976	125	13%
	General	9,264	714	8%
	Subtotal	10,242	840	8%
2021-22	Emergent	1	1	100%
	Urgent	617	152	25%
	General	8,557	659	8%
	Subtotal	9,175	812	9%
Total		28,346	2,762	10%

Source: Audit analysis of EDB records

- (b) **Temporary repairs.** Of temporary repairs of 20,956 ER requests, 614 (3%) were not completed within the stipulated time. For Urgent requests, of temporary repairs of 2,192 ER requests, 225 (10%) were not completed within the stipulated time (see Table 23); and

Emergency Repairs projects

Table 23

Analysis on timeliness of completion of temporary repairs by MTCs (2019-20 to 2021-22)

Year	Category	Number of ER requests requiring temporary repairs (a)	Number of ER requests not completed within stipulated time (b)	Percentage of ER requests not completed within stipulated time (c) = (b) ÷ (a) × 100%
2019-20	Emergent	2	0	0%
	Urgent	715	55	8%
	General	5,363	144	3%
	Subtotal	6,080	199	3%
2020-21	Emergent	2	0	0%
	Urgent	898	87	10%
	General	6,776	167	2%
	Subtotal	7,676	254	3%
2021-22	Emergent	1	1	100%
	Urgent	579	83	14%
	General	6,620	77	1%
	Subtotal	7,200	161	2%
Total		20,956	614	3%

Source: Audit analysis of EDB records

Remarks: There were cases that no repairs were required (e.g. there was no imminent danger for the items requested for repairs).

- (c) **Final repairs.** Of final repairs of 20,437 ER requests, 9,887 (48%) were not completed within the stipulated time (see Table 24).

Table 24

**Analysis on timeliness of completion of final repairs by MTCs
(2019-20 to 2021-22)**

Year	Category	Number of ER requests requiring final repairs (a)	Number of ER requests not completed within stipulated time (b)	Percentage of ER requests not completed within stipulated time (c) = (b) ÷ (a) × 100%
2019-20	Emergent	1	1	100%
	Urgent	713	409	57%
	General	5,345	2,674	50%
	Subtotal	6,059	3,084	51%
2020-21	Emergent	2	1	50%
	Urgent	881	532	60%
	General	6,609	3,425	52%
	Subtotal	7,492	3,958	53%
2021-22	Emergent	1	1	100%
	Urgent	567	271	48%
	General	6,318	2,573	41%
	Subtotal	6,886	2,845	41%
Total		20,437	9,887	48%

Source: Audit analysis of EDB records

Remarks: There were cases that only temporary repairs were conducted and no final repairs were required.

Emergency Repairs projects

4.20 In Audit's view, it is important that follow-up actions for ER requests are completed in a timely manner to ensure that schools are free from health or safety hazards which affect the operations of the schools. Audit considers that EDB needs to take measures to ensure that follow-up actions for ER requests are completed by MTCs within the time stipulated in the maintenance term contracts.

Audit recommendations

4.21 **Audit has *recommended* that the Secretary for Education should:**

- (a) **take measures to help TCs submit all necessary and accurate information in ER reports so that the reports are finalised in a timely manner; and**
- (b) **take measures to ensure that follow-up actions for ER requests are completed by MTCs within the time stipulated in the maintenance term contracts.**

Response from the Government

4.22 The Secretary for Education agrees with the audit recommendations. She has said that:

- (a) guidance notes would be prepared to assist TCs to improve the quality of their ER reports; and
- (b) some of the repairs could not be completed within the stipulated time for completion due to various reasons such as changes to suit the schools' operational needs, time required for material delivery, time required for fabrication and relatively large scopes of works, etc. EDB will continue to closely monitor TCs and MTCs' performance to ensure that the repairs are completed within the agreed timeframe with schools.

PART 5: IMPROVEMENT PROGRAMMES

5.1 This PART examines the delivery of improvement programmes for aided schools by EDB, focusing on the following areas:

- (a) Improvement programme for “Matchbox-style schools” (paras. 5.2 to 5.11);
- (b) Additional Air-conditioning Installation for Schools (paras. 5.12 to 5.25);
and
- (c) Time-limited Minor Works Programme (paras. 5.26 to 5.34).

Improvement programme for “Matchbox-style schools”

5.2 “Matchbox-style schools” is the term commonly used to refer to primary schools operating in cuboidal shaped school premises constructed between mid-1960s and 1980 at public housing estates (see Photograph 6 for an example). As these school premises do not meet present-day standards, they are considered as sub-standard school premises. Over the years, the teaching and learning environment of these schools has been a matter of concern to society. Notwithstanding this, according to EDB, there are many factors contributing to the quality of education provided by a school and there is no direct relationship between the conditions of the school premises and the teaching quality of the school.

Photograph 6

An example of matchbox-style school premises

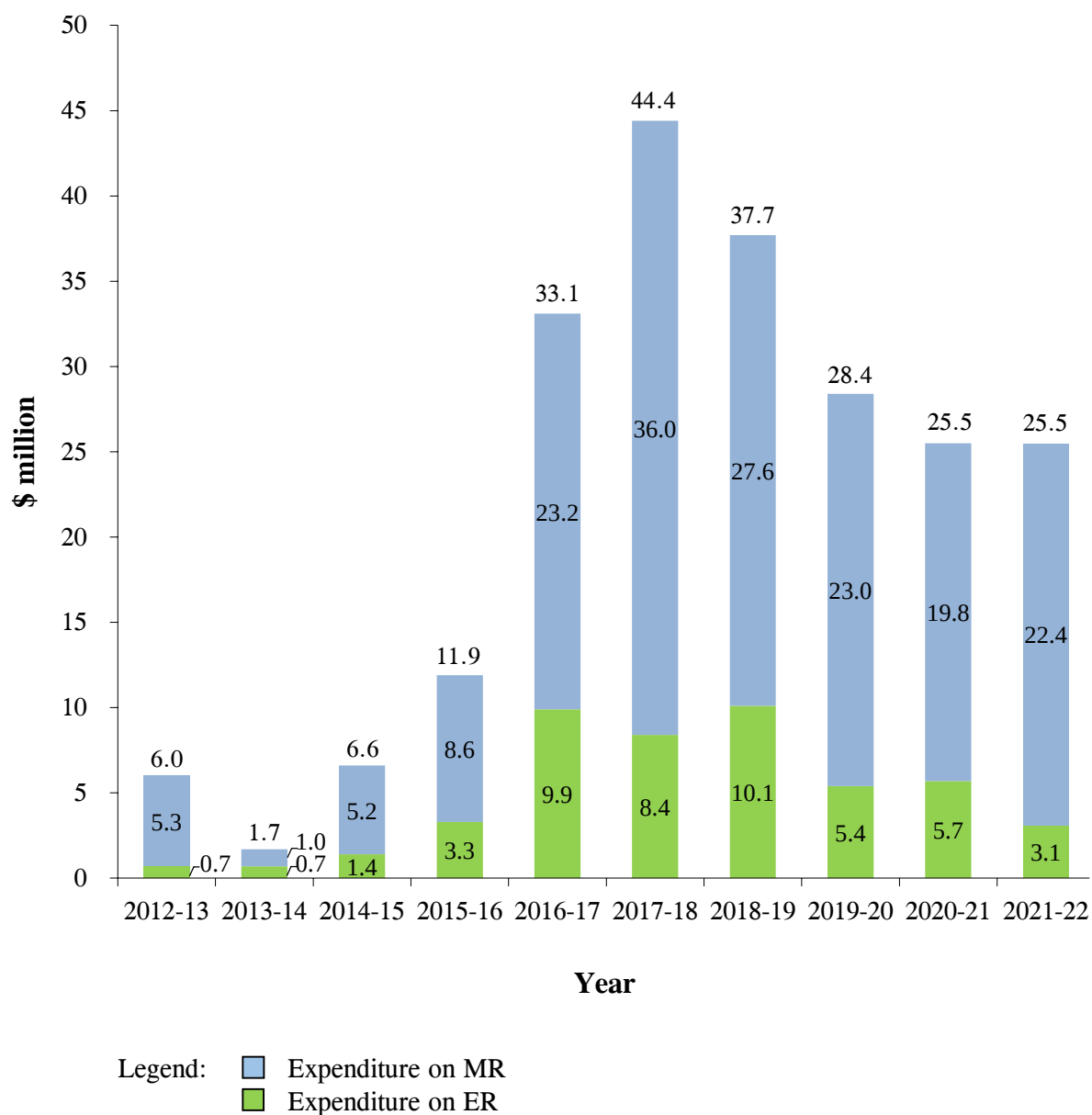


Source: Photograph taken by Audit staff in February 2023

5.3 As at 31 December 2022, there were 23 matchbox-style schools. In the 10-year period from 2012-13 to 2021-22, the expenditure on MR and ER for the 23 matchbox-style schools totalled \$220.8 million. The annual expenditure increased by more than three times from \$6 million in 2012-13 to \$25.5 million in 2021-22 (see Figure 2).

Figure 2

**Expenditure on MR and ER for the 23 matchbox-style schools
(2012-13 to 2021-22)**



Source: Audit analysis of EDB records

5.4 In 2016, two meetings were held among EDB, Members of the Panel on Education of LegCo and representatives of the Subsidized Primary Schools Council to explore practical options to improve premises of matchbox-style schools. The meetings identified five common problems of these premises (see Table 25).

Table 25**Common problems of matchbox-style school premises and related improvement works**

Problem	Improvement works
1. Noise from adjacent classrooms	• Replacement with sound-proof doors and double-glazed window system in classrooms to mitigate noise interference due to the internal corridor design in between classrooms
2. Poor ventilation at internal corridors	• Installation of mechanical ventilation system to improve ventilation along internal corridors
3. Rainwater ingress at staircase landings causing slippery floor	• Installation of openable windows at staircase landings to prevent rainwater ingress from grille walls
4. Hollow block wall incapable of mounting heavy teaching aids (e.g. electronic whiteboard)	• Installation of acoustic panel wall system with metal frame for internal partitions of classrooms to allow mounting of modern teaching aids, such as electronic whiteboards
5. Rainwater ingress and poor ventilation at covered playgrounds	• Installation of moveable partitions on both sides of covered playgrounds to prevent rainwater ingress, as well as provision of mechanical ventilation system

Source: Audit analysis of EDB records

5.5 In January 2017, the Chief Executive announced in the Policy Address that the Government would allocate additional resources to improve the facilities of matchbox-style schools. In July of the same year, EDB commenced an improvement programme to address the common problems of matchbox-style school premises (see Table 25). In 2019, these improvement works were completed. According to EDB, under the programme, in addition to addressing the common problems of matchbox-style school premises, it also explored other technically feasible improvements to further improve the teaching and learning environment of the schools within the constraints of space and existing building design of the premises. All these other improvement works were completed in 2021. Up to 31 March 2022, total expenditure incurred amounted to \$106.9 million.

Need to provide assistance to matchbox-style schools before reprovisioning

5.6 In addition to the five common problems identified and covered by the improvement programme (see paras. 5.4 and 5.5), Audit noted that some other common problems of the schools were not covered by the improvement works completed in 2019. For example:

- (a) ***Inadequate space for the schools' operations.*** In the feasibility studies conducted before the commencement of the improvement programme, in order to have more space for their operations, many schools requested to be provided an additional storey on the roof level of their premises. The consultant of the feasibility studies advised that it was not feasible because:
 - (i) the schools were located in public housing estates, prior approval from the Hong Kong Housing Authority was required (Note 16); and
 - (ii) the existing structure was inadequate to cater for the increased wind and vertical load induced by the additional storey;

Note 16: *According to the Housing Department: (a) it had facilitated EDB in carrying out lift addition works and school improvement works at some schools located in public housing estates in the past; and (b) it has all along rendered support on the improvement of teaching environment of schools in public housing estates.*

Improvement programmes

- (b) *Sub-standard school facilities.* The Government has put in place a Schedule of Accommodation (SoA) for standard-design public primary schools, which lists out the number and types of rooms and facilities required for teaching and learning. The salient features of SoA have not been changed since 2000. Audit noted that the facilities of matchbox-style schools were far below the standard required by SoA (see Table 26). For example:
- (i) 4 (31 %) of the 13 facilities under the category “Teaching rooms” of SoA were not available in any of the 23 matchbox-style schools; and
 - (ii) 5 (63 %) of the 8 facilities under the category “Assembly hall and physical education” of SoA were not available in any of the 23 matchbox-style schools; and

Table 26

**Analysis of number and percentage of matchbox-style schools
lacking facilities required by SoA
(December 2022)**

Facility	Number of matchbox-style schools without the facility	
	Number	Percentage
<i>Teaching rooms</i>		
1. Computer-assisted learning room	1	4 %
2. General studies room	18	78 %
3. Guidance activity room	22	96 %
4. Interview room	4	17 %
5. Language room	11	48 %
6. Library	1	4 %
7. Multi-purpose room	12	52 %
8. Music room with store room	0	0 %
9. Preparation room for computer-assisted learning	23	100 %
10. Preparation room for general studies	23	100 %
11. Preparation room for multi-purpose	23	100 %
12. Small group teaching room	23	100 %
13. Visual arts room	4	17 %
<i>Assembly hall and physical education</i>		
1. Assembly hall	6	26 %
2. Chair store and dressing room	23	100 %
3. Changing rooms	23	100 %
4. Covered playground	3	13 %
5. Multi-purpose area	23	100 %
6. Physical education store	23	100 %
7. Stage	23	100 %
8. Student activity centre	3	13 %

Source: Audit analysis of EDB records

Improvement programmes

- (c) ***Facilities shared with residents of public housing estates.*** Located in public housing estates, some matchbox-style schools need to share ball courts with residents of the housing estates (see Photograph 7 for an example). The schools expressed concern that while they were given priority to use the facilities during school hours, the residents also had access to the facilities even though students were having lessons at the facilities. In addition, some of the facilities were sometimes damaged by people other than staff/students of the schools, making the schools difficult to use the facilities.

Photograph 7

A basketball court shared between a matchbox-style school and residents of a housing estate



Source: Photograph taken by Audit staff in January 2023

5.7 According to EDB's school allocation mechanism, school sites are allocated to school sponsoring bodies (SSBs) on a competitive basis. All applications are screened by the School Allocation Committee which comprises official and non-official members who are familiar with the education system, which will then make recommendations to Permanent Secretary for Education. Factors to be considered during the applications assessment process include:

- (a) the school plan submitted by SSBs, which consists of six aspects to be assessed (Note 17);
- (b) the operation track record of SSBs;
- (c) for existing schools which are housed in sub-standard premises, the physical conditions of the existing premises will also be considered. As a general indicator, schools with site area less than 3,000 square metres and premises over 30 years old warrant serious consideration; and
- (d) location of the existing school.

5.8 In February 2017, EDB informed the Panel on Education of LegCo that:

- (a) given that the site area of the majority of the matchbox-style school premises was small, the potential and feasibility for a full-scale in-situ redevelopment was limited; and
- (b) to fully address the issues of insufficient space and facilities in the long run, these schools needed to be reprovisioned or expanded to suitable vacant school premises.

5.9 In the six-year period from 2017 to 2022, 19 matchbox-style schools applied for reprovisioning and only 5 (26%) of their applications were successful. In view of the low successful rate, Audit considers that EDB needs to explore the way forward to help matchbox-style schools deal with the issues of insufficient space and facilities before they are finally reprovisioned in the future.

Note 17: *The six aspects are: (a) vision and mission; (b) management and organisation; (c) learning and teaching; (d) school ethos and support for students; (e) performance targets; and (f) self-evaluation indicators.*

Audit recommendation

5.10 **Audit has *recommended* that the Secretary for Education should explore the way forward to help matchbox-style schools deal with the issues of insufficient space and facilities before they are finally reprovisioned in the future.**

Response from the Government

5.11 The Secretary for Education agrees with the audit recommendation. She has said that EDB had already thoroughly explored technically feasible means for more flexible use of existing space to further improve the teaching and learning environment of the matchbox-style schools within the constraints of space and existing building design of the premises. In July 2017, EDB commenced an improvement programme to address the common problems of matchbox-style school premises and completed the programme in 2019. In addition, EDB also explored other technically feasible improvements to further improve the teaching and learning environment of these schools within the constraints of space and existing building design of the premises and completed all additional improvement works in 2021. Up to 31 March 2022, the total expenditure of the programme amounted to \$106.9 million. EDB would continue to handle improvement requests under the prevailing MR mechanism.

Additional Air-conditioning Installation for Schools

5.12 In 1987, the Government implemented the Noise Abatement Programme for aided schools suffering from noise caused by traffic or aircraft which affected teaching in classrooms and caused undue strain and disturbance to both teachers and students. Under the Noise Abatement Programme, air-conditioning systems were installed in rooms used for teaching purpose. In addition, EDB had provided Noise Abatement Grant to schools with air-conditioning systems installed as noise mitigation measures, for paying the recurrent expenses including electricity fees, and fees related to routine maintenance, etc. In the 2017 Policy Address, the Chief Executive announced that, in order to create a better learning environment, the Government would:

- (a) provide air-conditioning systems for standard teaching facilities (including classrooms and special rooms), student activity centres and assembly halls in all public sector schools; and
- (b) arrange for the installation of air-conditioning systems for the facilities concerned as necessary in phases, taking into account the actual situation of individual schools.

5.13 In 2018, EDB launched a new programme namely “Additional Air-conditioning Installation for Schools”. Except for rooms or facilities constructed by the schools’ own funds, facilities which are used directly for teaching and learning or scheduled with regular student activities, are classified as “eligible facilities” and provided with air-conditioning systems. For air-conditioning systems installed in the eligible facilities, schools can submit MR applications or ER applications for repairs or replacement of the air-conditioning systems. Moreover, starting from the 2018/19 school year, EDB has provided a recurrent Air-conditioning Grant to aided schools to cover the related daily expenses of the air-conditioning systems in the eligible facilities. With the disbursement of Air-conditioning Grant, EDB ceased to provide schools with Noise Abatement Grant.

Incorrect information communicated to schools

5.14 In the meeting minutes of two meetings held in May 2021 on two MR projects and three meetings held in May 2022 on three MR projects among EDB, schools and the TC, it was recorded that schools were advised of the following information:

- (a) air-conditioning systems not installed under Noise Abatement Grant were not covered by MR projects or ER projects; and
- (b) any associated works involving taking down or re-fixing of the air-conditioning systems not installed under Noise Abatement Grant were to be carried out by schools.

5.15 However, Audit found that the information was not correct. In fact, under the “Additional Air-conditioning Installation for Schools” programme (i.e. air-conditioning systems not installed under Noise Abatement Grant), for air-conditioning

Improvement programmes

systems installed in the eligible facilities, schools can submit MR applications or ER applications for repairs or replacement of air-conditioning systems (see para. 5.13). These air-conditioning systems were covered by MR projects or ER projects. The incorrect information might have misled schools into giving up submitting MR applications or ER applications for repairing or replacing the air-conditioning systems installed in the eligible facilities.

5.16 EDB informed Audit in February 2023 that other communication channels with schools, including daily communications and letters, correctly stated that, EDB had provided MR or ER for the air-conditioning systems installed in all eligible facilities under the prevailing mechanism, including replacement of air-conditioning systems if necessary. Schools should be well aware of the ambit and arrangement.

5.17 Audit considers that EDB needs to take measures to ensure that the information relating to applications for repairs or replacement of air-conditioning systems are communicated to schools accurately.

Need to provide assistance to schools on applications for repairs or replacement of air-conditioning systems

5.18 In the five-year period from 2017-18 to 2021-22, 1,032 MR applications related to repairs or replacement of air-conditioning systems installed in the eligible facilities were submitted by schools. Audit examined 10 applications submitted in the 2021-22 MR cycle. In 3 (30%) applications, the TCs considered that the schools' requests for repairing or replacing air-conditioning systems were of ER nature and advised the schools to submit their applications as ER requests if necessary (see the case in paragraph 5.19 for an example).

5.19 In June 2020, a school submitted an MR application for replacing air-conditioning systems in the assembly hall, first floor and seventh floor:

- (a) ***First floor and seventh floor.*** The air-conditioning systems were dilapidated. The TC did not recommend the items under the MR application as it considered that the items were of ER nature. In April 2021, EDB notified the school that the items were not approved. In

the next month, the TC advised the school to submit another application as an ER request; and

- (b) *Assembly hall.* The air-conditioning systems were damaged and with dripping of water. The item was approved as an MR project.

5.20 Audit noted that:

- (a) the case in paragraph 5.19 revealed that the school was not familiar with the classification of repairing or replacing air-conditioning systems through MR projects or ER projects; and
- (b) submission of requests as MR applications or as ER applications would bring about different results:
 - (i) for ER projects, applications can be made anytime during the year and the works are required to be completed at a maximum of 12 calendar days after ER request submission date (see Table 21 in para. 4.18); and
 - (ii) for MR projects, applications can only be made once at the beginning of every financial year (see para. 3.3). Furthermore, for the case in paragraph 5.19, 10 months (from June 2020 to April 2021) was taken by EDB and the TC to process the items under the MR cycle before the school was notified that the items were not approved.

5.21 Audit considers that EDB needs to provide assistance to schools on applications for repairs or replacement of air-conditioning systems (e.g. by providing examples of approved MR projects and approved ER projects of repairs or replacement of air-conditioning systems).

Need to draw experience from air-conditioning system repair or replacement projects

5.22 In the period from March 2017 to June 2022, EDB identified 28 cases of air-conditioning system repair or replacement projects with workmanship issues. In various quarterly meetings between EDB and TCs, EDB brought the cases to the attention of TCs and urged them to exercise prudence in conducting their site inspections for early identification of irregularities on site and early rectification of unsatisfactory works (see Case 1 as an example).

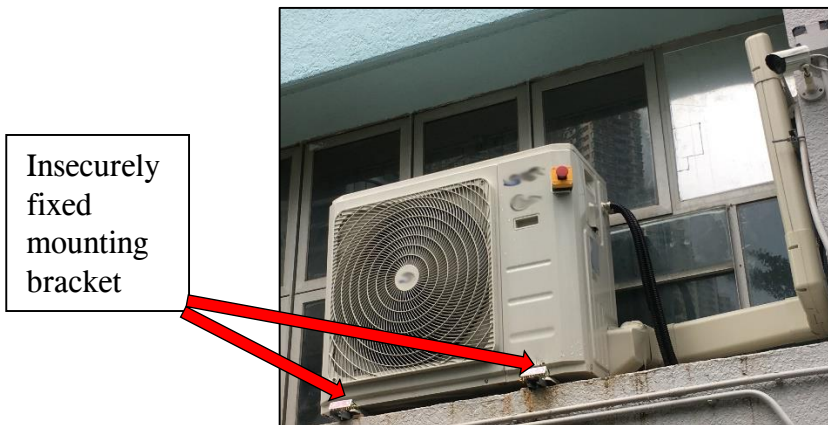
Case 1

**An air-conditioning unit replacement project with workmanship issues
(2019)**

1. In 2019, an air-conditioning unit replacement project was completed for a school. EDB identified the following workmanship issues of the project:
 - (a) an outdoor air-conditioning unit was inappropriately installed on a window sill due to reasons including structural safety of the window sill to cope with the external loads, transmission of noise and obstruction of sunlight to indoor area, and lack of accessibility to the outdoor air-conditioning unit for repairs or maintenance;
 - (b) the outdoor air-conditioning unit was insecurely fixed with part of the mounting bracket crossing over the edge of the window sill, resulting in low stability (see Photograph 8);

Photograph 8

An insecurely fixed air-conditioning unit



Source: EDB records

Case 1 (Cont'd)

- (c) the outdoor air-conditioning unit was not installed on a dedicated air-conditioning platform; and
- (d) the opening of the window panes right behind the outdoor air-conditioning unit would cause damages to the unit or even overturning it off the window sill.

Audit comments

2. In Audit's view, the project reflected room for improvement in MTC's workmanship. The project also shed some light on the need for TCs and MTCs to improve their performance.

Source: Audit analysis of EDB records

5.23 Audit considers that EDB needs to draw experience from the air-conditioning system repair or replacement projects with a view to improving the performance of TCs and MTCs.

Audit recommendations

5.24 **Audit has recommended that the Secretary for Education should:**

- (a) **take measures to ensure that the information relating to applications for repairs or replacement of air-conditioning systems are communicated to schools accurately;**
- (b) **provide assistance to schools on applications for repairs or replacement of air-conditioning systems (e.g. by providing examples of approved MR projects and approved ER projects of repairs or replacement of air-conditioning systems); and**

- (c) **draw experience from the air-conditioning system repair or replacement projects with a view to improving the performance of TCs and MTCs.**

Response from the Government

5.25 The Secretary for Education agrees with the audit recommendations. She has said that:

- (a) EDB would remind TCs to properly communicate the information relating to applications for repairs or replacement of air-conditioning systems to schools;
- (b) EDB would prepare guidance notes for schools including examples to illustrate the air-conditioning repairs or replacement works in ER or MR nature; and
- (c) the audit findings demonstrated that EDB's prevailing monitoring system was effective in identifying TCs' and MTCs' shortcomings. EDB would continue to share its observations with TCs and MTCs to further improve their performance.

Time-limited Minor Works Programme

5.26 In light of the experience gained through the improvement programme for "Matchbox-style schools", the Chief Executive announced in the 2019 Policy Address that the Government had reserved \$1 billion to take forward a time-limited minor works programme (hereinafter referred to as "FUS") under which simple minor internal conversion works would be carried out at some 600 aided school premises constructed according to past building standards to facilitate more flexible use of existing space by schools, thereby enhancing the teaching and learning environment and efficacy. Examples of minor conversion works are as follows:

- (a) merging of space to form bigger rooms;
- (b) subdivision of space into smaller rooms;

Improvement programmes

- (c) conversion of room or space for different use;
- (d) alternation of layout to meet school's operational need;
- (e) addition of built-in fixtures (e.g. movable partition);
- (f) floor surfacing for more flexible use of space (e.g. for conversion of open space to recreational or sports use); and
- (g) other minor conversion or alternation works that can enhance flexibility in the use of space within existing school premises for improving teaching and learning environment.

5.27 In 2019 and 2020, aided schools were invited to submit two rounds of applications. Up to 31 March 2022, 748 projects were approved for 475 schools and total expenditure incurred amounted to \$427.9 million.

Need to enhance the dissemination of programme information to schools

5.28 In 2019 and 2020, EDB conducted two rounds of briefing sessions for disseminating information on FUS to schools and inviting them to apply for FUS. The briefing sessions provided information including the scope of works within the project ambit and showcased examples of approved projects. Audit noted that:

- (a) the first round of briefing sessions was held in physical sessions. Of the 612 eligible schools, 132 (22%) did not attend the briefing sessions. EDB did not follow up with those schools (e.g. by sending the presentation materials to them);
- (b) during the outbreak of COVID-19 epidemic, the second round of briefing sessions was a video session uploaded on EDB's website. EDB did not ascertain the number of schools who had viewed the video; and
- (c) EDB had not sent questionnaires to schools to ask them to evaluate the effectiveness of the briefing sessions.

5.29 Audit considers that EDB needs to take measures to enhance the dissemination of programme information to schools.

Need to ensure feasibility study reports of improvement projects include all important project information

5.30 To apply for FUS projects, schools make their applications in the annual MR cycles. For items approved under FUS, TCs submit feasibility study reports, which include important project information (e.g. estimated costs of the works items) to EDB. Different TCs included different information in their feasibility study reports.

5.31 Audit examined 30 feasibility study reports of FUS projects conducted in the period from 2020-21 to 2021-22, and noted that the following important project information was not included in 19 (63%) feasibility study reports:

- (a) for 12 (40%) of the 30 projects, the project completion dates agreed with schools were not included;
- (b) for 14 (47%) of the 30 projects, the details of materials to be used and related cost estimates were not included; and
- (c) for 7 (23%) of the 30 projects, both information was not included.

5.32 Audit considers that EDB needs to take measures to ensure that the feasibility study reports of improvement projects include all important project information.

Audit recommendations

5.33 **Audit has *recommended* that the Secretary for Education should:**

- (a) **take measures to enhance the dissemination of programme information to schools; and**

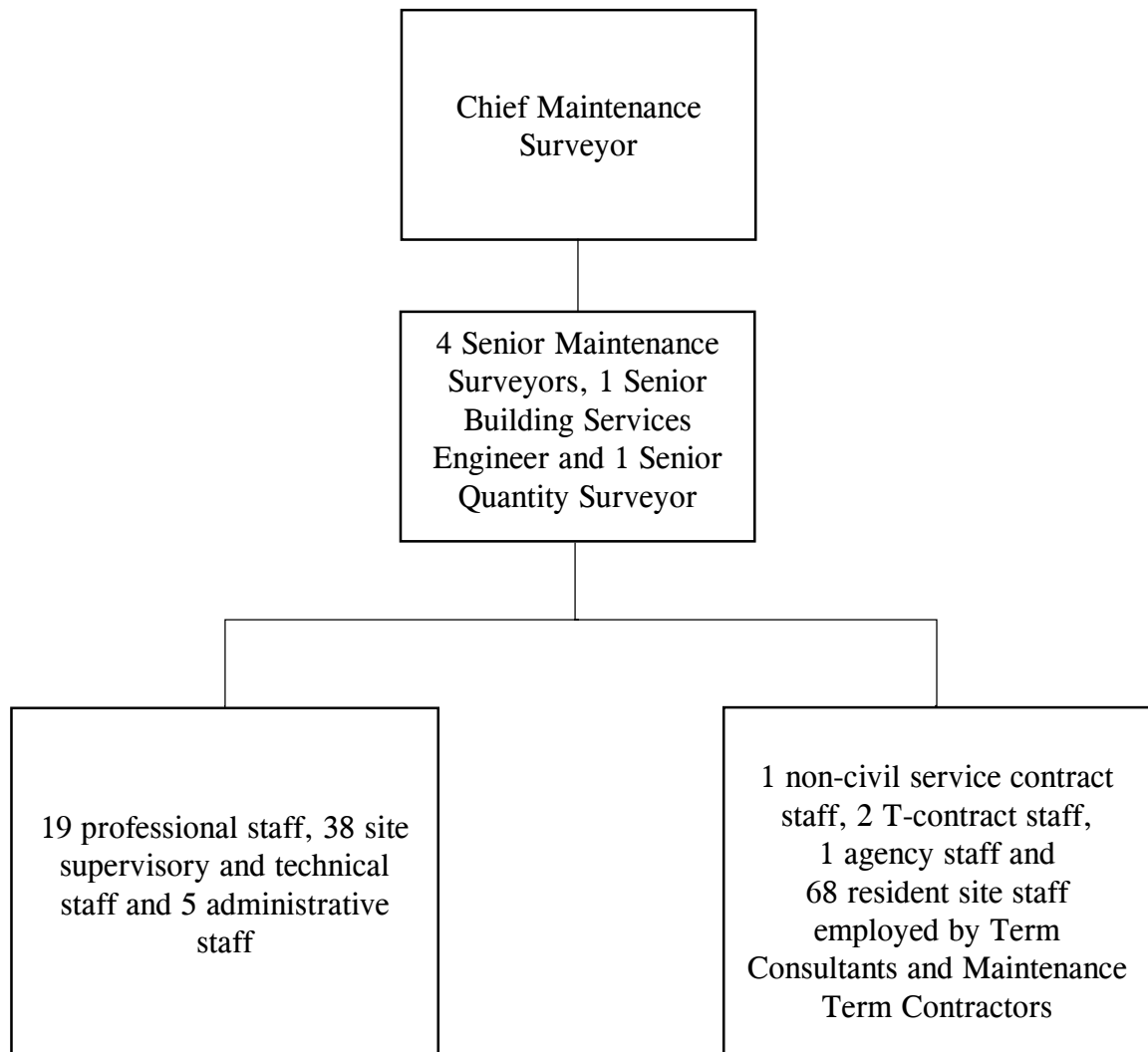
Improvement programmes

- (b) **take measures to ensure that the feasibility study reports of improvement projects include all important project information.**

Response from the Government

5.34 The Secretary for Education agrees with the audit recommendations. She has said that EDB would take measures to enhance the dissemination of programme information to schools and ensure that the feasibility study reports of improvement projects include all important project information.

**Education Bureau's School Premises Maintenance Section:
Organisation chart (extract)
(31 December 2022)**



Source: Audit analysis of EDB records

Acronyms and abbreviations

ACMs	Asbestos-containing materials
Audit	Audit Commission
Chief Executive	Chief Executive of the Hong Kong Special Administrative Region
CSCs	Comprehensive Site Checks
EDB	Education Bureau
ER	Emergency Repairs
FUS	Time-limited Minor Works Programme
HKSAR	Hong Kong Special Administrative Region
LegCo	Legislative Council
MR	Major Repairs
MTCs	Maintenance Term Contractors
REOs	Regional Education Offices
SoA	Schedule of Accommodation
SSBs	School sponsoring bodies
TAAAs	Technical Assurance Audits
TCs	Term Consultants
QAAs	Quality Assurance Audits

CHAPTER 6

**Culture, Sports and Tourism Bureau
Leisure and Cultural Services Department**

Management of public libraries

**Audit Commission
Hong Kong
31 March 2023**

This audit review was carried out under a set of guidelines tabled in the Provisional Legislative Council by the Chairman of the Public Accounts Committee on 11 February 1998. The guidelines were agreed between the Public Accounts Committee and the Director of Audit and accepted by the Government of the Hong Kong Special Administrative Region.

Report No. 80 of the Director of Audit contains 8 Chapters which are available on our website at <https://www.aud.gov.hk>



Audit Commission
6th Floor, High Block
Queensway Government Offices
66 Queensway
Hong Kong

Tel : (852) 2867 3423
Fax : (852) 2824 2087
E-mail : enquiry@aud.gov.hk

MANAGEMENT OF PUBLIC LIBRARIES

Contents

	Paragraph
EXECUTIVE SUMMARY	
PART 1: INTRODUCTION	1.1 – 1.14
Audit review	1.15
Acknowledgement	1.16
PART 2: COLLECTION DEVELOPMENT AND MANAGEMENT	2.1 – 2.3
Acquisition of library materials	2.4 – 2.26
Audit recommendations	2.27
Response from the Government	2.28
Processing of new library materials	2.29 – 2.33
Audit recommendations	2.34
Response from the Government	2.35
Maintenance of library materials	2.36 – 2.59
Audit recommendations	2.60
Response from the Government	2.61

	Paragraph
PART 3: LIBRARY OPERATION	3.1
Library patronage and usage	3.2 – 3.18
Audit recommendations	3.19
Response from the Government	3.20
Processing of returned library materials	3.21 – 3.31
Audit recommendations	3.32
Response from the Government	3.33 – 3.34
Library fees and charges	3.35 – 3.42
Audit recommendations	3.43
Response from the Government	3.44
Other operational issues	3.45 – 3.53
Audit recommendations	3.54
Response from the Government	3.55
 PART 4: USE OF INFORMATION TECHNOLOGY AND PUBLICITY EFFORTS	 4.1
Use of information technology in provision of library services	4.2 – 4.27
Audit recommendations	4.28
Response from the Government	4.29
Publicity efforts and extension activities	4.30 – 4.37
Audit recommendations	4.38
Response from the Government	4.39

Appendices	Page
A : Leisure and Cultural Services Department: Organisation chart (extract) (31 December 2022)	113
B : Implementation schedule of Smart Library System (December 2022)	114
C : Acronyms and abbreviations	115

MANAGEMENT OF PUBLIC LIBRARIES

Executive Summary

1. The International Federation of Library Associations and Institutions (IFLA) — United Nations Educational, Scientific and Cultural Organization (UNESCO) Public Library Manifesto proclaims UNESCO's belief in the public library as a living force for education, culture, inclusion and information, as an essential agent for sustainable development, and for individual fulfillment of peace and spiritual welfare through the minds of all individuals. The Hong Kong Public Libraries (HKPL) aims to serve the public in various ways, including as an information centre where information and the latest development on all subject disciplines are freely and readily available to the public, as a tool for self-education and continuing education through resource-based learning, as a centre for the promotion of literary arts and literary research, as a source of enjoyment for the profitable use of leisure, and as a source for the enrichment of everyday living.

2. The provision of public library services in Hong Kong is the responsibility of the Leisure and Cultural Services Department (LCSD), which provides library services by operating a network of libraries. As at 31 December 2022, the network included 70 static libraries and 12 mobile libraries. HKPL also provides book drop service at three Mass Transit Railway (MTR) stations for people to return books and other library items, and operates three self-service library stations to provide round-the-clock services (such as borrowing and return). In 2022-23, the estimated expenditure in the provision of public library services amounted to \$1,428 million. As at 31 December 2022, the collection comprised 15.2 million items of books, other print materials (e.g. maps) and non-print materials (e.g. audio-visual materials). In addition, HKPL provided 14 electronic book (e-book) collections, 83 electronic databases (e-databases) and about 4,500 titles of newspapers and periodicals. LCSD manages HKPL with the support of two major library information technology (IT) systems, namely the Next Generation Integrated Library System (NGILS) and Multimedia Information System (MMIS). The Smart Library System (SLS) is being developed to replace the existing two major IT systems. The Audit Commission (Audit) has recently conducted a review of the management of public libraries.

Executive Summary

Collection development and management

3. *Need to better monitor implementation of collection development plans (CDPs).* LCSD formulates an annual CDP on the overall collection development (including acquisitions and withdrawals) of HKPL. According to LCSD, the quantity of new library materials proposed in CDPs is governed by a number of factors, such as requirements of branch libraries (i.e. 70 static libraries, 12 mobile libraries and 3 self-service library stations) and usage rates (paras. 2.5 and 2.8). Audit noted that:

- (a) *Fulfillment by categories.* For the lending collections, the actual number of new items for some categories deviated significantly from those in the CDPs. For example, in 2021-22, the fulfillment rate for Chinese books in adult collections was only 72% (i.e. the actual number of new library materials fell short of the CDP number by 28%). However, the reasons for the deviations were not documented (paras. 2.9 and 2.12); and
- (b) *Fulfillment by subjects.* The proportion of new library materials to be acquired by subjects was set out in the CDPs (e.g. 18% of the Chinese books for adult lending collections to be acquired in 2021-22 was fiction). However, due to system limitations, LCSD could not provide statistics on the actual acquisition proportion by subjects (para. 2.10).

4. *Need to continue efforts to fulfill collection development needs of branch libraries.* CDPs are formulated by consolidating the branch library-level requirements of new library materials, which reflect the needs of users in the respective libraries (para. 2.13). Audit found that:

- (a) there was no management information on the fulfillment rates at the branch library-level. Audit analysis revealed that the numbers of new library materials allocated to branch libraries varied significantly from the requested numbers in the CDPs for the period 2017-18 to 2021-22, which ranged from 54% to 272%;
- (b) there was no documentary evidence showing that new library materials had been allocated according to the branch libraries' suggestions on subjects they wished to strengthen; and

Executive Summary

- (c) the number of branch libraries making title-specific suggestions had decreased by 47% from 38 in 2018 to 20 in 2021 (paras. 2.13 and 2.14).

According to LCSD, the relevant data analytics and statistical reporting tools were unavailable and therefore it was infeasible to monitor the fulfillment at the branch library-level. It was expected that SLS could facilitate the tasks (para. 2.15).

5. *Need to keep under review demand for e-books and explore availability of appropriate indicators for measuring quantity of electronic resources (e-resources).*

The usage counts of e-books increased by about 5 times from 0.6 million times in 2018 to 3.6 million times in 2022. LCSD has been acquiring new e-books as well as additional copies of popular titles. From 2018 to 2022, the number of e-books increased by 67% from some 290,000 to some 490,000. Audit however noted that there was unmet demand for e-books, i.e. some popular e-books were not available for borrowing immediately (see para. 17(b)). Audit also noted that LCSD had not set any indicator for measuring the quantity of e-resources (paras. 2.17, 2.18 and 2.20).

6. *Need to improve monitoring of outstanding orders.* LCSD engages contractors for acquiring library materials and the contractors should deliver the items within a pledged timeframe stated in the contracts. LCSD staff monitor the order status based on bi-monthly order status reports submitted by the contractors (para. 2.21). The audit findings include:

- (a) there was a lack of management information to monitor the overall status of all the orders (para. 2.21); and
- (b) Audit analysis of status reports of two contracts revealed that a large proportion of the outstanding orders had exceeded the time pledge stated in the contracts for delivering the library materials ordered. For example, 568 outstanding orders of a contract had exceeded the time pledge (ranging from 4 to 646 days, with 19 orders which had been overdue for over 360 days). However, the criteria for cancellations of unfulfilled orders were not specified in LCSD's guidelines and justifications for keeping long outstanding orders were not documented (paras. 2.23, 2.24 and 2.26).

Executive Summary

7. ***Room for improvement in processing new library materials.*** Upon receipt of new library materials from the contractors, LCSD staff are responsible for processing the materials to ensure that they are made available for the public as soon as practicable (para. 2.29). Audit noted that:

- (a) time targets had not been set for some key stages of processing work (e.g. cataloguing and processing);
- (b) system-generated exception reports were not conducive to the monitoring work. For example, for the “preparation by holding library” stage, while the processing time target was 3 weeks, the time configured in the reports was 3 months. For the “binding” stage, while the processing time target was 30 days, no exception report had been configured;
- (c) some items under processing as at 31 January 2023 had been outstanding for a long time. For example, for the “binding” stage, 49% of the items (i.e. 12,026 of the 24,481 items) had exceeded the time target for 31 days or more (ranging from 31 to 5,550 days, averaging 48 days); and
- (d) no target was set on the overall processing time and there was no readily available management information on the overall processing time of new library materials (i.e. the total time taken from receipt of an item until it was made available for use by the public) (paras. 2.30 and 2.31).

8. ***Need to consider disclosing availability status of library materials and expedite processing of temporarily unavailable and non-serviceable library materials.*** Audit noted that:

- (a) as of December 2022, of the 15.2 million items of library materials reported on HKPL’s website, 1.3 million items (9%) were not available to the public (e.g. under processing, under review or pending for withdrawal) (paras. 2.43 and 2.45); and
- (b) as at 31 January 2023, there were some 0.4 million “temporarily unavailable to the public” items and 2.7 million “non-serviceable” items. 75% of the “temporarily unavailable to the public” items and 78% of the “non-serviceable” items had been classified under these categories for 1 year or more (para. 2.46).

Executive Summary

9. *Need to step up efforts in examining library materials for safeguarding national security and taking follow-up actions.* The Law of the People's Republic of China on Safeguarding National Security in the Hong Kong Special Administrative Region stipulates that it is the constitutional duty of the Hong Kong Special Administrative Region to safeguard national security. Audit noted that LCSD, taking into account complaints/enquiries and national security risk considerations, commenced a preliminary review of the library materials in 2021. Since then, LCSD has been conducting examination of the materials identified in the preliminary review for taking necessary follow-up actions (e.g. suspension from library services). According to LCSD, HKPL has already completed the review of library books which are manifestly contrary to the interests of national security and removed them from the library collections. Up to February 2023, the examination work and the follow-up actions were still in progress (paras. 2.48, 2.49 and 2.61).

Library operation

10. *Need to strengthen actions in encouraging physical visits to libraries.* Audit noted that the number of physical visits to HKPL decreased by about 8% from 37.7 million in 2015 to 34.7 million in 2019. It decreased significantly by 79% to 7.4 million in 2020. According to LCSD, the decrease was mainly due to the temporary closure and service suspension of libraries in the midst of the coronavirus disease (COVID-19) epidemic. While the number increased by 91% to 14.1 million in 2021, it decreased by 16% to 11.9 million in 2022 (para. 3.3).

11. *Need to keep under review library opening hours.* LCSD conducted a pilot scheme to extend library opening hours in 2018. According to the review report of the pilot scheme of 2019, LCSD had drawn up a short-term plan (including launching a trial scheme to set up unmanned service corners after library opening hours by end of 2019) and a long-term plan (i.e. exploring measures of extending library opening hours in a more cost-effective way with the development of SLS and adoption of the radio frequency identification technology). Audit noted that as of January 2023, both the short-term and long-term plans had not been fully implemented as scheduled (paras. 3.8 and 3.9).

12. *Room for improvement in setting performance measures and achieving targets on usage of library services.* LCSD has set in its Controlling Officer's Report (COR) key performance targets and indicators in respect of usage of library services

Executive Summary

of HKPL, including registered borrowers, items of library materials borrowed and virtual visits (para. 3.12). Audit noted the following issues:

- (a) ***Some key performance targets on usage of library services not met.*** HKPL did not meet the target on items of library materials borrowed for eight consecutive years from 2015 to 2022 (with shortfalls ranging from 3% to 50%) and the target on virtual visits for three consecutive years from 2020 to 2022 (with shortfalls ranging from 22% to 31%) (para. 3.13); and
- (b) ***Room for improvement in setting performance measures on usage of library services.*** The usage of e-books and e-databases was not included in the performance measures in LCSD's COR. Besides, no performance indicators had been set on active borrowers as suggested in IFLA Guidelines (para. 3.15).

13. ***Scope for improvement in outsourced returned library materials processing services.*** Borrowers may borrow and return library materials at any public library and the self-service library stations, and may also use the book drop service of HKPL to return library materials. LCSD has signed a Service Level Agreement (SLA) with the Hongkong Post for the provision of returned library materials processing services (namely inter-library receipt and despatch service, MTR book drop collection service and self-service library station book replenishment service). The current SLA covered the period from October 2019 to September 2022, and an addendum was made for the extension of service period for one year to September 2023 (paras. 3.21 and 3.22). Audit noted the following issues:

- (a) ***Need to adopt open bidding as soon as practicable.*** The services of the Hongkong Post for processing returned library materials were procured directly without recourse to competitive bidding. According to LCSD, upon the implementation of a central sorter and a new logistics tracking system of SLS, the services would then be ready for open bidding (paras. 3.25 and 3.26);
- (b) ***Need to review service requirements.*** The service charges of the inter-library receipt and despatch service and the MTR book drop collection service were based on the numbers of library materials processed. While both services were subject to minimum monthly service charges with guarantee levels for quantities, the numbers of library materials processed under the two services were sometimes below the minimum monthly

Executive Summary

guarantee levels. For example, for the MTR book drop collection service, from October 2019 to September 2022, on average, 19,963 library materials were processed per month, which was about 33% below the minimum monthly guarantee level of 30,000 library materials. Besides, for the self-service library station book replenishment service, LCSD had not taken into account the number of library materials processed in reviewing the arrangement of the current SLA in 2019 (paras. 3.23 and 3.24); and

- (c) *Need to strengthen monitoring of compliance with performance standards.* Regarding the inter-library receipt and despatch service provided in the period from October 2019 to September 2022 and the MTR book drop collection service provided in 2022, Audit noted that the performance standards stipulated in SLA were not always achieved by the Hongkong Post and there was no clause in SLA specifying the penalty for not meeting the performance standards. Besides, the compliance with the performance standards of the self-service library station book replenishment service was not monitored (para. 3.31).

14. *Need to review book drop service at MTR stations.* HKPL has been providing book drop service at three major MTR interchange stations (i.e. Central, Kowloon Tong and Nam Cheong) to facilitate the return of library materials since September 2011 as a trial scheme. Audit noted that the usage rate of the book drop service was generally on a decreasing trend (from 45% in 2017 to 21% in 2022). Besides, LCSD had not conducted any review and publicity campaign for the scheme since 2013 (paras. 3.45 and 3.47).

15. *Scope for improvement in operation of self-service library stations.* LCSD has set up three self-service library stations to provide round-the-clock services (such as borrowing, return, payment and pickup of reserved library materials), one each on Hong Kong Island, in Kowloon and the New Territories. The maintenance of the book dispensers at the three self-service library stations has been outsourced to a contractor. According to the maintenance contract, the contractor shall commit at least 99% of the serviceability level for check-in and check-out service of each dispenser each month. For the 10-month period from February to November 2022, the committed serviceability level (i.e. at least 99%) had not been met in 5 (50%), 9 (90%) and 5 (50%) months for the library stations on Hong Kong Island, in

Executive Summary

Kowloon and the New Territories respectively (with serviceability level ranging from 95.89% to 98.99%) (paras. 3.49 and 3.50).

Use of information technology and publicity efforts

16. ***Delay in development of SLS.*** In February 2019, the Finance Committee of the Legislative Council approved the commitment of \$877.3 million for the development of SLS to replace NGILS and MMIS. Audit noted that there were delays in the implementation of SLS. According to the revised implementation schedule as of December 2022, the expected dates of launching all core functions and the full implementation of SLS were March 2024 and September 2025 respectively (i.e. about 9 months later than the target dates of June 2023 and December 2024 respectively) (paras. 4.5 and 4.6).

17. ***Need to strengthen actions in improving usage and accessibility of e-resources.*** LCSD maintains websites for HKPL (including HKPL website, MMIS website and e-Resources website) and provides two mobile applications (apps), namely “My Library” (hereinafter referred to as My Library App) and “Multimedia Information” (hereinafter referred to as MMIS App). As of December 2022, HKPL provided 14 e-book collections (with over 490,000 e-books) and 83 e-databases (paras. 4.3, 4.4 and 4.8). Audit noted the following issues:

- (a) ***Scope for enhancing accessibility of e-books and e-databases.*** Readers may use the e-books and e-databases via the Internet with library accounts (i.e. remote access) and the workstations in static libraries. Audit noted that of the 83 e-databases, 40 (48%) e-databases could be remotely accessed and 43 (52%) e-databases had to be accessed by using the workstations in static libraries. Of the 43 e-databases for use at static libraries, 33 (77%) could be accessed at all libraries while 10 (23%) could only be accessed at designated libraries. Besides, as of December 2022, the online catalogue and search engines of HKPL website and My Library App only included physical library materials, and various search engines were used for electronic library materials in different platforms. According to LCSD, SLS will provide, among others, a single platform for all forms of library resources and a discovery service for searching meta data of e-databases (paras. 4.11 to 4.15); and

Executive Summary

- (b) ***Need to strengthen monitoring of usage of individual e-books.*** E-books are available for online reading and/or borrowing (download). Audit noted that as of December 2022, of the 14 e-book collections, 9 (64%) e-book collections were with a quota for concurrent online reading. For the 9 e-book collections, borrowing was not available for 2 e-book collections and there were quotas for borrowing for the remaining 7 e-book collections. According to LCSD, the statistics on the reservation number and turnaway rate for borrowing e-books (when the quota for concurrent borrowing was exceeded) were not readily available. On 9 February 2023, Audit selected 30 e-books in an e-book collection for examination and noted that, while all the e-books were available for online reading, 14 (47%) e-books could not be borrowed immediately, with the number of readers reserving the e-books ranging from 1 to 335 (averaging 42 readers) (paras. 4.17 and 4.18).

18. ***Scope for improving functions provided by library mobile apps.*** Audit noted that: (a) the annual usage of My Library App and MMIS App decreased by about 36% and 14% respectively from 2017 to 2022; (b) a popular digitised collection, namely “Hong Kong Arts and Artist Clippings”, was accessible via library terminals only; and (c) MMIS App would be replaced upon the implementation of SLS (para. 4.21).

19. ***Need to strengthen actions in organising extension activities.*** LCSD has set in its COR a key performance target and an indicator on the attendance at extension activities programmes and the number of extension activities programmes for HKPL respectively. Audit noted that the number of extension activities programmes decreased by about 1% from 23,608 in 2018 to 23,278 in 2019, and further dropped by 81% to 4,316 in 2020. While the number increased to 14,735 in 2021 and further to 15,193 in 2022, it was still on the low side when compared with the pre-COVID-19 level. Besides, HKPL did not meet the target on attendance at extension activities programmes of 19.1 million in 2019 to 2022, with shortfalls ranging from 3% to 78%. According to LCSD, the decrease was mainly due to the impact of anti-epidemic measures including the temporary closure of public libraries and the cancellation of extension activities (paras. 4.31 and 4.32).

Executive Summary

Audit recommendations

20. Audit recommendations are made in the respective sections of this Audit Report. Only the key ones are highlighted in this Executive Summary. Audit has *recommended* that the Director of Leisure and Cultural Services should:

Collection development and management

- (a) take measures to enhance the monitoring of implementation of CDPs, in particular on fulfillment rates by categories (para. 2.27(a));
- (b) continue the efforts to fulfill the collection development needs of branch libraries as far as practicable including encouraging more branch libraries to make title-specific suggestions, and take measures to better monitor the fulfillment of collection development needs at branch library-level upon the implementation of SLS (para. 2.27(b));
- (c) keep under review the demand for e-books and take follow-up actions as appropriate (para. 2.27(c));
- (d) explore the availability of appropriate indicators for measuring the quantity of e-resources (para. 2.27(d));
- (e) take measures to improve the mechanism of monitoring outstanding orders and processing new library materials (paras. 2.27(e) and 2.34);
- (f) consider disclosing the availability status of library materials in reporting the total number of items in HKPL's collections (para. 2.60(c));
- (g) expedite the follow-up actions on library materials classified as "non-serviceable" and "temporarily unavailable to the public" (para. 2.60(d));
- (h) step up efforts in examining library materials for safeguarding national security and taking the related follow-up actions (para. 2.60(e));

Executive Summary

Library operation

- (i) **keep under review the number of physical visits to HKPL and take further measures in encouraging visits to public libraries (para. 3.19(a));**
- (j) **expedite efforts in implementing the planned measures (e.g. unmanned operation) for providing longer library service hours (para. 3.19(c));**
- (k) **strengthen actions to improve the usage of library services and closely monitor the achievement of related performance targets (para. 3.19(d));**
- (l) **review the key performance targets and indicators on the usage of library services in LCSD's COR and take follow-up actions as appropriate (para. 3.19(e));**
- (m) **review the requirements of the outsourced returned library materials processing services, including the estimated/minimum number of library materials processed and the service charges (para. 3.32(a));**
- (n) **adopt open bidding for the provision of returned library materials processing services as soon as practicable (para. 3.32(b));**
- (o) **consider incorporating penalty clauses for non-compliances with performance standards in future agreements for the outsourced returned library materials processing services, and take measures to monitor the compliance with the performance standards for the self-service library station book replenishment service (para. 3.32(d) and (e));**
- (p) **take measures to improve the usage of the book drop service at MTR stations, and conduct a review of the effectiveness of the service (para. 3.54(a) and (b));**
- (q) **ascertain the reasons for the persistent non-compliance with the performance standard on the serviceability of some self-service library**

Executive Summary

stations and take measures to minimise service disruption (para. 3.54(c));

Use of information technology and publicity efforts

- (r) step up monitoring of the development progress of SLS (para. 4.28(a));
- (s) keep under review the need for providing remote access for more e-databases and/or at more libraries as appropriate, and take measures to enhance the search engines of library websites and mobile apps upon the launch of SLS (para. 4.28(c) and (d));
- (t) strengthen measures in monitoring the usage of individual e-books (para. 4.28(e));
- (u) take measures to enhance the functions of new library mobile app under SLS (para. 4.28(g)); and
- (v) strengthen actions in organising extension activities and achieving the performance target on attendance (para. 4.38(a)).

Response from the Government

21. The Director of Leisure and Cultural Services agrees with the audit recommendations.

PART 1: INTRODUCTION

1.1 This PART describes the background to the audit and outlines the audit objectives and scope.

Background

1.2 The International Federation of Library Associations and Institutions (IFLA — Note 1) — United Nations Educational, Scientific and Cultural Organization (UNESCO) Public Library Manifesto (Note 2) proclaims UNESCO's belief in the public library as a living force for education, culture, inclusion and information, as an essential agent for sustainable development, and for individual fulfillment of peace and spiritual welfare through the minds of all individuals. The Hong Kong Public Libraries (HKPL) aims to serve the public in the following ways:

- (a) as an information centre where information and the latest development on all subject disciplines are freely and readily available to the public;
- (b) as a tool for self-education and continuing education through resource-based learning;
- (c) as a centre for the promotion of literary arts and literary research in Hong Kong to cultivate public interest in creative writing and literary research, to encourage and promote literary writing, to preserve Hong Kong literature, and to promote cultural exchange;
- (d) as a source of enjoyment for the profitable use of leisure where library materials may be borrowed for home use; and

Note 1: *IFLA is an international library organisation and has a member base of library associations and institutions from the library and information science field from around 150 countries. IFLA publishes standards that reflect current consensus on rules, principles, guidelines, best practices or models for activities or services. The Hong Kong Public Libraries is one of its members.*

Note 2: *UNESCO is an agency of the United Nations that promotes international cooperation in education, science, culture, communication and information. The Manifesto was created in 1949 and was last updated in July 2022.*

Introduction

- (e) as a source for the enrichment of everyday living where members of the public may learn about current affairs, hobbies and leisure pursuits.

According to the Government, its vision is to develop Hong Kong as a knowledge-based economy. It is the Government's policy to leverage technology to provide innovative public library services as well as to enhance the facilities, service quality, cost-effectiveness and customer friendliness of the libraries to promote city-wide reading culture.

HKPL network

1.3 The provision of public library services in Hong Kong is the responsibility of the Leisure and Cultural Services Department (LCSD), which is committed to providing quality services for all library users. LCSD provides library services by operating a network of libraries. As at 31 December 2022, the network included 70 static libraries and 12 mobile libraries (see Table 1). According to LCSD, it operates a five-tier library system whereby service points at different levels provide library materials appropriate to their respective purposes and clientele. The libraries are geographically evenly spread over the territory to provide convenient access to a wide range of library services for people of all age groups and walks of life.

Table 1

**HKPL network
(31 December 2022)**

Tier	Library	Purpose and scope of collection	Number
<i>Static libraries</i>			
1	Hong Kong Central Library (see Photograph 1)	Information hub of HKPL system and develops a comprehensive range of lending and reference collections	1
2	Major libraries	Regional information centres equipped with a dedicated reference library in addition to standard public library services	6
3	District libraries	Offer a full range of standard library services to serve the general needs of their respective districts	31
4	Small libraries	Provide basic lending services	32
Total number of static libraries			70
5	<i>Mobile libraries</i>	Provide basic lending services	12
Total number of public libraries			82

Source: Audit analysis of LCSD records

Photograph 1

Hong Kong Central Library



Source: LCSD records

Introduction

1.4 HKPL also provides book drop service at Mass Transit Railway (MTR) stations, and operates self-service library stations and Library-on-Wheels, as follows:

- (a) ***Book drop service at MTR stations.*** As announced in the 2010-11 Policy Address, to facilitate the use of public library services, LCSD would provide drop-in boxes at major MTR interchange stations on a trial basis to make it more convenient for people to return books and other library items. Since September 2011, a trial book drop service at three major MTR interchange stations (i.e. Central, Kowloon Tong and Nam Cheong) has been launched. Four book drop boxes (see Photograph 2(a) for an example) are placed within the paid area of each of the three MTR stations;
- (b) ***Self-service library stations.*** As announced in the 2016 Policy Agenda, three self-service library stations would be provided on a trial basis at locations with heavier pedestrian flow and far from existing libraries. LCSD has launched a pilot scheme to set up three self-service library stations, one each on Hong Kong Island (i.e. Island East Sports Centre sitting-out area since December 2017) (see Photograph 2(b)), in Kowloon (i.e. Hong Kong Cultural Centre since December 2018) and the New Territories (i.e. Tsuen Nam Road in Tai Wai since January 2020). According to LCSD, these stations provide round-the-clock services, such as borrowing, return, payment and pickup of reserved library materials; and
- (c) ***Library-on-Wheels.*** LCSD launched the “Joyful Reading at Your Neighbourhood: Library-on-Wheels” pilot project in January 2020. Two specially designed trucks have turned into Library-on-Wheels (see Photograph 2(c) for an example) and visit locations with heavier pedestrian flow but far from existing library facilities in a convenient manner. The pilot project aims to promote theme-based reading, library self-charging service, electronic resources (e-resources) and online services, and familiarise non-frequent library users with the vast resources and accessible services of public libraries.

Photographs 2(a) to (c)

(a) Book drop box
at MTR Central station



(b) Self-service library station
at Island East Sports Centre
sitting-out area



(c) Library-on-Wheels



Source: LCSD records

1.5 The library network is further supplemented by the efforts made at the neighbourhood level. LCSD launched the “Libraries@neighbourhood — Community Libraries Partnership Scheme” in December 2005. The scheme aims to promote a reading culture in the community, and provide the public, especially children, youths, housewives, elderly persons and those who seldom visit library facilities, with more

accessible and convenient library material lending service free of charge. HKPL collaborates with non-profit-making organisations and local groups in providing community-based library services under the scheme. These organisations and groups are offered block loan of library materials as well as professional advice on setting up community libraries tailored to the needs of their target users. As at 31 December 2022, there were 191 community libraries.

Organisation and advisory structure for HKPL

1.6 ***Responsible division of LCSD.*** LCSD's work in providing and managing library services falls within the programme area "Public Libraries". In 2022-23, the estimated expenditure in the provision of public library services amounted to \$1,428 million. The Libraries and Development Division, under the Cultural Services Branch of LCSD, is responsible for providing public library services and promoting reading and the literary arts. As at 30 September 2022, there were 1,620 staff (comprising 1,453 permanent staff and 167 non-civil service contract staff) under the Division. An extract of the organisation chart of LCSD as at 31 December 2022 is at Appendix A.

1.7 ***Public Libraries Advisory Committee.*** The Public Libraries Advisory Committee comprises professionals, academics, community personalities and government representatives who are appointed by the Secretary for Culture, Sports and Tourism for a term of two years. The Committee advises the Government on the formulation of strategies and measures for the development of HKPL's facilities and services, as well as plans for the promotion of reading and collection development.

1.8 ***LCSD Expert Advisers on Literary Arts.*** The Cultural Services Branch of LCSD is supported by expert advisers who provide input on issues relating to performing arts, literary arts and museum activities. They include artists, authors, academics and others who have made significant contributions in their fields. For HKPL, the expert advisers advise LCSD on matters pertaining to the promotion of literary arts and presentation of literary arts programmes.

Strategic plan of HKPL

1.9 According to the Strategic Plan of HKPL (2020-2025) formulated in March 2020, HKPL aims to provide quality public library services to promote city-wide reading culture in Hong Kong. The missions include:

- (a) to enable access by providing a wide network of public libraries for free and equitable access to information and knowledge to serve all residents of Hong Kong;
- (b) to enrich knowledge by providing a gateway to information and knowledge of diverse points of view for supporting and encouraging lifelong learning;
- (c) to cultivate quality of life by enriching the documentary heritage of the history and culture of Hong Kong and promoting Hong Kong literature and local publications;
- (d) to inspire curiosity and creativity through reading;
- (e) to enhance quality of library services by leveraging on new technology and the use of information technology (IT); and
- (f) to build connection and engagement through public involvement and partnership in public library services.

HKPL's collection

1.10 LCSD aims at strengthening the library collection to provide a balanced mix of library materials for free use by the public so as to meet the community's needs for knowledge, information and research, to support life-long learning, continuous education and the profitable use of leisure time, and to promote reading and local literary arts. As at 31 December 2022, the collection comprised 13.5 million items of books and other print materials (including maps and music scores), and 1.7 million items of non-print materials (including audio-visual materials and microforms). In addition, HKPL also provided 14 electronic book (e-book) collections (with over

Introduction

490,000 e-books), 83 electronic databases (e-databases) (Note 3) and about 4,500 titles of newspapers and periodicals.

1.11 Some of these library materials may be borrowed whilst others are for use in the libraries. With about 4.8 million registered borrowers, some 24 million items (books and other library materials) were borrowed in 2022. HKPL adopts a performance indicator with a quantity comparable to that recommended by IFLA, i.e. 2 to 3 items per capita in LCSD's Controlling Officer's Report (COR). For 2021-22, the expenditure on acquisition of library materials amounted to \$111.5 million.

Use of IT in provision of library services and publicity efforts

1.12 LCSD aims to provide more efficient and effective library services through active use of IT. According to LCSD, the extensive use of IT has improved the efficiency in delivering library services, enhanced and speeded up access to the library collections, and optimised use of available staff resources. Remote access to library services includes telephone and web renewal service, online reservation service and email enquiry service.

1.13 LCSD manages HKPL with the support of two major library IT systems, namely the Next Generation Integrated Library System (NGILS) and Multimedia

Note 3: *E-resources, including e-books and e-databases, are sources of information or publications that can be accessed through the use of computers. According to LCSD:*

- (a) *the e-book collections cover a wide range of categories (e.g. locally published Chinese e-books and children picture books) and subjects (e.g. arts, fiction, and science and technology); and*
- (b) *the e-databases provide authoritative and online databases of different types (e.g. newspapers and audio-visual materials) and subjects (e.g. statistical information, business periodicals and scholarly journal articles).*

These e-resources have to be accessed through the platforms provided by respective service providers. Library users can access the e-resources through computer workstations at static libraries, or remotely accessed via the Internet for those with remote access feature (see para. 4.11).

Information System (MMIS) (Note 4). In February 2019, the Finance Committee of the Legislative Council (LegCo) approved a commitment of \$877.3 million for the development of a new system (i.e. Smart Library System (SLS)) to replace the existing two major systems. The new system will be implemented in phases. As of December 2022, the target launch dates of all the core functions and remaining functions of the system were March 2024 and September 2025 respectively.

1.14 LCSD promotes good reading habits and fosters the development and appreciation of literature through library extension activities, among others. Such activities include reading programmes, storytelling for children, book displays and exhibitions.

Audit review

1.15 In October 2022, the Audit Commission (Audit) commenced a review to examine the management of public libraries. The audit review has focused on the following areas:

- (a) collection development and management (PART 2);
- (b) library operation (PART 3); and
- (c) use of IT and publicity efforts (PART 4).

Audit has found room for improvement in the above areas and has made a number of recommendations to address the issues.

Acknowledgement

1.16 Audit would like to acknowledge with gratitude the full cooperation of the staff of LCSD during the course of the audit review.

Note 4: *NGILS is an integrated library administration system that supports the core functions of HKPL, such as circulation control, acquisition, cataloguing and collection management of library materials, as well as searching of library resources. MMIS serves as a digital library system that provides access to subscribed e-databases, e-books and digitised items including old newspapers and digitised audio-visual recordings.*

PART 2: COLLECTION DEVELOPMENT AND MANAGEMENT

2.1 This PART examines the collection development and management of HKPL, focusing on:

- (a) acquisition of library materials (paras. 2.4 to 2.28);
- (b) processing of new library materials (paras. 2.29 to 2.35); and
- (c) maintenance of library materials (paras. 2.36 to 2.61).

Background

2.2 HKPL provides readers with free access to its library collections, which can also be broadly classified as lending collections (i.e. items available for loan by registered borrowers), reference collections (i.e. items solely for use in the libraries), and non-print collections (e.g. audio-visual materials). Table 2 shows the number of items in HKPL's collections from 2018 to 2022. According to LCSD, it aims to gradually increase the number of collection items to a quantity comparable to that recommended by IFLA, which is 2 to 3 items of library stock per capita (see para. 1.11). This had been achieved each year from 2018 to 2022 (ranging from 2.01 items per capita in 2018 to 2.08 items per capita in 2022).

Collection development and management

Table 2

Collections of HKPL (2018 to 2022)

Collection	2018	2019	2020	2021	2022
	Number of items ('000)				
<i>Lending collections</i>					
Adult collections					
Chinese	5,256	5,282	5,208	5,188	5,099
English	1,552	1,555	1,575	1,587	1,578
Sub-total	6,808	6,837	6,783	6,775	6,677
Children/young adult collections					
Chinese	2,598	2,659	2,691	2,794	2,836
English	1,300	1,322	1,325	1,368	1,386
Sub-total	3,898	3,981	4,016	4,162	4,222
Total lending collections	10,706	10,818	10,799	10,937	10,899
<i>Reference collections</i>	2,436	2,474	2,505	2,546	2,552
Total books and print materials	13,142	13,292	13,304	13,483	13,451
<i>Non-print collections</i>	1,857	1,832	1,793	1,772	1,740
Total library materials	14,999	15,124	15,097	15,255	15,191
Library stock per capita (Note)	2.01	2.01	2.01	2.06	2.08

Source: Audit analysis of LCSD records

Note: According to LCSD's COR, the calculation was based on the provisional figures in Mid-year Population issued by the Census and Statistics Department.

Remarks: The figures represent the position as at 31 December in respective years.

2.3 Apart from the above collections, as at 31 December 2022, HKPL also provided about 4,500 titles of newspapers and periodicals, 83 e-databases and 14 e-book collections (with some 490,000 e-books). Table 3 shows the number of newspapers and periodicals, e-databases and e-book collections from 2018 to 2022.

Table 3

**Newspapers and periodicals, e-databases
and e-book collections provided by HKPL
(2018 to 2022)**

Item	2018	2019	2020	2021	2022
	Number				
Newspapers/periodicals	about 5,000 titles	about 5,000 titles	about 5,000 titles	about 5,000 titles	about 4,500 titles
E-databases	76	77	79	82	83
E-book collections (E-books)	10 (294,542)	11 (338,084)	11 (378,135)	12 (418,530)	14 (491,576)

Source: Audit analysis of LCSD records

Remarks: The figures represent the position as at 31 December in respective years.

Acquisition of library materials

2.4 Acquisition and processing of new library materials are handled centrally and involve the following:

- (a) **Collection Development Meeting (CDM).** Chaired by the Chief Librarian (Collections and Technical Processing) and consisting of Librarian grade staff from various offices (see Appendix A), CDM is tasked to formulate and review strategies for collection development, review the existing library collections, and approve acquisition of library materials; and
- (b) **Technical Processing Unit (TPU).** TPU (under the Collections and Technical Processing Office — see Appendix A) is responsible for the preparation of collection development plans (CDPs), coordination of selection and ordering of new library materials, and handling of new library materials (including cataloguing and allocating books to branch libraries).

2.5 **CDPs.** An annual CDP is formulated on the overall collection development (including acquisitions and withdrawals) of HKPL. Each year, branch libraries (i.e. 70 static libraries, 12 mobile libraries and 3 self-service library stations — see paras. 1.3 and 1.4(b)) are required to prepare the branch library-level CDPs for the coming financial year, which consist of:

- (a) quantity of new library materials required in broad categories (Note 5) having regard to factors including usage statistics, readers' suggestions and the demographics in their respective districts;
- (b) estimated quantity of unserviceable library materials for withdrawal; and
- (c) a business plan on collection development with justifications and considerations, including any subjects the libraries wish to strengthen.

The plans are submitted to TPU for consolidation. After taking into account the quantity requirements for new libraries and schemes (e.g. thematic block loan to kindergartens), the consolidated CDP is submitted to CDM for approval.

2.6 **Collection development policy.** According to LCSD, the library materials acquired each year should comprise an appropriate mix of print, non-print and electronic resources in order to keep up with the emerging trends in information provision (Note 6) and usage patterns. LCSD's guidelines set out the principles in

Note 5: *Branch libraries are required to list out the quantity requirements for new library materials of:*

- (a) *adult/children/young adult books in Chinese/English in lending collections;*
- (b) *books in Chinese/English in reference collections; and*
- (c) *non-print materials.*

Note 6: *For example, in the CDP for 2022-23, in view of the opening of the Hong Kong Palace Museum in West Kowloon Cultural Area, HKPL planned to enrich the library collections on Chinese constitution, history and geography, as well as relevant e-books to enhance public understanding of national affairs and correct understanding of history, with a view to cultivating their sense of national identity and national pride.*

Collection development and management

determining the library materials to be acquired, including compliance with the law (Note 7), conformity with the collection development direction of HKPL, stock requirements of branch libraries, usage rates and demographic changes.

2.7 *Selection of library materials.* Library material contractors are engaged (Note 8) to provide bibliographies, trade catalogues or sample books for selection by HKPL's librarians. The recommendations by the librarians are consolidated by TPU and submitted to CDM for approval before ordering. The statistics of library materials acquired/subscribed is also reported at the monthly CDM meeting. Table 4 shows the expenditure and number of library materials acquired/subscribed for the period 2017-18 to 2021-22.

Note 7: *According to LCSD's guidelines, to ensure effective fulfillment of the duty to safeguard national security, as well as preventing and suppressing acts or activities that may endanger national security, in selecting library materials for purchase and considering suggestion for library purchase, donations of books and books received from the Books Registration Office, libraries shall ensure that the library collections are not contrary to the interests of national security.*

Note 8: *LCSD engaged the contractors in accordance with the Government's Stores and Procurement Regulations (e.g. by tender for procurement of over \$1.4 million).*

Collection development and management

Table 4

**Expenditure and number of library materials acquired/subscribed
(2017-18 to 2021-22)**

Category	2017-18	2018-19	2019-20	2020-21	2021-22
<i>Expenditure (\$ million)</i>					
Chinese books (Note 1)	26.3	27.1	24.4	24.2	27.6
English books	26.3	23.9	23.9	21.0	26.2
Non-print materials	10.3	9.4	8.6	8.6	7.2
Newspaper and periodicals	22.4	22.5	22.7	21.3	21.8
E-databases	6.2	8.3	10.8	11.6	13.1
E-books	4.0	6.0	6.1	6.0	7.2
Book data (Note 2)	N.A.	N.A.	6.2	10.8	8.4
Total	95.5	97.2	102.7	103.5	111.5
<i>Number of items acquired (Note 3)</i>					
Chinese books (Note 1)	520,117	523,300	486,849	454,776	501,525
English books	194,480	174,278	185,495	158,343	209,590
Non-print materials	44,145	33,429	28,781	33,365	22,392
Total	758,742	731,007	701,125	646,484	733,507

Source: Audit analysis of LCSD records

Note 1: These include books in Traditional Chinese and Simplified Chinese. In 2021-22, books in Simplified Chinese accounted for 7% of the expenditure and 6% of number of Chinese books acquired.

Note 2: According to LCSD, a new book database was launched in April 2020 to provide enriched information (e.g. digitised images of book cover and summaries) of local publications in HKPL's online catalogue to facilitate readers to select suitable local publications and promote the culture of quality reading.

Note 3: The number of items acquired only includes books and non-print materials. Newspapers and periodicals, e-databases, e-books and book data are generally on subscription basis.

Need to better monitor implementation of CDPs

2.8 According to LCSD, the quantity of library materials to be acquired is governed by a number of factors, such as requirements of branch libraries (see para. 2.5) and usage rates. In selecting materials to be acquired, the needs and interests of the community/users of branch libraries have to be taken into account. In other words, requirements from the branch libraries represent a major source of input reflecting the public needs and demand in the districts, and the branch library-level CDPs serves as a quantified indicator of the collection development needs of the respective libraries.

2.9 ***Fulfillment by categories.*** Audit compared the number of new library materials (Note 9) to those proposed in the CDPs for the lending collections (Note 10) for the period 2017-18 to 2021-22 (see Table 5) and noted that:

- (a) the overall number of new library materials each year slightly deviated from the CDPs, the fulfillment rates ranged from 88% in 2020-21 (i.e. the actual number of new library materials fell short of the CDP number by 12%) to 109% in 2017-18 (i.e. the actual number of new library materials exceeded the CDP number by 9%); and
- (b) analysis by library materials category showed that for some categories:

Note 9: *New library materials include library materials acquired, donations, and books received by the Books Registration Office. According to the Books Registration Ordinance (Cap. 142), the publisher of a new book shall, within one month after the book is published, printed, produced or otherwise made in Hong Kong, deliver to the Books Registration Office free of charge 5 copies of the book. According to LCSD's guidelines, HKPL holds one copy of the depository materials in its depository collection for preservation purpose. HKPL also selects suitable titles for incorporation in the library collections.*

Note 10: *Audit analysis focused on the categories under lending collections (i.e. excluding reference collections and non-print collections) because:*

- (a) *lending collections accounted for the majority of new library materials (e.g. 89% in 2021-22); and*
- (b) *the number of donated items and books received by the Books Registration Office fluctuated over time and some of the items were included in the reference collections or non-print collections.*

Collection development and management

- (i) the actual number of new items deviated significantly from those in the CDPs, the fulfillment rates ranged from 72 % (Chinese books in adult collections in 2021-22) to 119% (English books in adult collections in 2020-21); and
- (ii) in particular, for Chinese books in adult collections, the fulfillment rates showed a decreasing trend (from 108% in 2017-18 to 72 % in 2021-22). In other words, the actual number of new library materials had fallen short of the requirements in the CDPs in an increasing trend for four consecutive years.

Table 5

**Fulfillment rate of new library materials for lending collections
(2017-18 to 2021-22)**

Collection	2017-18	2018-19	2019-20	2020-21	2021-22
	Fulfillment rate				
Adult collections					
Chinese	108 %	99 %	92 %	81 %	72 %
English	107 %	84 %	98 %	119 %	100 %
Children/young adult collections					
Chinese	106 %	91 %	90 %	84 %	95 %
English	117 %	88 %	87 %	99 %	111 %
Overall	109 %	93 %	91 %	88 %	89 %

Source: Audit analysis of LCSD records

Remarks: The fulfillment rates are calculated by:

$$\frac{\text{Aggregate number of new library materials in the year}}{\text{Number of new library materials required in the CDP}} \times 100\%$$

2.10 Fulfillment by subjects. When submitting the acquisition requirements to TPU for formulation of CDPs, the branch libraries can also suggest “subjects to be strengthened” (see para. 2.5(c)), so as to enrich the coverage of materials in their respective libraries subject to the needs of users. Taken into account of these

Collection development and management

suggestions and other relevant factors, TPU sets out the proportion of new library materials to be acquired by subjects (e.g. for acquisition for Chinese books for adult lending collections in 2021-22, 18% for fiction and 11% for language and literature). Audit requested LCSD to provide statistics on the actual acquisition proportion by subjects in 2021-22. In response, LCSD informed Audit in February 2023 that:

- (a) it was not available due to system limitations in compiling the relevant statistics;
- (b) the acquisition proportion by subjects served as a broad brush approach for an overview of subject distribution, and was never aimed as a hard target. Due to the growth and expansion of knowledge in recent years, subject classification/category had become a more fluid concept. Many books were covering multiple subjects and it became increasingly difficult to provide an accurate picture of collection distribution by subject disciplines with precise and accurate description; and
- (c) there was time gap between ordering and the actual arrival of the items (i.e. the items acquired this year might be from the order placed last year), and that the yearly actual acquisition percentage by subjects might not be comparable to the acquisition targets by subjects of the year.

2.11 Regarding the deviations of the numbers of library materials acquired from the planned numbers in the CDPs, LCSD informed Audit in March 2023 that:

- (a) the quantities set out in the CDPs were intended for planning purposes rather than serving as hard targets. As the quantities were estimated demand instead of actual demand, it would be unwise to rigidly adhere to the planned quantities without regard to actual demand over the course of the year;
- (b) acquisition of library materials was a dynamic process. The actual quantities acquired were subject to a basket of factors, such as market supply, book prices and readers' suggestions (which constituted 10% to 15% of total acquisitions). As far as the market supply was concerned, the publishing sector had been shrinking due to the adverse impact of the coronavirus disease (COVID-19) epidemic (e.g. fewer new titles released as book fairs were cancelled or scaled down). This was particularly true

for Chinese books, including those published in Hong Kong, the Mainland and Taiwan;

- (c) to safeguard national security, more time was required for selecting library materials and fewer suitable titles were available for acquisition; and
- (d) regarding the decreasing trend of fulfillment rates for Chinese books (see para. 2.9(b)(ii)), the supply of sample books for library selection had dropped by 30% on average in recent years and there was an increasing trend in average book prices that resulted in fewer quantities acquired. The adverse impact on Chinese children books was less apparent because of a smaller variety than that of adult books.

2.12 While noting LCSD's explanations, Audit noted that the deviations were significant for some categories and the reasons were not documented. In Audit's view, LCSD needs to take measures to enhance the monitoring of implementation of CDPs, in particular on fulfillment rates by categories.

Need to continue efforts to fulfill collection development needs of branch libraries

2.13 The annual CDPs are formulated by consolidating the branch library-level requirements of new library materials, which reflect the needs of users in the respective libraries (see paras. 2.5 and 2.8). Audit analysed the statistics of new library materials allocated to branch libraries (Note 11) for the period 2017-18 to 2021-22 and found that:

- (a) the numbers of new library materials allocated to branch libraries varied significantly from the requested numbers in the CDPs, which ranged from 54% to 272%. In this connection, Audit noted that there was no management information on the fulfillment rates at the branch library-level; and

Note 11: *According to LCSD, under the current allocation mechanism, the quantity of English books allocated to branch libraries was according to the fulfillment rate upon receipt of books, whereas Chinese books were allocated according to an allocation plan prepared at the order preparation stage.*

Collection development and management

- (b) branch libraries could indicate the subjects they wished to strengthen in the submission of the CDPs (see para. 2.5(c)). However, there was no documentary evidence showing that TPU had allocated the new library materials according to the branch libraries' suggestions on those subjects.

2.14 Upon enquiry, LCSD informed Audit in February 2023 that the subjects suggested by the branch libraries in the CDPs were usually broad, and the allocated titles might not meet the requirements for the subjects they had in mind. Instead, branch libraries were encouraged and reminded to suggest specific titles for purchase as and when needed. Title-specific suggestions instead of some generalised subjects would better fit and meet their community interests and collection building needs. In this regard, Audit noted that the number of branch libraries making title-specific suggestions had decreased by 47%, from 38 in 2018 to 20 in 2021, and was on the low side (i.e. 24% of total number of branch libraries in 2021). In addition, since 2018 and up to 2021, no title-specific suggestions were made by 23 static libraries and all the 12 mobile libraries.

2.15 Regarding the fulfillment of collection development needs of branch libraries, LCSD further informed Audit in March 2023 that:

- (a) HKPL's collections were inter-connected through the library system and accessible to all users (i.e. "one-collection"). TPU would build a comprehensive stock for the whole library system and allocate sufficient new library materials with a balanced mix of subjects to the branch libraries. Fulfillment rates at the branch library-level could be supplemented by stock rotation (e.g. transferring library materials among the branch libraries) as and when required; and
- (b) data analytics and statistical reporting tools for collection development were currently unavailable, and therefore it was infeasible to monitor the fulfillment at the subject and branch library-levels. It was expected that the new collection tools in SLS (see para. 1.13) could facilitate the tasks.

2.16 In Audit's view, LCSD needs to:

- (a) continue the efforts to fulfill the collection development needs of branch libraries as far as practicable including encouraging more branch libraries

to make title-specific suggestions and initiating stock rotation as and when required; and

- (b) take measures to better monitor the fulfillment of collection development needs at branch library-level upon the implementation of SLS.

Need to keep under review demand for e-books and take follow-up actions as appropriate

2.17 According to LCSD, the usage of e-books experienced a significant increase in 2020 because of the closure of public libraries due to the COVID-19 epidemic. As readers got used to using e-books, the usage has remained high after 2020. The usage counts of e-books increased by about 5 times from 0.6 million times in 2018 to around 3.2 million to 3.6 million times in 2020 to 2022 (see para. 4.8). To meet the public demand for e-books, LCSD has been acquiring new e-books, as well as additional copies of popular titles. From 2018 to 2022, the number of e-books increased by 67% from some 290,000 to some 490,000 (see Table 3 in para. 2.3).

2.18 Audit however noted that there was unmet demand for e-books, i.e. some popular e-books were not available for borrowing immediately and the numbers of reservations were high (see para. 4.18). Upon enquiry, LCSD informed Audit in March 2023 that:

- (a) HKPL aimed to meet the demand for e-books at both the quantity level and the quality level. Readers were encouraged to diversify to read a variety of titles instead of reading the same popular titles. That said, HKPL had already stepped up efforts to cater for the demand on exceptionally popular titles. To optimise the use of public fund, it would be infeasible to provide access to popular titles on an unrestricted basis and it would be prudent for HKPL to set a cap on the number of copies for each title (e.g. 15 copies for popular titles available on a popular Chinese e-book platform). The actual number of copies would depend on the agreements with the vendors of the e-book platforms (e.g. some publishers might be unwilling to supply a large number of additional copies for popular titles because it might hurt their sales in the retail market);

Collection development and management

- (b) on some platforms, the online reading feature allowed readers to read the e-books without borrowing the books or waiting in the reservation queue. To some extent, the demand for popular titles could be satisfied by the feature; and
- (c) subject to agreements with the vendors, HKPL might propose a new system feature that when the popular e-books were not available for borrowing immediately, it would suggest readers to borrow other related titles.

2.19 While noting LCSD's explanations, Audit considers that LCSD needs to keep under review the demand for e-books and take follow-up actions as appropriate (e.g. reviewing the cap on copies of e-books in warranted cases).

Need to explore availability of appropriate indicators for measuring quantity of e-resources

2.20 Audit noted that LCSD had set an indicator on the quantity for library stock in its collection (i.e. 2 to 3 items per capita — see para. 2.2), but no indicator had been set for e-resources. Upon enquiry, LCSD informed Audit in March 2023 that:

- (a) it had been searching for indicators for measuring the quantity of e-resources but no suitable indicator was found;
- (b) more e-books were acquired on a subscription basis, which were fundamentally different from physical books. E-book subscription was subject to market supply and licence agreements between e-book platform vendors and publishers. Those agreements might change from time to time and might affect the availability of each title and hence the quantity. Therefore, the quantity of e-books would fluctuate;
- (c) similar to e-books, materials provided in e-databases were subject to licence agreements between e-database vendors and the content providers (i.e. the copyright owners). Those agreements were subject to change and hence the quantity of materials provided in e-databases might also vary from time to time;

- (d) to set an indicator on the quantity of e-resources might be misleading and cause confusion to the public. In particular, members of the public might not be aware of the different nature between physical books and e-resources and the licensing issue; and
- (e) LCSD would continue to explore the availability of any internationally accepted indicator for measuring the quantity of e-resources.

In Audit's view, as e-resources form an integral part of the HKPL's collections and should complement the physical library stock, there is a need to take into consideration the quantity of e-resources in the collection development planning process. There are merits for LCSD to explore the availability of appropriate indicators for measuring the quantity of e-resources.

Need to improve monitoring of outstanding orders

2.21 LCSD engages contractors for acquiring library materials (see para. 2.7). Upon ordering of selected library materials, the contractors should deliver the items (if available in the market) within a pledged timeframe stated in the contracts. Under the existing mechanism, the contractors submit order status reports on a bi-monthly basis, which show the status of the orders including outstanding items (with reasons such as "out of stock" or "unavailable from publishers"). TPU staff manually monitor the order status of each contractor based on the order status reports. Audit noted that there was a lack of management information to monitor the overall status of all the orders. Furthermore, while the lists of the selected library materials to be ordered and the statistics of new library materials delivered (and after cataloguing and processing) were reported to CDM (Note 12), the statistics on outstanding orders and cancelled orders were not available.

2.22 In Audit's view, LCSD needs to improve the mechanism of monitoring outstanding orders, including automating the order tracking process (e.g. incorporating such feature in SLS).

Note 12: *NGILS (see Note 4 to para. 1.13) can only record the items after relevant records were created in the "cataloguing and processing" stage (see Table 6 in para. 2.29).*

Collection development and management

2.23 As regards unfulfilled orders, LCSD's guidelines state that cancellations of orders should be arranged in batches on a half-yearly basis (i.e. in January and July). Audit noted the following areas for improvement:

- (a) the guidelines did not specify the criteria for cancellations of unfulfilled orders (e.g. awaiting delivery for a prolonged period of time);
- (b) the frequency of arranging the cancellations had been increased to a 4-month interval (i.e. in January, May and September). However, the guidelines had not been updated; and
- (c) according to the guidelines, for unfulfilled orders which the contractors indicated as "out of stock" or "out of print", TPU staff should conduct a sample check of 3% of the items on the webpages of prime bookstores, and request contractors to provide further proof if necessary. However, the supporting documents for checking of English books were not available for audit examination.

2.24 Audit examined the bi-monthly order status reports of two contracts (Note 13) and found the following issues:

- (a) an analysis of the outstanding orders showed that a large proportion of the outstanding orders had exceeded the time pledge (Note 14) (i.e. 100% for Contract 1 (all 568 outstanding orders, ranging from 4 to 646 days and averaging 112 days) and 50% for Contract 2 (970 of 1,922 outstanding orders, ranging from 7 to 1,012 days and averaging 214 days)). Among those overdue orders, 3% for Contract 1 (19 orders) and 15% for Contract 2 (150 orders) had been long overdue for over 360 days

Note 13: *Contract 1 and Contract 2 were completed in December 2022 and September 2021 respectively. For the purpose of this analysis, the last status reports before the contract expiry dates were examined.*

Note 14: *For this analysis, the number of orders represents the number of book titles ordered, of which it might comprise more than one item (i.e. copy) per title. The time pledge for Contract 1 was 6 weeks from the date of order. For Contract 2, the time pledge was 4 weeks (by air-freight) or 16 weeks (by sea-freight) from the date of order, or the date of availability on the market, whichever was later. As the information on the mode of transport was not available on the order status reports, Audit had adopted a more prudent pledge (i.e. 16 weeks) for the analysis.*

(Note 15). It was unsatisfactory that the library materials ordered were not delivered within the timeframe pledged in the contracts, and LCSD did not take follow-up actions on some long outstanding orders (e.g. cancellation and ordering of other titles on the same subject as replacement); and

- (b) an analysis of 1,027 cancelled orders that had exceeded the time pledge (37 orders for Contract 1 and 990 orders for Contract 2) revealed that, while there was a large variation in the number of overdue days of the cancelled orders (ranging from 25 to 935 days and averaging 410 days), the reasons for cancellations were not documented. In the absence of clear guidelines specifying the criteria for cancellations of unfulfilled orders (see para. 2.23(a)) and justification, it was unclear under what circumstances LCSD cancelled an order.

2.25 Upon enquiry, LCSD informed Audit in March 2023 that:

- (a) since the outstanding orders included readers' suggestions, pre-publication titles and temporarily out of stock titles, pre-mature cancellation of orders would adversely impair collection development;
- (b) the COVID-19 epidemic had seriously affected international shipment and hence adversely affected the fulfillment of orders;
- (c) for the outstanding and cancelled orders that had exceeded the time pledges under Contract 2:
 - (i) for the 970 outstanding orders (see para. 2.24(a)), 168 orders were invoiced and pending for delivery, and 379 orders were partially fulfilled (i.e. with some items/copies delivered or pending delivery).

Note 15: *According to LCSD, in terms of the number of items (i.e. copies of books) ordered:*

- (a) *as of the end of the contract periods, the outstanding items that had exceeded the time pledge accounted for 3.8% (Contract 1) and 2.3% (Contract 2) of the total numbers of items ordered during the contract periods respectively; and*
- (b) *subsequent to the end of the contract periods, as of February 2023, 72% (Contract 1) and 14% (Contract 2) of the overdue items had been delivered.*

Collection development and management

All the orders were either pending for delivery or on order. There was no good reason to cancel them; and

- (ii) for the 990 cancelled orders (see para. 2.24(b)), 152 orders were readers' suggestions or part of a book series that justified for a longer waiting time. Another 308 orders were partially fulfilled orders. It was believed that the contractor would fulfill the remaining quantities, so it took a longer time to decide for cancellation; and
- (d) instead of cancelling orders by simply following a timeframe, TPU staff took into account a number of factors before deciding not to cancel the orders (e.g. some titles were not yet published or print on demand).

2.26 Audit noted that the considerations mentioned in paragraph 2.25 were not documented. In Audit's view, LCSD needs to take measures to improve the mechanism of monitoring outstanding orders, including:

- (a) setting out the criteria for cancelling outstanding orders in guidelines and documenting justifications for keeping long outstanding orders;
- (b) ensuring that guidelines for cancelling orders are up-to-date; and
- (c) keeping records of checking unfulfilled English book orders.

Audit recommendations

2.27 **Audit has *recommended* that the Director of Leisure and Cultural Services should:**

- (a) **take measures to enhance the monitoring of implementation of CDPs, in particular on fulfillment rates by categories;**
- (b) **continue the efforts to fulfill the collection development needs of branch libraries as far as practicable including encouraging more branch libraries to make title-specific suggestions and initiating stock rotation as and when required, and take measures to better monitor the**

fulfillment of collection development needs at branch library-level upon the implementation of SLS;

- (c) keep under review the demand for e-books and take follow-up actions as appropriate;**
- (d) explore the availability of appropriate indicators for measuring the quantity of e-resources; and**
- (e) take measures to improve the mechanism of monitoring outstanding orders, including:**
 - (i) automating the order tracking process (e.g. incorporating such feature in SLS);**
 - (ii) setting out the criteria for cancelling outstanding orders in guidelines and documenting justifications for keeping long outstanding orders;**
 - (iii) ensuring that guidelines for cancelling orders are up-to-date; and**
 - (iv) keeping records of checking unfulfilled English book orders.**

Response from the Government

2.28 The Director of Leisure and Cultural Services agrees with the audit recommendations. He has said that:

- (a) LCSD has already been taking measures to enhance the monitoring of the implementation of the CDPs, including:**
 - (i) starting from April 2023, conducting quarterly reviews on the quantity requirements as set out in the CDPs to take into account changes in demand for and supply of library materials and other factors over the course of the year; and**

Collection development and management

- (ii) monitoring the fulfillment rates through the new module of Collection Development Planning Solution of SLS upon system launch scheduled in 2025. The preparation for the implementation of the system is now in full swing;
- (b) LCSD is taking measures to enhance the submission and fulfillment of CDPs at the branch library-level, including:
 - (i) starting from April 2023, requiring suggestions from branch libraries for strengthening individual subjects to be title-specific;
 - (ii) facilitating the online submission of title-specific suggestions and stock rotation of branch libraries respectively, through the new acquisition module and inventory module of SLS upon system launch; and
 - (iii) monitoring the fulfillment rates at the branch library-level through the new module of Collection Development Planning Solution of SLS upon system launch;
- (c) as a long-term commitment, LCSD has been closely monitoring and reviewing the demand for e-books. LCSD will continue to duly keep under review the demand for e-books and make necessary acquisitions to fulfill the public demand;
- (d) LCSD has all along been searching for indicators used in libraries elsewhere for measuring the quantity of e-resources but no suitable indicator has been identified to date. LCSD will continue to explore the availability of suitable and internationally accepted indicators for measuring the quantity of e-resources; and
- (e) as a trade practice, most English titles are ordered on a pre-publication basis (i.e. titles are not yet published when ordered) and hence there will be a longer lead time for fulfilling the orders. Besides, the COVID-19 epidemic seriously affected international shipment and in turn the fulfillment of orders. LCSD is taking measures to improve the mechanism of monitoring outstanding orders, including:

- (i) updating the criteria for order cancellations in the relevant guidelines and ensuring that the guidelines are up-to-date. LCSD targets to complete the update in 2023;
- (ii) recording the justifications for keeping long outstanding orders with immediate effect;
- (iii) keeping records of supporting documents for the checking of “out of stock” or “out of print” titles of unfulfilled English book orders with immediate effect;
- (iv) monitoring the outstanding orders through the new acquisition module of SLS upon system launch; and
- (v) exploring the feasibility of incorporating a new feature of automating the order tracking process in SLS.

Processing of new library materials

Room for improvement in processing new library materials

2.29 Upon receipt of library materials from the contractors, TPU and the branch libraries allocated with the items (hereinafter referred to as holding libraries) are responsible for processing the new library materials. It is important that the library materials are made available for the public as soon as practicable. Table 6 shows the key stages of processing new library materials and the respective target on processing time specified in LCSD’s guidelines/agreements.

Table 6

Key stages and time targets of processing new library materials

Key stage	Description	Processing time target
1. Checking and acceptance upon receipt	TPU performs checking and acceptance of items, and attaches barcodes on items	30 days for books; 30 to 90 days for audio-visual materials; and 120 days for microforms
2. Cataloguing and processing	TPU creates bibliographic records, inputs records and additional information in system manually, and generates and sticks “spine labels” on items	N.A.
3. Packing	TPU prepares packing list and sorts/packs items for despatch	N.A.
4. Binding	The Correctional Services Department performs binding (for books which require binding for durability)	30 days (from collection from TPU to delivery to holding libraries upon completion of binding)
5. Delivery to holding library	The Hongkong Post collects items (which do not require binding) and despatches them to holding libraries	3 (non-peak season) or 4 (peak season) working days
6. Preparation by holding library	Holding libraries carry out preparation work (e.g. fixing anti-theft magnetic strips and stamping library chops)	3 weeks

Source: Audit analysis of LCSD records

Remarks: The processing time targets shown in the Table are specified in LCSD’s guidelines or agreements with relevant parties.

2.30 Audit noted room for improvement in processing new library materials as follows:

- (a) as shown in Table 6, time targets had not been set for some key stages, i.e. no targets had been set for the “cataloguing and processing” and “packing” stages in LCSD’s guidelines. There was also no target set on the overall processing time;

- (b) system-generated exception reports were prepared monthly for TPU and the holding libraries to monitor the time spent on the processing work. However, the design of the reports was not conducive to monitoring the progress because there were discrepancies between the processing time targets set in LCSD's guidelines/agreements and those specified in the reports. Audit analysed the data of the items under processing as at 31 January 2023 (Note 16) and noted that:
- (i) for the "delivery to holding library" stage (Stage 5 in Table 6), while the processing time target stated in the agreement was 3 to 4 working days, the time specified in the system-generated exception reports was 14 days. As such, of the 11,162 items under this stage, while 4,338 (39%) had exceeded the time target stated in the agreement, the exception reports would only highlight 2,053 (18%) items; and
 - (ii) for the "preparation by holding library" stage (Stage 6 in Table 6), while the processing time target stated in the guidelines was 3 weeks, the time configured in the system-generated exception reports was 3 months. As such, of the 39,319 items under this stage, while 14,272 (36%) had exceeded the time target (Note 17), the exception reports would only highlight 279 (1%) items;
- (c) while a processing time target was set for the "binding" stage (Stage 4 in Table 6), no exception report had been configured. Audit analysis found

Note 16: *The current system could only record the items after bibliographical and relevant records were created after the "cataloguing and processing" stage. For library materials which were acquired for building up initial collections of a new library, delivery of these items would only be arranged when the site was ready, and the time taken might be subject to factors other than the processing time of the library materials. For the purpose of the analysis, the items for new libraries were excluded from the "delivery to holding library" and "preparation by holding library" stages. The analysis was based on the system-generated records of 122,415 items under processing (i.e. after completing the "cataloguing and processing" stage) as at 31 January 2023.*

Note 17: *Since the opening hours of branch libraries varied (e.g. 7 days a week for major libraries and 6 days a week for small libraries), for simplicity, 24 days was adopted as the time target for this analysis.*

Collection development and management

that of the 35,228 items under this stage, 24,481 (69%) had exceeded the time target (i.e. 30 days); and

- (d) Audit performed an ageing analysis of items with processing time exceeding the time targets and noted that some items had been outstanding for a long time. In particular:
 - (i) for the “preparation by holding library” stage, 45% of the items (i.e. 6,379 of the 14,272 items — see (b)(ii)) had exceeded the time target (i.e. 3 weeks) for 31 days or more (ranging from 31 to 1,099 days, averaging 51 days); and
 - (ii) as regards the “binding” stage, 49% of the items (i.e. 12,026 of the 24,481 items — see (c)) had exceeded the time target (i.e. 30 days) for 31 days or more (ranging from 31 to 5,550 days, averaging 48 days).

2.31 Audit also noted that currently, there was no readily available management information on the overall processing time of new library materials (i.e. the total time taken from receipt of an item until it was made available for use by the public). Audit examined the overall processing time of 59 items (Note 18) that were made available for use by the public in 2021 and noted that:

- (a) the overall processing time ranged from 44 to 246 days, averaging 128 days;
- (b) 43 (73%) items (comprising 21 items that required binding and the remaining did not) took more than 90 days for processing, with 9 (15%) items took more than 180 days; and
- (c) on average, 41 days were spent on the “cataloguing and processing” stage and 14 days on the “packing” stage, in which no processing time target was set.

Note 18: *Audit selected 60 items for examination and LCSD could not provide information on the processing time for 1 item.*

2.32 In relation to the processing time for new library materials, LCSD informed Audit in March 2023 that:

- (a) the exception reports (see para. 2.30(b)) listed out all items under a specific status beyond a certain period as defined by HKPL. The purpose of the report on the “delivery to holding library” status (see para. 2.30(b)(i)) was to track the number of items delivered to and checked-in by branch libraries (changed to the “preparation by holding library” status) within 14 days, instead of monitoring the delivery time of library materials (i.e. 3 or 4 working days). New reports would be available upon the implementation of SLS (e.g. for tracking the time on the “delivery to holding library” and “binding” stages); and
- (b) assuming the processing time target for the “cataloguing and processing” and “packing” stages were set at 45 days and 14 days respectively, the total processing time target would be about 143 days. The average processing time of the 59 audit samples of 128 days (see para. 2.31(a)) fell within this target range.

2.33 In light of the audit findings, LCSD needs to take measures to improve the mechanism of processing new library materials.

Audit recommendations

2.34 **Audit has *recommended* that the Director of Leisure and Cultural Services should take measures to improve the mechanism of processing new library materials, including:**

- (a) **setting targets on processing time for key stages and the overall processing time;**
- (b) **compiling reports for monitoring the achievement of processing time targets, long outstanding cases and overall processing time;**
- (c) **taking follow-up actions promptly on overdue cases; and**

- (d) exploring measures to expedite the overall processing time of new library materials.

Response from the Government

2.35 The Director of Leisure and Cultural Services agrees with the audit recommendations. He has said that LCSD is taking measures to improve the mechanism of processing new library materials, including:

- (a) setting processing time targets for key stages including the processes of “cataloguing and processing” and “packing” at 45 days and 14 days respectively with immediate effect;
- (b) monitoring the processing time targets, long outstanding cases and overall processing time, and promptly following up on overdue cases through the new reporting tools of SLS upon system launch; and
- (c) streamlining the processing of new library materials with a view to expediting the overall process as a regular practice.

Maintenance of library materials

Need to improve accuracy of management information on withdrawals

2.36 According to LCSD, regular and systematic weeding is conducted to identify items for withdrawal from the collections, so as to ensure the vitality and usefulness of the collections, and to make room for new and updated materials. According to LCSD’s guidelines, materials that should be withdrawn include:

- (a) physically damaged items (e.g. worn out, damaged and beyond binding or rebinding);
- (b) content outdated items (e.g. new/updated versions are available); or
- (c) items not found (e.g. lost or long overdue by readers, or missing and cannot be located for 12 months).

Collection development and management

In 2021-22, about 369,000 items of library materials were withdrawn, of which 98 % were physically damaged items. According to LCSD, the physically damaged items would generally be disposed of by paper recycling, while the content outdated items were planned to be donated (see para. 2.40).

2.37 According to LCSD, from the collection development perspective, when making decisions on acquisitions, reference would be made to the withdrawal of library materials, so as to maintain a balanced mix in the collections. Each year, a summary of the withdrawal figures is submitted to CDM. Audit noted that there were discrepancies between the statistics generated from the system in December 2022 and that reported to CDM in each of the year from 2017-18 to 2021-22 (see Table 7). The percentage of discrepancies ranged from 11 % to 57 %.

Table 7

**Withdrawal of library materials
(2017-18 to 2021-22)**

Item	2017-18	2018-19	2019-20	2020-21	2021-22
	Number of items				
The system report generated in December 2022 (a)	519,704	617,614	583,122	533,104	368,935
Reported to CDM (b)	379,018	393,621	437,631	401,449	330,898
Discrepancy (c) = (a) – (b)	140,686	223,993	145,491	131,655	38,037
Percentage of discrepancy (d) = (c) ÷ (b) × 100%	37%	57%	33%	33%	11%

Source: Audit analysis of LCSD records

2.38 Upon enquiry about the discrepancies, LCSD informed Audit in January and March 2023 that:

- (a) the reports to CDM were generated in October each year. Due to the lead time in seeking approvals for withdrawing the items and/or recording the

Collection development and management

approvals in the computer system, the reports to CDM might not capture some of the items; and

- (b) the reports to CDM only included unserviceable items, whereas the figures provided to Audit in December 2022 also included not found items (see para. 2.36).

2.39 As the information on withdrawal (i.e. the number of and reasons for withdrawal) of library materials forms part of the considerations in the collection development planning and is used by various parties (e.g. CDM, TPU and branch libraries), LCSD needs to ensure that the relevant information is comprehensive and consistent.

Need to improve the implementation of donation scheme of library materials

2.40 According to LCSD, it has been exploring means of donating outdated library materials. Upon a review commenced in 2018, HKPL planned to launch a Books Sharing in the Community Scheme (the Scheme) to donate the outdated books in 2020 under the following two approaches:

- (a) ***Open approach.*** Books were made available to organisations participating in the Community Libraries Partnership Scheme (see para. 1.5) for selection on a first-come-first-served basis; and
- (b) ***Partnership approach.*** Partnering with non-governmental organisations (NGOs), the unselected books after the open approach would be distributed to other users via the network of their service centres, or re-create the remaining books into art pieces or sculpture with a series of workshops.

2.41 Audit noted that:

- (a) the Scheme was postponed to 2021 due to the COVID-19 epidemic. In 2021, under the open approach of the Scheme, a total of 20,199 items were

made available to 129 community libraries (Note 19). A total of 31 (24%) community libraries participated in the book selection process and selected 1,259 (6%) items. As for the partnership approach, it was suspended due to the COVID-19 epidemic and hygienic concerns. All the unselected books would be arranged for disposal by paper recycling; and

- (b) for 2022, the open approach commenced in November 2022 and the book selection process was planned to be completed by February 2023. According to LCSD, the partnership approach would remain suspended due to the epidemic.

2.42 As HKPL has resumed normal operation and the Scheme is a good initiative to promote better use of library resources, Audit considers that LCSD needs to keep under review the implementation of the Scheme, including stepping up efforts in encouraging more community libraries to participate in the Scheme and consider launching the partnership approach at an opportune time.

Need to consider disclosing availability status of library materials and expedite processing of temporarily unavailable and non-serviceable library materials

2.43 As reported on HKPL's website, as of December 2022, there were 15.2 million items of library materials in its collections (see para. 2.2). According to LCSD's computer records, serviceable items included:

- (a) items available to the public (e.g. in the lending collections on library shelves and the reference collections for use in the libraries);
- (b) items under processing (see paras. 2.29 to 2.32); and
- (c) items that were temporarily unavailable to the public.

Note 19: *According to LCSD, a community library is eligible to participate in the Scheme only if it fulfills the requirements on donation set out in the Stores and Procurement Regulations, i.e. it is an NGO established solely or principally for education, scientific, cultural or charitable purpose.*

Collection development and management

Non-serviceable materials were also included in the records. Table 8 shows an analysis of the records as at 22 December 2022 and 31 January 2023.

Table 8

**Status of HKPL's library materials
(22 December 2022 and 31 January 2023)**

Status	22 December 2022	31 January 2023
	Number of items ('000)	
Before service to the public (i.e. under processing)	143 (1%)	132 (1%)
Available to the public	13,857 (81%)	14,144 (81%)
Temporarily unavailable to the public (e.g. action required, under review)	655 (4%)	380 (2%)
Serviceable	14,655 (86%)	14,656 (84%)
Non-serviceable (e.g. pending for withdrawal, missing)	2,423 (14%)	2,706 (16%)
Total	17,078 (100%)	17,362 (100%)

Source: Audit analysis of LCSD records

Remarks: Library materials for new libraries were excluded.

2.44 Audit noted that there was a discrepancy between the number of serviceable items in the computer records (i.e. 14.7 million) and the number of items of library materials reported on HKPL's website (i.e. 15.2 million). The discrepancy was mainly due to the inclusion of about 0.6 million "pending for withdrawal" items (under the category of "non-serviceable") in the reported library stock figure. Upon enquiry, LCSD informed Audit in March 2023 that an item remained in the library stock until the withdrawal process was completed and hence, the official stock figure shown on the website should include the "pending for withdrawal" items which had not been formally withdrawn.

Collection development and management

2.45 While noting LCSD’s explanations, given that the number of items of library materials not available to the public is not small (e.g. 0.65 million “temporarily unavailable to the public” items and about 0.6 million “pending for withdrawal” items, totalling 1.3 million items which accounted for 9% of the 15.2 million items as of December 2022), for the sake of accountability and transparency, LCSD needs to consider disclosing the availability status of library materials in reporting the total number of items in HKPL’s collections.

2.46 Audit conducted an ageing analysis of the “temporarily unavailable to the public” items and the “non-serviceable” items as at 31 January 2023 (see Table 9), and noted that:

- (a) the majority of the items had been classified under these categories for 1 year or more, representing 75% of the “temporarily unavailable to the public” items and 78% of the “non-serviceable” items; and
- (b) 6% of the “temporarily unavailable to the public” items and 32% of the “non-serviceable” items had been classified under these categories for more than 5 years.

Table 9

**Ageing analysis of “temporarily unavailable to the public”
and “non-serviceable” library materials
(31 January 2023)**

Number of years classified under the category	Temporarily unavailable to the public	Non-serviceable
	Number of items ('000)	
< 1 year	96 (25%)	591 (22%)
1 to 5 years	262 (69%)	1,248 (46%)
> 5 years	22 (6%)	867 (32%)
Total	380 (100%)	2,706 (100%)

Source: Audit analysis of LCSD records

Collection development and management

2.47 Library materials identified as non-serviceable (excluding items not found) would take up storage space. Under LCSD's current practice, these materials would be withdrawn and disposed of by paper recycling or donated through the Books Sharing in the Community Scheme (see paras. 2.36 and 2.40). In Audit's view, LCSD needs to expedite the processing of the "non-serviceable" items. As for the materials classified as "temporarily unavailable to the public", LCSD also needs to expedite the follow-up actions with a view to making the items available to the public as soon as practicable.

Need to step up efforts in examining library materials for safeguarding national security and taking follow-up actions

2.48 The Law of the People's Republic of China on Safeguarding National Security in the Hong Kong Special Administrative Region (National Security Law) was implemented on 30 June 2020. The National Security Law stipulates that it is the constitutional duty of the Hong Kong Special Administrative Region to safeguard national security. The Government shall take necessary measures to strengthen public communication, guidance, supervision and regulation over matters concerning national security, including those relating to the Internet. According to LCSD, to ensure effective fulfillment of its duty to safeguard national security, it would make sure that the library collections are not contrary to the interests of national security during its work on acquisition and maintenance of library materials. The measures taken include:

- (a) HKPL had re-examined and updated the procedures for and guidelines on purchasing library materials and accepting donations of books and periodicals. Safeguarding national security had now been included as one of the considerations to ensure that the library collections for loan by members of the public free of charge conform to the laws of Hong Kong (see para. 2.6); and
- (b) in addition to carefully selecting library materials to be included in the library collections, HKPL also, taking into account complaints/enquiries and national security risk considerations, conducted a preliminary review of its library stock to identify materials with contents which may be contrary to the interests of national security. Any library material which was suspected of breaching the National Security Law or other laws would be suspended from library services. Upon careful examination, if it was ascertained that the content of the material concerned posed a risk of

violating the law, it would be withdrawn from the library collections permanently and disposed of. Only when the material concerned was ascertained that its content did not violate the relevant laws would it be put on library shelves again.

2.49 Audit noted that the preliminary review of the library materials commenced in 2021. Since then, LCSD has been conducting examination of the materials identified in the preliminary review for taking necessary follow-up actions (i.e. suspension from library services, withdrawn for disposal or resumption of library services). Up to February 2023, the examination work and the aforementioned follow-up actions were still in progress.

2.50 Upon enquiry, LCSD informed Audit in March 2023 that:

- (a) it was an on-going exercise to examine library books for safeguarding national security. HKPL needed to examine library materials from time to time upon receiving complaints from the public. Hence, the number of books to be examined was increasing continuously. It was unlikely that there was a clear end date for book examination;
- (b) library books varied in complexity of content, and hence there was no standard indicator on the number of days required for completion of examining a library book; and
- (c) as HKPL had a vast collection of over 2 million titles, LCSD had to set priorities for examining library books. HKPL had already completed a preliminary review of its library stock including publications of those authors or publishers that had been suspected of publishing books on “Hong Kong independence” previously.

2.51 In Audit’s view, LCSD needs to step up efforts in examining library materials for safeguarding national security and taking the related follow-up actions.

Need to review sample size for stocktaking library materials

2.52 Stocktaking of library collections helps maintain the accuracy of the library stock records, as well as facilitate both library users and staff to search and retrieve library items effectively. LCSD has set out in its guidelines that each of the branch libraries should conduct an annual stocktake of the library collections. The guidelines have also specified the sample size (on random samples of library materials retrieved from the computer system) for each type of library, which ranges from 50 (for small libraries, mobile libraries and self-service library stations) to 3,960 (for the Hong Kong Central Library). In the 2021-22 stocktaking cycle (from October 2021 to August 2022), some 25,000 items (i.e. about 0.16% of the library stock of some 15 million items) were checked.

2.53 Audit analysed the ratios of the sample size for stocktaking to the inventory level for different types of libraries (see Table 10) and noted that the ratios varied, ranging from 0.07% to 0.8%.

Table 10

**Sample size for stocktaking for different types of libraries
(31 March 2022)**

Library	Sample size (Note 2) (a) (No. of items)	Inventory level (b) (No. of items)	Ratio of sample size to inventory level (c) = (a) ÷ (b) × 100%
• Hong Kong Central Library	3,960	2,830,000	0.14 %
• Major libraries	700 or 750	501,000 to 753,000	0.10 % to 0.15 %
• District libraries (except for 2 libraries (Note 1))	300 or 350	109,000 to 308,000	0.11 % to 0.32 %
• 2 District libraries (Note 1) • Small libraries (except for 6 libraries (Note 1))	150 or 200	51,000 to 108,000	0.17 % to 0.39 %
• 6 Small libraries (Note 1) • Mobile libraries • Self-service library stations	50 or 100	12,000 to 93,000	0.07 % to 0.8 %

Source: Audit analysis of LCSD records

Note 1: According to LCSD, the sample size for the 2 district libraries and 6 small libraries had been adjusted downward having regard to the inventory level.

Note 2: Sample sizes are set for lending collections, reference collections and materials on reserve stacks respectively. For calculating the ratio of sample size to inventory level, the respective sample sizes are aggregated.

2.54 According to LCSD, SLS could automate the data collection process of the stocktaking procedures using the radio frequency identification (RFID) technology (see para. 4.5(b) to (d)). As the sample size on stocktaking of library materials was last reviewed in 2015-16 and that the inventory level has changed over the years (i.e. increased by 13% from 13.5 million in 2014 to 15.2 million in 2022), LCSD needs to review and adjust the sample size as appropriate (e.g. setting the sample size as a percentage of inventory) pending the implementation of SLS.

Need to ensure timely completion and review of stocktaking reports

2.55 According to LCSD, in the 2021-22 stocktaking cycle, a total of 153 stocktaking exercises were conducted and all were with satisfactory results (Note 20). According to LCSD's guidelines, librarians responsible for the stocktakes should complete a first stocktaking report on the same day, and a final stocktaking report within 30 days of the stocktaking day. Audit examined the reports of the stocktakes in 2021-22 and noted room for improvement as follows:

- (a) *Timeliness of completing reports.* There were delays in completing 24 (11%) of the 218 reports (Note 21). The delays ranged from 1 to 203 days, averaging 16 days; and
- (b) *Timeliness of reviewing reports.* The stocktaking reports were submitted to the Chief Librarian overseeing the stocktaking exercise for review. Currently, the guidelines had not set out the timeframe on the review of the reports. Audit noted that the time taken on reviewing the reports varied significantly, ranging from 0 (i.e. on the same day) to 443 days (i.e. 14 months — (Note 22)), averaging 13 days.

2.56 According to LCSD, among the cases with delays in completion and review of the stocktaking reports, some were because of longer time taken in delivery and work-from-home arrangements during the COVID-19 epidemic. In Audit's view, LCSD needs to take measures to ensure the timely completion and review of stocktaking reports (e.g. setting guidelines on the timeframe on reviewing all reports).

Note 20: *According to LCSD's guidelines, any un-located items on the stocktaking day should be located or confirmed outstanding within 30 days. The result of a stocktake is considered satisfactory if the number of items located reaches 97% of the total sample size.*

Note 21: *It is LCSD's general practice that for stocktaking exercises with no discrepancy, only the first stocktaking report is submitted. The 218 reports for the stocktaking exercises in 2021-22 comprised 153 first stocktaking reports and 65 final stocktaking reports.*

Note 22: *In December 2022, Audit found that the reports of two stocktakes (conducted in October 2021 and May 2022) were not signed by the Chief Librarians. Subsequent to Audit's enquiry, the reports were submitted to and reviewed by the Chief Librarians in January 2023 (i.e. 14 months and 7 months respectively after the stocktakes).*

Need to ensure that SLS incorporates functions and capabilities to address issues in collection development and management processes

2.57 Currently, the collection development and management of library materials involve many manual processes and substantial manpower. For example, due to limitations of the current computer systems, some management information is lacking (e.g. analysis of acquisition proportion of library materials by subjects (see para. 2.10(a)); management information on the overall order status of library materials (see para. 2.21); and overall processing time of new library materials (see para. 2.31)). For stocktaking, HKPL only performed manual stocktakes with a small sample size (see paras. 2.52 and 2.53).

2.58 According to LCSD, SLS would improve the collection development and management processes with automated functions and capabilities including the following:

- (a) ***Collection development planning.*** To provide data for preparation of the annual CDPs, perform stock analysis and recommend listing for the withdrawal of library materials;
- (b) ***Acquisition of library materials.*** To facilitate the process on consolidating, reviewing and approving selection lists, creating and placing orders, receiving goods and cancelling orders;
- (c) ***Processing of new library materials.*** To facilitate the process on creating and maintaining bibliographic records, importing data and completing the cataloguing process;
- (d) ***Management information.*** To provide management information, generate operational and ad-hoc reports (e.g. statistics and reports on usage of e-resources, exception reports on missing items for stocktakes); and
- (e) ***Stocktaking.*** To facilitate comprehensive stocktaking on a regular basis with RFID and an inventory module.

2.59 The core functions and remaining functions of SLS are expected to be implemented in March 2024 and September 2025 respectively (see para. 4.6). In

Collection development and management

Audit's view, LCSD needs to ensure that functions and capabilities are incorporated in SLS to address the issues in the collection development and management processes (including those identified by Audit) as far as practicable.

Audit recommendations

2.60 Audit has *recommended* that the Director of Leisure and Cultural Services should:

- (a) ensure that the information on withdrawal of library materials is comprehensive and consistent;**
- (b) keep under review the implementation of the Books Sharing in the Community Scheme, including stepping up efforts in encouraging more community libraries to participate in the Scheme and consider launching the partnership approach at an opportune time;**
- (c) consider disclosing the availability status of library materials in reporting the total number of items in HKPL's collections;**
- (d) expedite the follow-up actions on library materials classified as "non-serviceable" and "temporarily unavailable to the public";**
- (e) step up efforts in examining library materials for safeguarding national security and taking the related follow-up actions;**
- (f) review and adjust the sample size of stocktaking of library materials as appropriate pending the implementation of SLS;**
- (g) take measures to ensure the timely completion and review of stocktaking reports; and**
- (h) ensure that functions and capabilities are incorporated in SLS to address the issues in the collection development and management processes as far as practicable.**

Response from the Government

2.61 The Director of Leisure and Cultural Services agrees with the audit recommendations. He has said that:

- (a) LCSD is taking measures to ensure that comprehensive and consistent withdrawal figures would be available to CDM. This will be achieved by setting 31 December as the report generation date and including all types of withdrawals in the analysis;
- (b) LCSD has been keeping under review the implementation of the Books Sharing in the Community Scheme. LCSD will also continue to explore potential partners for implementing the partnership approach. In fact, LCSD has already been taking measures to encourage participation of community libraries in the Scheme, including: (i) increasing the types and number of books for selection as far as practicable; (ii) providing more time slots for selection; (iii) arranging more rounds of selection on a need basis; (iv) extending the time of collecting the donated books; and (v) strengthening the promotion of the Scheme to the community libraries;
- (c) LCSD will disclose the availability status of library materials in reporting the total number of HKPL's library items;
- (d) while most of the "non-serviceable" and "temporarily unavailable to the public" items were processed timely, LCSD will generate lists of these items to facilitate individual branch libraries to enhance double-checking and expedite follow-up actions;
- (e) LCSD agrees that it is of utmost importance in taking actions to safeguard national security. It is an on-going exercise to examine library books for safeguarding national security. HKPL has already completed the review of library books which are manifestly contrary to the interests of national security and removed them from the library collections. Upon receipt of public complaints on books which are suspected of violating the National Security Law, HKPL will first suspend the services of the relevant books and review their contents. If the books are found contrary to the interests of national security, they will be withdrawn and permanently removed from the library collections;

Collection development and management

- (f) LCSD will take into account the latest inventory level of different types of libraries and operational feasibility in setting the sample size of stocktaking of library materials, where a certain percentage will be adopted to replace the absolute quantity. The measure will be implemented in full in 2023-24;
- (g) while most branch libraries have been able to adhere to the completion of the stocktaking reports in 2021-22 within 30 days in general, the delays encountered were mainly attributed to the epidemic. To further improve the timeliness of completion and review of stocktaking reports, LCSD will, starting from 2023-24, streamline the workflow of completing the stocktaking reports and setting timeframe for signing off the reports by responsible officers to complete the reviewing process; and
- (h) LCSD has been closely monitoring and will continue to steer the development of SLS, the preparation for implementation is now in full swing, with a view to providing suitable functions in relation to collection development planning, acquisition of library materials, processing of new library materials, management information and stocktaking upon the launch of the system.

PART 3: LIBRARY OPERATION

3.1 This PART examines the operation of HKPL, focusing on the following areas:

- (a) library patronage and usage (paras. 3.2 to 3.20);
- (b) processing of returned library materials (paras. 3.21 to 3.34);
- (c) library fees and charges (paras. 3.35 to 3.44); and
- (d) other operational issues (paras. 3.45 to 3.55).

Library patronage and usage

3.2 According to LCSD, the public libraries are evenly spread over the territory of Hong Kong to provide convenient access to a wide range of library services for people of all age groups and walks of life. While free lending of library materials is available at all public libraries, other services and facilities are also offered by most of the public libraries. Such services and facilities include adult libraries, children's libraries, newspaper and periodical services, reference and information services, computer and information centres, multi-media libraries, students' study rooms, extension activities and block loan services.

Need to strengthen actions in encouraging physical visits to libraries

3.3 According to the Strategic Plan of HKPL (2020-2025), one of the missions of HKPL is to enable access by providing a wide network of public libraries for free and equitable access to information and knowledge to serve all residents of Hong Kong (see para. 1.9(a)). The strategy includes reaching out and promoting library services to serve different user segments while continuing to attract user patronage to libraries. Audit examined the number of physical visits to HKPL from 2015 to 2022 and noted that:

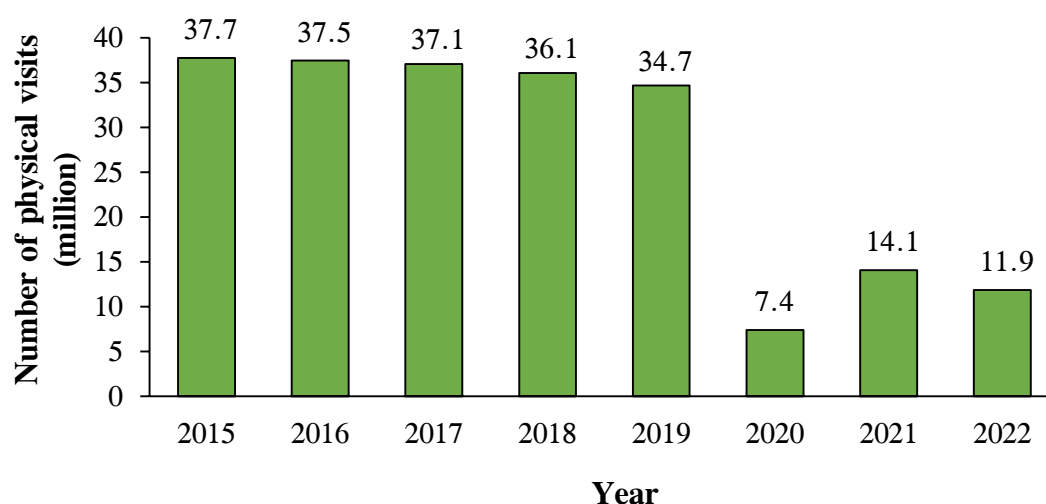
- (a) the number of physical visits to HKPL was generally on a decreasing trend over the years (see Figure 1). The number of physical visits decreased by

Library operation

about 8% from 37.7 million in 2015 to 34.7 million in 2019. The number further decreased significantly by 79% to 7.4 million in 2020. According to LCSD, the decrease was mainly due to the temporary closure and service suspension of libraries in the midst of the COVID-19 epidemic (Note 23). While the number increased by 91% to 14.1 million in 2021 mainly due to the gradual resumption of normal operation as the situation of the COVID-19 epidemic stabilised locally, it decreased by 16% to 11.9 million in 2022 as the libraries were temporarily closed in the first four months under the fifth wave of the COVID-19 epidemic; and

Figure 1

**Number of physical visits to HKPL
(2015 to 2022)**



Source: LCSD records

Remarks: The number of physical visits included visits to static libraries, mobile libraries and Library-on-Wheels.

- (b) while the numbers of physical visits of static libraries were collected according to meters placed at the security gates, the numbers of physical

Note 23: The static libraries, mobile libraries and Library-on-Wheels were closed with services suspended temporarily and intermittently for 169 to 221 days in 2020, 48 to 84 days in 2021, and 82 to 100 days in 2022. The self-service library stations were closed for 127 days in 2020 and remained open in 2021 and 2022.

visits of mobile libraries and Library-on-Wheels were counted by library staff at the entrance manually. In addition, the numbers of physical visits of the three self-service library stations were not collected.

3.4 According to LCSD, public libraries worldwide tend to record a gradual decline in physical visits, loans and usage, partly attributable to the impact of the Internet, bringing information and entertainment at the fingertips. As stated in the Strategic Plan of HKPL (2020-2025), LCSD will continuously enhance the static libraries (e.g. setting up and reprovisioning major and district libraries, such as setting up a new library in Sham Shui Po in 2021) and the library self-services (e.g. launching self-service library stations and the Library-on-Wheels pilot project). Audit noted that for the Sham Shui Po Public Library, the students' study room was open to the public in October 2022. As of December 2022, the library was expected to commence services in the first quarter of 2023 (i.e. more than one year later than the expected commencement date of 2021). In this connection, Audit's research found that in view of the challenges posed by the fast-expanding cyberspace, some public libraries overseas/in the Mainland had taken on new functions (e.g. assigning areas for community activities).

3.5 Upon enquiry, LCSD informed Audit in March 2023 that:

- (a) though the epidemic had affected the physical library services, it had continued to provide online library services with access to e-books and online databases as well as reading and library activities via LCSD Edutainment Channel. With the gradual resumption to normalcy of the society from COVID-19, it was expected that the number of physical visits would gradually increase; and
- (b) HKPL would continue to adopt a multi-pronged approach to promote its services and improve library patronage as directed along with the missions and strategies that were formulated for the development of HKPL. In addition, HKPL had been exploring new ways to upgrade its services and functions. Examples of recent projects which aimed at re-purposing space in the libraries to attract the youth in particular included "CreateInfo Zone" at Young Adult Library of the Hong Kong Central Library and "Smart Learning Space" in the Kowloon Public Library. For new libraries, LCSD was formulating strategies and plans for construction of new cultural facilities (including new libraries) under the 10-year development blueprint

Library operation

on cultural and arts facilities that had been announced in the Policy Measures of the 2022 Policy Address.

3.6 Given the important role of public libraries in education, culture, inclusion and provision of information, LCSD needs to keep under review the number of physical visits to HKPL and take further measures in encouraging visits to public libraries including continuing to upgrade HKPL's services and functions. LCSD also needs to explore the use of IT in collecting data of physical visits to public libraries (including mobile libraries, Library-on-Wheels and self-service library stations) for planning and management purposes.

Need to keep under review library opening hours

3.7 According to IFLA Guidelines, in order to provide the best possible access to library services, a library must be open at times of maximum convenience to those who live, work and study in the community. The opening hours of HKPL vary according to their respective types and functions. At present, the Hong Kong Central Library, major/district libraries, small libraries and mobile libraries open for 74 hours, 71 hours, 14 to 56 hours and 42 hours a week respectively.

3.8 The last major change in library opening hours took place in April 2009, with the opening hours of major and district libraries being extended from 61 or 62 hours to 71 hours per week to provide seven-day-a-week library services. In 2018, LCSD conducted a pilot scheme to extend opening hours at four public libraries for a three-month period. According to the review report of the pilot scheme of February 2019, LCSD had drawn up short-term and long-term plans for the extension of library opening hours, as follows:

- (a) ***Short-term plan (2019 to 2021).*** The short-term measures included launching a three-month trial scheme by selecting three libraries for setting up unmanned service corners after library opening hours by end of 2019. During the extended service hours, only designated reading areas of the libraries would remain open to provide book reading and self-services for borrowing and returning of library materials. In addition, the Library-on-Wheels pilot project (i.e. mobile library with self-service equipment and extended service hours) would be launched by end of 2019; and

- (b) **Long-term plan (2021 to 2023).** With the development of SLS and adoption of RFID technology (see para. 4.5(b)), LCSD would explore measures of extending library opening hours in a more cost-effective way.

3.9 Audit noted that as of January 2023, both the short-term and long-term plans had not been fully implemented as scheduled, as follows:

- (a) **Short-term plan.** While the Library-on-Wheels pilot project was launched in January 2020, the trial scheme for unmanned service corners had not yet been implemented as of December 2022 (i.e. three years after the scheduled date of end of 2019). Upon enquiry, LCSD informed Audit in January 2023 that the setting up of unmanned service corners after library opening hours in existing library venues was found to be impracticable due to the constraints of physical layout and security concerns. New libraries and libraries under renovation projects would be designed to allow access to self-service library services beyond normal opening hours as far as practicable; and
- (b) **Long-term plan.** As of December 2022, there was a delay in the development of SLS by about 9 months (see para. 4.6). Concrete plans on extending library opening hours in a more cost-effective way had yet to be explored.

3.10 Upon enquiry, LCSD informed Audit in March 2023 that:

- (a) with the development of SLS, a wider use of information and communications technology and self-service facilities enabled with RFID technology would enable HKPL to examine options to extend the service hours in a more cost-effective and sustainable manner in the long run. For instance, RFID-enabled facilities for pickup of reserved library materials could be installed outside branch libraries where feasible for providing services beyond the normal opening hours; and
- (b) it was planning to set up a “Self-service Zone” in newly built branch libraries (e.g. Lei King Road Public Library) in which extended hours of convenient access of books, self-charging and self-returning services, and pickup lockers/dispensers would be available.

3.11 From time to time, LCSD received requests from the public and the District Councils for extension of library opening hours. To improve the accessibility of library services, LCSD needs to expedite efforts in implementing the planned measures (e.g. unmanned operation) for providing longer library service hours.

Room for improvement in setting performance measures and achieving targets on usage of library services

3.12 According to IFLA Guidelines, the availability of reliable performance information is a necessary tool for evaluation and the improvement of efficiency, effectiveness and quality of service. A number of key performance indicators have been suggested in IFLA Guidelines to evaluate and monitor the achievement of the library's objectives, including usage indicators. LCSD has set in its COR key performance measures (including targets and indicators) in respect of usage of library services of HKPL, including registered borrowers, items of library materials borrowed and virtual visits.

3.13 ***Some key performance targets on usage of library services not met.*** Table 11 shows the achievement of the performance targets on usage of library services from 2015 to 2022. Audit noted that the targets on items of library materials borrowed and virtual visits were not always met, as follows:

- (a) ***Items of library materials borrowed.*** While the target on items of library materials borrowed decreased by 18% from 55 million in 2015 to 45 million in 2022, HKPL still did not meet the target for eight consecutive years from 2015 to 2022 (with shortfalls ranging from 3% to 50%). According to LCSD:
 - (i) the target was revised having regard to the changing pattern in the use of physical library materials and e-books, as well as the growing trend of an Internet-based lifestyle in society while more varieties of free online reads/resources were available conveniently for access via the Internet; and
 - (ii) the shortfalls between the target and actual figures in 2020 to 2022 were mainly due to the impact of anti-epidemic measures including the temporary closure of public libraries and service suspension. The increase in actual figure in 2021 was mainly due to the gradual

resumption of normal operation as the situation of the COVID-19 epidemic stabilised locally; and

- (b) **Virtual visits.** For virtual visits, HKPL did not meet the target of 25 million in 2020 to 2022, with shortfalls ranging from 22% to 31%. According to LCSD, the suspension of services (such as borrowing and onsite reading) as a result of the temporary closure of libraries in the midst of the COVID-19 epidemic had led to the decrease in the number of virtual visits in 2020 to 2022.

Table 11

**Achievement of performance targets
on registered borrowers, items of library materials borrowed and virtual visits
(2015 to 2022)**

	2015	2016	2017	2018	2019	2020	2021	2022
	Number ('000)							
Registered borrowers								
Target (a)	4,330	4,330	4,330	4,330	4,330	4,330	4,330	4,330
Actual (b)	4,372	4,454	4,533	4,610	4,682	4,710	4,770	4,820
Variance (c)=(b)−(a)	42	124	203	280	352	380	440	490
(%) (d)=(c)÷(a)×100%	(1%)	(3%)	(5%)	(6%)	(8%)	(9%)	(10%)	(11%)
Items of library materials borrowed								
Target (e)	55,000	52,000	52,000	51,000	51,000	48,000	45,000	45,000
Actual (f)	51,344	50,504	50,251	48,009	45,018	23,852	29,205	24,302
Variance (g)=(f)−(e)	(3,656)	(1,496)	(1,749)	(2,991)	(5,982)	(24,148)	(15,795)	(20,698)
(%) (h)=(g)÷(e)×100%	(-7%)	(-3%)	(-3%)	(-6%)	(-12%)	(-50%)	(-35%)	(-46%)
Virtual visits (Note)								
Target (i)	20,000	20,000	20,000	25,000	25,000	25,000	25,000	25,000
Actual (j)	23,755	24,156	26,194	25,923	25,481	18,508	19,405	17,137
Variance (k)=(j)−(i)	3,755	4,156	6,194	923	481	(6,492)	(5,595)	(7,863)
(%) (l)=(k)÷(i)×100%	(19%)	(21%)	(31%)	(4%)	(2%)	(-26%)	(-22%)	(-31%)

Source: Audit analysis of LCSD records

Note: Virtual visits refer to the number of single visits (sessions) to the relevant websites/online services of HKPL, regardless of the number of web pages viewed.

Library operation

3.14 As the library operation has resumed normal, LCSD needs to strengthen actions to improve the usage of library services and closely monitor the achievement of related performance targets.

3.15 ***Room for improvement in setting performance measures on usage of library services.*** Audit noted the following issues regarding the performance measures on usage of library services of HKPL:

(a) ***Usage of e-books and e-databases not included in performance measures in LCSD's COR.*** The performance target of library materials borrowed did not include the usage of e-books and e-databases. Besides, according to LCSD, the performance target on virtual visits referred to the number of single visits (sessions) to the relevant websites/online services of HKPL, and the usage of e-resources could not be reflected as the e-book collections and e-databases had to be accessed through the platforms provided by respective service providers. Upon enquiry, LCSD informed Audit in March 2023 that:

(i) unlike the usage of lending physical materials which could be measured by an objective and unified metric of circulation rate, there was currently no universally accepted way of measuring use counts of e-books and e-databases. Different vendors adopted different means of measures. In light of the heterogeneous nature of e-resources, it was infeasible to formulate a single index for measuring the usage of an array of e-resources providing a wide variety of materials through different modes of services; and

(ii) the total usage of e-books reported to the public so far was merely a proxy for portraying a rough picture of the utilisation of e-book usage, not an authoritative or scientific figure for the purpose of performance target. HKPL would explore the availability of any internationally accepted indicator for measuring the usage of e-resources; and

(b) ***Room for improvement concerning performance measures for registered and active borrowers.*** The usage indicators suggested in IFLA Guidelines include registrants versus active registrants (an active borrower refers to a registered user who has borrowed at least one item during the reporting period). LCSD had set in its COR a performance target for registered

borrowers and two related indicators (i.e. registered borrowers as percentage of population and items on loan per registered borrower). Audit noted that:

- (i) the number of registered borrowers increased by about 10% from about 4.37 million as of 2015 to about 4.82 million as of 2022. During the seven-year period, on average, there were about 64,700 new registered borrowers per year and about 800 borrowers de-registered per year (Note 24). According to LCSD, the cancellation of registration was mainly initiated by borrowers (Note 25). Audit noted that the number of de-registration was not high (Note 26); and
- (ii) no performance indicators had been set on active borrowers as suggested in IFLA Guidelines. As of December 2022, the number of active registered borrowers (i.e. borrowing physical library materials within the last 12 months) was about 566,400 (i.e. about 12% of 4.82 million registered borrowers in 2022).

3.16 In light of the audit findings, LCSD needs to review the key performance targets and indicators on the usage of library services in its COR and take follow-up actions as appropriate (e.g. exploring the availability of suitable targets/indicators on the usage of e-resources, and introducing more targets/indicators such as active borrowers). Regarding the performance target on registered borrowers, LCSD needs to explore measures to remove deceased registered borrowers as far as practicable.

Note 24: *According to LCSD, it did not record the reasons for de-registration.*

Note 25: *According to LCSD, family members or friends of a deceased patron may approach the library and enquire the handling of items of the deceased patron's account with the provision of library account information and official documents which can indicate the date of death (e.g. death certificate).*

Note 26: *According to the statistics of the Census and Statistics Department, in the seven-year period from 2016 to 2022, the total number of deaths was 354,100 (averaging about 50,600 per year).*

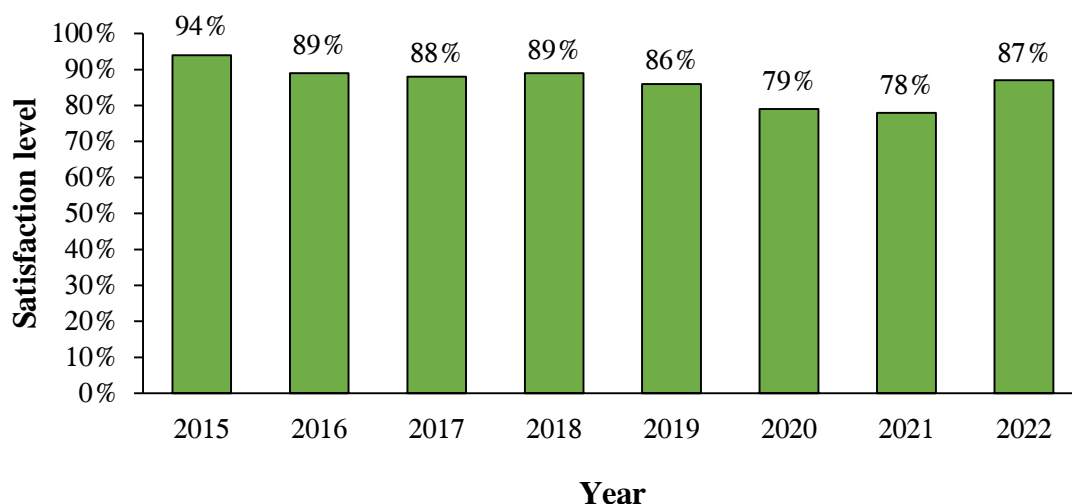
Need to keep under review reader satisfaction level

3.17 LCSD conducts reader liaison group workshops and/or reader opinion surveys annually to collect the level of readers' satisfaction on various aspects of library facilities and services. Audit noted that based on the results of the annual reader opinion surveys conducted in the period from 2015 to 2022, the reader satisfaction level (i.e. rating as satisfied/satisfactory or very satisfied/very good) for overall impression of HKPL decreased from 94% in 2015 to 87% in 2022 (see Figure 2). Upon enquiry, LCSD informed Audit in March 2023 that:

- (a) a three-point rating scale (i.e. very good, satisfactory and unsatisfactory) was adopted in the feedback form in 2015 while a five-point rating scale (i.e. very satisfied, satisfied, average, dissatisfied and very dissatisfied) was adopted from 2016 onwards, which might attribute to the noticeable change of the reader satisfaction level after 2015; and
- (b) it was believed that the decrease in the reader satisfaction level, in particular in 2020 and 2021, was mainly due to the temporary closure of libraries and the implementation of social distancing measures such as reduced number of seats and limited admission quota for library programmes under the impact of the COVID-19 epidemic. With the gradual resumption of normal operation of HKPL, the reader satisfaction level recorded an increase to 87% in 2022.

Figure 2

**Reader satisfaction level for overall impression of HKPL
(2015 to 2022)**



Source: LCSD records

3.18 Audit noted that while the reader satisfaction level increased to 87% in 2022, it was still slightly below the level in 2018 or before. In Audit's view, LCSD needs to keep under review the reader satisfaction level on HKPL and take measures to further improve the library facilities and services as appropriate.

Audit recommendations

3.19 Audit has *recommended* that the Director of Leisure and Cultural Services should:

- (a) keep under review the number of physical visits to HKPL and take further measures in encouraging visits to public libraries including continuing to upgrade HKPL's services and functions;
- (b) explore the use of IT in collecting data of physical visits to public libraries (including mobile libraries, Library-on-Wheels and self-service library stations) for planning and management purposes;

Library operation

- (c) **expedite efforts in implementing the planned measures (e.g. unmanned operation) for providing longer library service hours;**
- (d) **strengthen actions to improve the usage of library services and closely monitor the achievement of related performance targets;**
- (e) **review the key performance targets and indicators on the usage of library services in LCSD's COR and take follow-up actions as appropriate;**
- (f) **explore measures to remove deceased registered borrowers as far as practicable; and**
- (g) **keep under review the reader satisfaction level on HKPL and take measures to further improve the library facilities and services as appropriate.**

Response from the Government

3.20 The Director of Leisure and Cultural Services agrees with the audit recommendations. He has said that:

- (a) LCSD has noted a changing pattern in the use of public library services, having regard to, inter alia, the growing trend of an Internet-based lifestyle in the society and easy access to information on the Internet. To keep abreast of the needs of the public under the changing environment, LCSD has been devoting efforts to devise strategies in developing and enriching the library services in different aspects. In particular, the newly introduced "CreateInfo Zone" and "Smart Learning Space" in libraries where technically feasible (see para. 3.5(b)) aim to recreate libraries as a community focal point. LCSD will continue to strengthen the promotion and publicity of enhanced services and facilities through different channels, including social media and interactive platforms to arouse public awareness and interests in using HKPL's services and encourage physical visit to libraries;

- (b) LCSD will explore the use of IT to count and collect data of physical visits to mobile libraries, Library-on-Wheels and self-service library stations for planning and management purposes, and for replacing the current practice of physical counting;
- (c) taking the opportunity of SLS development, the full implementation of RFID-enabled facilities will enable HKPL to explore the extension of the service hours in a cost-effective and sustainable manner. LCSD has been expediting efforts in planning for longer library service hours in a self-service delivery mode. The preparation works for installation of RFID-enabled self-service facilities in existing libraries are underway, with a view to providing longer service hours of the RFID-enabled facilities at libraries where technically feasible upon the launch of SLS. Besides, the provisions and space for accommodating new self-service library facilities have already been incorporated in the design of new library projects;
- (d) LCSD has already adopted a multi-pronged approach to promote the usage of library services and to monitor the performance to achieve targets. LCSD will continue to strengthen the existing measures which include:
 - (i) providing a current and relevant collection for people of all ages in physical and digital formats;
 - (ii) promoting awareness and use of the physical collection and e-resources to arouse users' interests in various subject disciplines;
 - (iii) reaching out and promoting library services to serve different user segments (such as out-reaching programmes in collaboration with community partners to raise awareness and expand readership);
 - (iv) promoting reading with more utilisation of library collections via electronic means and web channels; and
 - (v) organising a wide variety of reading activities at both territory and district levels to enhance reading experience and expand readership to different user segments and non-library users.

Library operation

In addition, LCSD has planned to organise large scale reading activities under “Hong Kong Reading Day” from 2024 onwards to synchronise with the Hong Kong Book Fair in July each year for promotion of reading;

- (e) LCSD has been keeping under review the key performance targets and indicators on the usage of library services in COR through yearly comparison and taking follow-up actions as appropriate;
- (f) despite the difficulties in identifying deceased registered borrowers, LCSD will study and explore further measures to remove such borrowers as far as practicable on top of the existing procedures for handling the report of deceased registered borrowers; and
- (g) LCSD has all along been keeping under review the reader satisfaction level. With the exception of 2015 during which a different feedback form was adopted as well as 2020 and 2021 when libraries were closed intermittently due to the COVID-19 epidemic (see para. 3.17(a) and (b)), the reader satisfaction level has been generally maintained at a level ranging from 86% to 89% from 2016 to 2022.

Processing of returned library materials

3.21 HKPL provides lending services to registered borrowers. Each registered borrower may borrow a maximum of 8 items of library materials together with accompanying library materials, or a maximum of 16 items of back issues of periodicals. Borrowers may borrow and return library materials at any public library and the self-service library stations, and may also use the book drop service of HKPL (including the service at the three MTR stations) to return library materials. The returned library materials will be sorted and delivered back to the holding library.

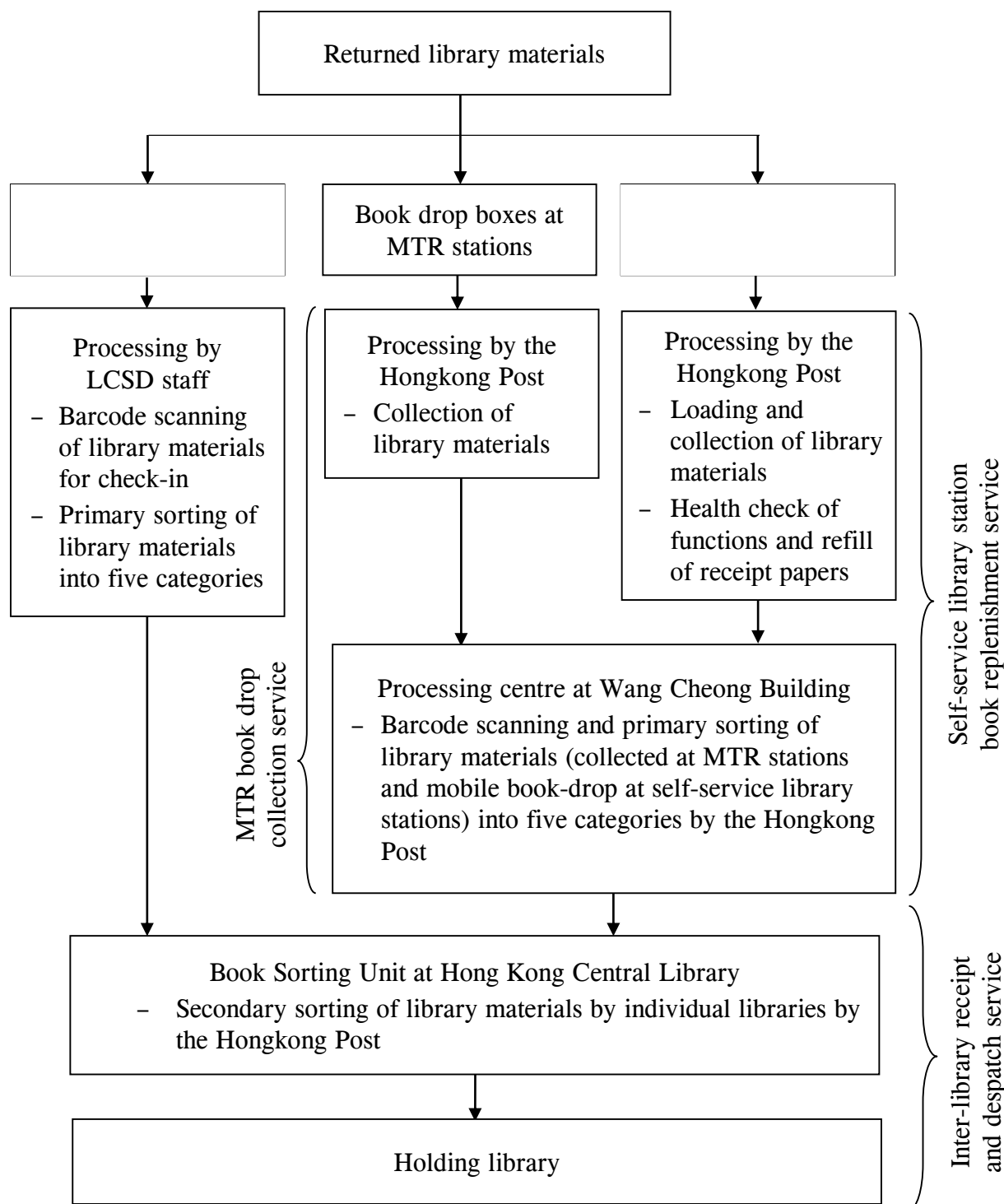
3.22 To facilitate the processing of returned library materials, LCSD has engaged the Hongkong Post to provide the inter-library receipt and despatch service, MTR book drop collection service and self-service library station book replenishment service. LCSD and the Hongkong Post have signed a Service Level Agreement (SLA) for the provision of the services. The current SLA covered the period from October 2019 to September 2022, and an addendum was made for the extension of service period for one year to September 2023. The services provided by the Hongkong Post under the current SLA are as follows:

- (a) ***Inter-library receipt and despatch service.*** When the library materials are returned to 82 libraries (comprising 70 static libraries and 12 mobile libraries), LCSD staff will carry out barcode scanning of the library materials for check-in and primary sorting of library materials (for those belonging to other libraries) into five categories (i.e. reserved library materials, the Hong Kong Central Library, Hong Kong Island, Kowloon and the New Territories areas). The Hongkong Post provides the scheduled inter-library receipt and despatch service among the 82 libraries and two sorting/processing centres (i.e. the Book Sorting Unit at the Hong Kong Central Library and the processing centre at Wang Cheong Building in Cheung Sha Wan);
- (b) ***MTR book drop collection service.*** The service includes scheduled collection of library materials from the drop-in boxes at the three MTR stations and conveyance to the processing centre at Wang Cheong Building twice daily. In addition, the service covers barcode scanning for check-in and primary sorting of collected library materials into five categories (see (a) above) at Wang Cheong Building; and
- (c) ***Self-service library station book replenishment service.*** The service includes daily scheduled library materials loading and collection services, health check of functions (including loading, check-out, check-in and receipt printing) and refill of receipt papers at the three self-service library stations. In addition, the service covers conveyance of library materials collected to the processing centre at Wang Cheong Building, barcode scanning for check-in and primary sorting of library materials collected from mobile book-drop (i.e. those returned by the public during loading and unloading of books of the stations) into five categories (see (a) above).

Figure 3 summarised the major steps in processing returned library materials.

Figure 3

Major steps in processing returned library materials



Source: Audit analysis of LCSD records

Need to review requirements of outsourced returned library materials processing services

3.23 Under the current SLA between LCSD and the Hongkong Post, the total service fee for the period from October 2019 to September 2022 was about \$50 million. The service charge for each service and the respective number of library materials processed (see Table 12) were as follows:

- (a) ***Inter-library receipt and despatch service.*** For the inter-library receipt and despatch service for the 82 public libraries, the service charge was based on the number of library materials processed. For the period from October 2019 to September 2022, on average, the service charge was about \$2.53 per library material and 341,494 library materials were processed per month. The addendum for the extension of one-year service period (from October 2022 to September 2023) added a minimum monthly service charge of \$973,000 for processing 350,000 library materials or below. Audit noted that from October to December 2022, the number of library materials processed was below 350,000 for 1 (33%) of the 3 months, and a minimum monthly service charge was paid for the month;
- (b) ***MTR book drop collection service.*** For the MTR book drop collection service, the service charge was based on the number of library materials processed, with a minimum monthly service charge (gradually increased from \$348,080 to \$380,120 during the three-year period) for processing 30,000 library materials or below. Audit noted that for the period from October 2019 to September 2022, on average, the service charge was about \$18.31 per library material and 19,963 library materials were processed per month, which was about 33% below the minimum monthly guarantee level of 30,000 library materials; and
- (c) ***Self-service library station book replenishment service.*** For the self-service library station book replenishment service, the service charge was a monthly lump-sum fee (Note 27). According to LCSD, when reviewing the arrangement of the current SLA in 2019, it had not taken into

Note 27: *In 2017 (i.e before the launch of the first self-service library station), when considering the amount of lump-sum fee for the service to be added in an addendum to the then SLA, LCSD estimated that based on the Hongkong Post's quotation and the projection of 49,500 library materials to be processed by the three stations per month, the estimated service charge was about \$4.3 per library material.*

Library operation

account the number of library materials processed, instead a monthly lump-sum charge for completing all the required tasks (including routine and ad hoc tasks) within an agreed time period and cost was adopted. Audit noted that for the period from October 2019 to September 2022, on average, the service charge was about \$19 per library material and 14,077 library materials were processed per month.

Table 12

**Service charges and library materials processed under SLA
(October 2019 to September 2022)**

	Inter-library receipt and despatch service	MTR book drop collection service	Self-service library station book replenishment service
Basis of service charge	No. of library materials processed	No. of library materials processed	Lump-sum fee
Service charge (a)	\$29,404,212	\$12,059,160	\$8,560,324
No. of library materials processed (b)	11,610,807	658,766	450,457
Average service charge per library material (c) = (a) ÷ (b)	\$2.53	\$18.31	\$19.00
Average no. of library materials processed per month (d) (Note)	341,494	19,963	14,077

Source: Audit analysis of LCSD records

Note: According to LCSD, for the 36-month period from October 2019 to September 2022, the services under SLA had been suspended for certain periods with no service charge from the Hongkong Post. In calculating the average number of library materials processed per month, the base period referred to the period with services provided, as follows:

- (a) inter-library receipt and despatch service: 34 months (service suspended for 2 months);*
- (b) book drop service at MTR stations: 33 months (service suspended for 3 months); and*
- (c) self-service library stations: 32 months (service suspended for 127 days or about 4 months).*

3.24 Audit noted that the number of library materials processed under the inter-library receipt and despatch service was sometimes below the minimum monthly guarantee level, and that under the MTR book drop collection service was considerably below the minimum monthly guarantee level (see para. 3.23(a) and (b)). For the self-service library station book replenishment service, LCSD had not taken into account the number of library materials processed in reviewing the arrangement of the current SLA in 2019 (see para. 3.23(c)). Audit considers that LCSD needs to review the requirements of the outsourced returned library materials processing services, including the estimated/minimum number of library materials processed and the service charges.

Scope for improvement in engagement of service provider for processing returned library materials

3.25 The services of the Hongkong Post for processing returned library materials were procured directly without recourse to competitive bidding. Approval had been obtained in accordance with the Financial Circular (Note 28). According to LCSD, it had explored the possibility of open bidding for the provision of services but considered not feasible, the reasons included:

- (a) in 2016, when reviewing the arrangement for the previous SLA (for the period from October 2016 to September 2019), LCSD found that the IT systems used by the commercial service providers could not synchronise with HKPL's system, and a further feasibility study on the system integration would be required for tracking and acknowledgement of in-transit library items if the services were to be contracted out; and

Note 28: *According to the Financial Circular on procurement of services involving trading funds, a Controlling Officer may enter into SLA with the trading fund direct, without recourse to competitive bidding, if the Controlling Officer is clearly satisfied that:*

- (a) *a trading fund is fully capable of delivering in a cost-effective manner specific services that his or her department needs; and*
- (b) *having regard to the circumstances of the case (such as urgency or the special requirements of the services required), inviting competitive bidding for the delivery of such services is not appropriate.*

- (b) in 2019, when LCSD reviewed the arrangement of the current SLA, it decided to include in the tender specifications of SLS the requirements of a central sorter and a new logistics tracking system. According to LCSD, the future logistics tracking process would be solely handled by the new logistics tracking system and the integration with external IT systems of service providers would no longer be required. The concerns on tracking and acknowledgement arrangement should be duly addressed upon the implementation of SLS by 2024 tentatively and the services would then be ready for open bidding.

3.26 *Need to adopt open bidding as soon as practicable.* According to LCSD, the central sorter, which would support both barcode and RFID technology, would replace the manual sorting of inter-library book transfer at the Book Sorting Unit at the Hong Kong Central Library. The central sorter with barcode mode sorting was originally planned to be launched in mid-2022, while the central sorter with RFID mode sorting together with the new logistics tracking system were planned for launch with the core library functions of SLS in mid-2023. Upon enquiry, LCSD informed Audit in February and March 2023 that:

- (a) due to the delay in the implementation of SLS (see para. 4.6) and the COVID-19 epidemic, the rollout schedule for the central sorter (barcode mode only) had been revised to April 2023; and
- (b) the central sorter with RFID mode sorting and the new logistics tracking system would be available with the launch of the core library functions of SLS in March 2024.

3.27 As stipulated in the Stores and Procurement Regulations, the policy of government procurement is underpinned by, inter alia, the principle of open and fair competition, and as a norm, open bidding should be adopted as far as practicable. According to LCSD, the provision of returned library materials processing services would be ready for open bidding upon the implementation of SLS (see para. 3.25(b)). In Audit's view, LCSD needs to closely monitor the implementation progress of the central sorter and the new logistics tracking system of SLS, and adopt open bidding for the provision of returned library materials processing services as soon as practicable.

3.28 *Room for streamlining procedures in processing returned library materials.* Audit noted that, for the MTR book drop collection service and self-service library station book replenishment service, the library materials returned were subject to two rounds of sorting by the Hongkong Post at two locations (see Figure 3 in para. 3.22). While the central sorter would replace the manual secondary sorting conducted at the Hong Kong Central Library (see para. 3.26), the primary sorting would still be carried out manually at the processing centre at Wang Cheong Building. Upon enquiry, LCSD informed Audit in March 2023 that:

- (a) the primary sorting would only be required during the transition period when the central sorter was running with barcode mode sorting, i.e. before the launch of the core library functions of SLS (including the new logistics tracking system) and the RFID mode sorting of central sorter; and
- (b) the library system would support all sorting at one location after the full launch of RFID mode sorting.

In Audit's view, LCSD needs to explore measures to streamline the procedures in processing returned library materials to enhance effectiveness and efficiency (e.g. carrying out all sorting at one location upon the implementation of SLS).

Need to strengthen monitoring of compliance with performance standards

3.29 The SLA between LCSD and the Hongkong Post stipulates the performance standards for the provision of services. The performance standards under the current SLA are shown in Table 13.

Table 13

**Performance standards for provision of services under SLA
(October 2019 to September 2023)**

Service type	Performance standard
Inter-library receipt and despatch service	Library materials should be delivered to the holding library by A+3 for non-peak season and A+4 for peak season (Note)
MTR book drop collection service	Achievement of 98% for completion of scanning all collected library materials for check-in within 34 hours after collection at MTR stations
Self-service library station book replenishment service	All library materials collected should be returned to the processing centre at Wang Cheong Building on the same day and despatched to the Book Sorting Unit at the Hong Kong Central Library on the following day

Source: LCSD records

Note: According to the SLA, “A” is the date of collecting the library materials by the Hongkong Post and “3” and “4” are the number of working days.

3.30 According to LCSD, the following measures have been adopted to monitor the compliance with the performance standards:

- (a) ***Inter-library receipt and despatch service.*** Regular sorting-cum-delivery service tests are conducted to ensure compliance with the performance standard. Every two months, three to four selected libraries will conduct the testing (including selecting at least three titles of library materials for testing the delivery and sorting services). The Hongkong Post will be required to provide justifications for the failure to meet the performance standards;
- (b) ***MTR book drop collection service.*** The Hongkong Post is required to generate daily statistical reports from HKPL’s system which will record the number of returned library materials checked in per MTR trip for collecting library materials. The Hongkong Post staff will also input the statistical data and necessary information in computerised spreadsheets for

submission to LCSD to ensure compliance with the performance standard;
and

- (c) ***Self-service library station book replenishment service.*** LCSD monitors the performance of the Hongkong Post via closed-circuit television daily and performs monthly regular on-site surprise inspections to check the Hongkong Post's staff attendance and any irregularities. LCSD also conducts random checks on the transaction logs from HKPL's system for the Hongkong Post's performance of check-in and despatch duties.

3.31 For monitoring of the compliance with the performance standards under SLA, Audit noted the following room for improvement:

- (a) ***No penalty for not meeting performance standards.*** Audit noted that the performance standards were not always achieved by the Hongkong Post, as follows:
 - (i) for the inter-library receipt and despatch service, for the period from October 2019 to September 2022, a total of 221 library materials had been selected for sorting-cum-delivery service tests, of which the delivery time for 9 (4%) items did not meet the performance standard (i.e. A+3/A+4 where applicable — see Table 13 in para. 3.29) with the longest time of 10 days. According to the Hongkong Post, the longer delivery time was mainly due to items being mis-sorted to the wrong libraries; and
 - (ii) for the MTR book drop collection service, in 2022, the Hongkong Post had collected the library materials at the three MTR stations 2,150 times, of which the scanning of all collected library materials for check-in was completed within 34 hours for 2,096 (97.5%) times and longer than 34 hours for 54 (2.5%) times. Hence, the performance standard of “achievement of 98% for completion of scanning all collected library materials for check-in within 34 hours” (see Table 13 in para. 3.29) was not met for the year. According to the Hongkong Post and LCSD, the 54 failed times occurred during the fifth wave of the COVID-19 epidemic between February and April 2022 due to reduced manpower and closure of the venue for sterilisation.

Library operation

Audit noted that there was no clause in SLA specifying the penalty for not meeting the performance standards. In Audit's view, LCSD needs to consider incorporating penalty clauses for non-compliances with performance standards in future service agreements; and

- (b) ***Compliance with performance standards of self-service library station book replenishment service not monitored.*** According to LCSD, regular on-site surprise inspections and random checks on the transaction logs from HKPL's system are conducted to check the Hongkong Post's staff attendance and any irregularities (see para. 3.30(c)). However, Audit noted that the inspections and checks mainly covered the operation of the self-service library stations (such as cleanliness and serviceability of the stations) but not on the compliance with the performance standards (i.e. timeliness in delivery of library materials to processing centre/Book Sorting Unit — see Table 13 in para. 3.29). In Audit's view, LCSD needs to take measures to monitor the compliance with the performance standards for the self-service library station book replenishment service.

Audit recommendations

3.32 **Audit has *recommended* that the Director of Leisure and Cultural Services should:**

- (a) **review the requirements of the outsourced returned library materials processing services, including the estimated/minimum number of library materials processed and the service charges;**
- (b) **closely monitor the implementation progress of the central sorter and the new logistics tracking system of SLS, and adopt open bidding for the provision of returned library materials processing services as soon as practicable;**
- (c) **explore measures to streamline the procedures in processing returned library materials to enhance effectiveness and efficiency (e.g. carrying out all sorting at one location upon the implementation of SLS);**

- (d) **consider incorporating penalty clauses for non-compliances with performance standards in future agreements for the outsourced returned library materials processing services; and**
- (e) **take measures to monitor the compliance with the performance standards for the self-service library station book replenishment service.**

Response from the Government

3.33 The Director of Leisure and Cultural Services agrees with the audit recommendations. He has said that:

- (a) LCSD is taking measures to review the requirements of the outsourced returned library materials processing services, including the estimated/minimum number of library materials processed and the service charges when drawing up requirements in the new SLA in 2023;
- (b) the central sorter is being installed and tested for the launching of the barcode mode sorting during the transition period starting from the second quarter of 2023 (i.e. before the launch of the new logistics tracking system of SLS). The progress of further implementation of the RFID mode sorting together with the launch of the new logistics tracking system planned for commissioning upon the launch of SLS will be closely monitored. Upon launch of the new system, LCSD will adopt open bidding for the provision of returned library materials processing services when practicable;
- (c) LCSD is taking measures to streamline the procedures in processing returned library materials by setting up a new central sorting centre to accommodate the existing sorting centres for processing returned library materials in one location. LCSD has identified a possible site of new government joint-user complex to set up the new central sorting centre and the planning work is underway;
- (d) LCSD will continue to closely monitor the performance of the Hongkong Post under the SLA, and is taking measures to incorporate penalty clauses for non-compliances with performance standards in the new SLA for the outsourced returned library materials processing services in 2023; and

Library operation

- (e) LCSD is exploring measures to enhance the monitoring of the performance standards for self-service library station book replenishment service in the new SLA in 2023. In a slightly longer term, the tracking of performance on delivery of returned library materials will be further enhanced by using the new logistics tracking system of SLS to be launched.

3.34 The Postmaster General has said that the Hongkong Post will continue to monitor the service performance to ensure the standards as laid down in the SLA are met.

Library fees and charges

3.35 The library fees and charges collected by HKPL include:

- (a) ***Overdue fine.*** An overdue fine is imposed on each and every loan item and accompanying library material returned late. For each loan item or accompanying library material borrowed from an adult library, the charging rate is \$1.5 per day or part of a day, and the fine is limited to \$130 per item. For each loan item or accompanying library material borrowed from a young adult or children's library, the charging rate is \$0.5 per day or part of a day, and the fine is limited to \$25 per item;
- (b) ***Reservation fee.*** Each reader can reserve up to 8 library items for a fee of \$3.3 per item. The reservation fee has to be paid once the reservation request has been processed with the requested item available for collection;
- (c) ***Replacement cost for lost library materials.*** If any library material borrowed is lost, the borrower shall be liable to pay such sum of money to replace such library material or the whole set of library material of which such library material forms a part. In addition, the borrower may be required to pay a surcharge amounting to 20% of such sum; and
- (d) ***Other charges.*** These charges include other miscellaneous items, such as charges for damaged library materials and card replacement fee.

3.36 According to LCSD, library materials for lending can be borrowed for 14 days. The borrowing can be renewed for another 14 days each time for up to five consecutive times. When a library item is not returned, LCSD will take various follow-up actions, including issuing due date reminders, overdue notices and payment notices, suspending borrowing rights (Note 29) of the borrowers and taking prosecution actions. After all recovery actions have been taken and the amount remained outstanding, the unpaid amount will be written off after the expiration of the six-year statutory time bar from the date on which the cause of action accrued (Note 30).

Need to step up efforts in recovering outstanding library fees and charges

3.37 As at 31 January 2023, the amount of unpaid library fees and charges was about \$5.7 million, which were incurred in the financial years from 2016-17 to 2022-23 (i.e. outstanding for up to seven years). Audit noted that:

- (a) the \$5.7 million comprised about \$3.9 million (68%) of overdue fines, about \$1.8 million (31%) of replacement costs for lost library materials, about \$54,000 (0.9%) of reservation fees and about \$3,000 (0.1%) of other charges; and
- (b) the percentage of fees and charges incurred but not paid within the same financial year increased. As at the year-end (i.e. 31 March) of 2016-17 to 2018-19, about 9% of the total fees and charges incurred in the year was not paid within the same year. The percentage increased to 11%, 21% and 15% in 2019-20, 2020-21 and 2021-22 respectively. As at 31 January 2023, about 38% of the total fees and charges incurred from 1 April 2022 to 31 January 2023 was not yet settled.

3.38 In Audit's view, LCSD needs to step up efforts in recovering outstanding library fees and charges in a timely manner.

Note 29: *Borrowing rights include checkout, renewal and request (i.e. hold/loan).*

Note 30: *According to section 4 of the Limitation Ordinance (Cap. 347), actions to recover any sum recoverable shall not be brought after the expiration of six years from the date on which the cause of action accrued.*

Need for promoting use of notification services

3.39 LCSD takes various follow-up actions on overdue library items. According to LCSD:

- (a) the notification services provided to borrowers include:
 - (i) the library email notification service under which upon registration, HKPL will send notifications including due date reminders, overdue notices, hold awaiting notices and renewal confirmation notices to the borrowers' registered email addresses. Audit noted that as of December 2022, only about 13% of registered borrowers had opted to receive library email notification from HKPL (Note 31); and
 - (ii) borrowers may use the mobile application (app), namely "My Library" (hereinafter referred to as My Library App) (see para. 4.4(a)), as an alternate way to receive notifications of reminders and notices. Audit noted that as of December 2022, the cumulative number of downloads for the mobile app was about 0.71 million (about 15% of 4.82 million registered borrowers) (Note 32); and
- (b) all payment notices have to be sent by post to the registered addresses of the borrowers (Note 33) as proper records in accordance with LCSD's guidelines. Upon enquiry, LCSD informed Audit in February 2023 that

Note 31: *Upon enquiry, LCSD informed Audit in March 2023 that a message encouraging readers to register for the email notification service was included in the printed overdue notice.*

Note 32: *According to LCSD, for the mobile app, readers need to enable the "auto login" function (so that the account information and password would be stored in the mobile phone/device) in order to receive the notifications.*

Note 33: *According to LCSD's guidelines:*

- (a) *when a payment notice has been returned, a note has to be added to the patron's record in HKPL's system to alert the library staff when the patron shows up at counter for transaction; and*
- (b) *when the patron shows up, the library staff should advise the patron to update his/her address in writing as soon as possible.*

while the percentage of returned payment notices was not maintained, the returned mails would be sent back to the registering libraries for taking follow-up actions.

3.40 To improve the usage of email and mobile app notification services and reduce instances of returned payment notices, Audit considers that LCSD needs to promote the use of the services and take measures to remind library users to update the registered addresses.

Need to carry out fees and charges review in a timely manner

3.41 According to the Financial Circular on fees and charges, fees should generally be reviewed and, where necessary, revised on an annual basis. In 2014-15, LCSD conducted a review of the library fees and charges. The fee review was planned to be implemented by two phases. The revised administrative fee items (Note 34) (not requiring legislative amendments) under Phase I had been implemented with effect from September 2017 and full alignment of the A4-size computer colour printout charges in urban area and the New Territories from September 2018. The proposal for revision of statutory fee items (Note 35) under Phase II was planned to be submitted to LegCo in 2018-19. Upon enquiry, LCSD informed Audit in February 2023 that:

- (a) the review of the statutory fee items under Phase II was suspended as the Government had implemented a fee review moratorium from 15 August 2019 to 31 December 2021 (Note 36). The review was

Note 34: *The administrative fee items include reservation fee of library materials, replacement fee of library cards and refundable deposit for temporary library card for non-Hong Kong residents.*

Note 35: *The statutory fee items include overdue fine for library materials and fee for use of cloakroom and electronic locker.*

Note 36: *According to the Financial Services and the Treasury Bureau Circular Memoranda on fee review moratorium, the Government would implement a fee review moratorium on fees and charges from 15 August 2019 to 31 December 2021 with a view to supporting the business and relieving people's financial burden. When the moratorium remained in force, bureaux and departments were not required to review the fees and charges in accordance with the procedures set out in the Financial Circular on fees and charges.*

Library operation

re-activated in the fourth quarter of 2022 and completed in December 2022; and

- (b) the Culture, Sports and Tourism Bureau had given policy support and endorsed the recommendations of the fee review proposal (i.e. maintaining the fees at existing level) on 27 January 2023. As of February 2023, the proposal had been submitted to the Financial Services and the Treasury Bureau (FSTB).

In March 2023, FSTB informed LCSD that it had no comment on the fee proposal.

3.42 Audit noted that while the statutory fee items were reviewed in the fourth quarter of 2022, the administrative fee items had not been reviewed as of January 2023 (the last fee review was conducted in 2014-15 and the revised administrative fees have come into effect from September 2017). In Audit's view, LCSD needs to carry out the review of the library fees and charges in accordance with the Financial Circular.

Audit recommendations

3.43 Audit has *recommended* that the Director of Leisure and Cultural Services should:

- (a) **step up efforts in recovering outstanding library fees and charges in a timely manner;**
- (b) **promote the use of the email and mobile app notification services and take measures to remind library users to update the registered addresses; and**
- (c) **carry out the review of the library fees and charges in accordance with the Financial Circular.**

Response from the Government

3.44 The Director of Leisure and Cultural Services agrees with the audit recommendations. He has said that:

- (a) the increase of outstanding library fees and charges in 2019-20, 2020-21 and 2021-22 (see para. 3.37(b)) was due to the temporary closure of libraries intermittently due to the COVID-19 epidemic. LCSD will explore enhancement measures to step up the recovery of outstanding library fees and charges in a timely manner by multiple ways of issuing notifications and suspend the borrowing rights at an earlier stage;
- (b) LCSD is taking measures to enhance publicity in promoting the use of email and mobile app notification services and to remind library users to update the registered addresses in 2023, including:
 - (i) enhancing publicity at libraries, library web page and social media;
 - (ii) enhancing promotion to the community libraries, schools and NGOs by outreach programmes; and
 - (iii) reminding library patrons to update registered addresses by library notices on a regular basis; and
- (c) LCSD will continue to conduct fee review of library fees and charges in consultation with FSTB and in accordance with the Financial Circular.

Other operational issues

Need to review book drop service at MTR stations

3.45 HKPL has been providing book drop service at three major MTR interchange stations (i.e. Central, Kowloon Tong and Nam Cheong) to facilitate the return of library materials since September 2011 on a trial basis. A total of 12 book drop boxes are placed in the paid areas of the three MTR stations. Audit examined the usage of the book drop service for the period from 2017 to 2022 (see Table 14) and noted that:

Library operation

- (a) the usage of the book drop service was generally on a decreasing trend over the years, decreasing by about 52% from 474,879 library materials collected in 2017 to 225,979 library materials collected in 2022. The usage rate (Note 37) also decreased from 45% in 2017 to 21% in 2022. According to LCSD, due to the outbreak of the COVID-19 epidemic in 2020, public libraries were closed intermittently which in turn seriously affected the borrowing rate. As a result, the usage of the MTR book drop service had inevitably dropped drastically since 2020; and
- (b) the usage rate of book drop boxes located at Nam Cheong station was the lowest (average usage rate of 19%), followed by Kowloon Tong station (average usage rate of 35%) and Central station (average usage rate of 40%).

Table 14

**Usage of book drop service at MTR stations
(2017 to 2022)**

Year	No. of library materials collected (Usage rate)			
	Central	Kowloon Tong	Nam Cheong	Overall
2017	206,623 (59%)	187,077 (53%)	81,179 (23%)	474,879 (45%)
2018	203,946 (58%)	180,124 (51%)	79,268 (23%)	463,338 (44%)
2019	165,475 (47%)	158,240 (45%)	74,474 (21%)	398,189 (38%)
2020	65,609 (19%)	62,389 (18%)	39,497 (11%)	167,495 (16%)
2021	109,830 (31%)	88,571 (25%)	60,582 (17%)	258,983 (25%)
2022	99,429 (28%)	68,291 (19%)	58,259 (17%)	225,979 (21%)
Average	141,819 (40%)	124,115 (35%)	65,543 (19%)	331,477 (32%)

Source: Audit analysis of LCSD records

Note 37: According to LCSD, at each of the MTR stations, there are four book drop boxes, each of which can contain 120 books (the holding capacity has remained unchanged since the launch of the service in September 2011), and the books are collected twice daily. The maximum capacity for each MTR station is 960 books a day. The usage rate is calculated using the following formula:

$$\text{Usage rate} = \frac{\text{Number of books returned}}{\text{Total maximum capacity of the book drops}}$$

3.46 In January 2013, LCSD completed a review of the book drop service at MTR stations. According to the review, the way forward for the service included the following:

- (a) it was not the opportune time to extend the book drop service to more than three MTR stations in view of the relatively low usage level (Note 38) and the significant expenditure being incurred, but two options for the three MTR stations had to be considered. The first option was to maintain status quo for the provision of the service at the existing three MTR stations, and the second option was to continue providing the book drop service at Central and Kowloon Tong stations while replacing Nam Cheong station by Mei Foo station; and
- (b) more publicity efforts should be made to further promote and increase the public's awareness of the book drop service at the existing MTR stations.

3.47 Audit noted that:

- (a) LCSD had not conducted further review of the scheme as of January 2023 (i.e. about 10 years after the review of January 2013), including the two options identified for the three MTR stations (see para. 3.46(a)) and the effectiveness of the scheme. Since 2013, there had been extensions to the MTR network (Note 39) which might affect the passenger flow at different stations; and
- (b) regarding publicity efforts (see para. 3.46(b)), according to LCSD, efforts had been made to further promote and increase the public's awareness of the service at the libraries and the MTR stations (e.g. distribution of posters and leaflets to government district offices, community organisations and

Note 38: *According to the review report of 2013, for the period from 29 September 2011 (i.e. launch of the service) to 31 December 2012, the total numbers of library materials collected from the book drops at Central, Kowloon Tong and Nam Cheong stations were 140,192, 172,773 and 66,580 (with usage rates of about 32%, 39% and 15%) respectively.*

Note 39: *The major extensions to MTR network included the opening of the Whampoa and Ho Man Tin stations in October 2016, the opening of South Island Line in December 2016, full opening of Tuen Ma Line in June 2021 and extension of East Rail Line to Admiralty station in May 2022.*

schools, and advertising within the selected major MTR interchange stations) in January 2013. However, no further publicity campaign had been launched since 2013.

3.48 The book drop service at MTR stations has remained as a trial scheme since its launch in September 2011. In Audit's view, LCSD needs to take measures to improve the usage of the book drop service at MTR stations (e.g. stepping up publicity efforts), and conduct a review of the effectiveness of the service taking into account the changes in the passenger flow at MTR stations and the latest developments.

Scope for improvement in operation of self-service library stations

3.49 LCSD has launched a pilot scheme to set up three self-service library stations to provide round-the-clock services such as borrowing, return, payment and pickup of reserved library materials, one each on Hong Kong Island (i.e. Island East Sports Centre sitting-out area since December 2017), in Kowloon (i.e. Hong Kong Cultural Centre since December 2018) and the New Territories (i.e. Tsuen Nam Road in Tai Wai since January 2020). According to LCSD, two reviews had been conducted for the scheme in June 2021 and February 2022, and the services provided by the self-service library stations were well-received by the public.

3.50 The maintenance of the book dispensers at the three self-service library stations has been outsourced to a contractor by quotation (Note 40). The contractor is responsible for regular inspection and maintenance works and urgent maintenance works. Audit noted room for improvement in the following areas:

- (a) ***Performance standard for serviceability of self-service library stations not met.*** According to the maintenance contract, the contractor shall commit at least 99% of the serviceability level for check-in and check-out service (Note 41) of each dispenser each month. In the event that a book dispenser cannot achieve the monthly committed serviceability level, the contractor

Note 40: *For the maintenance contract for the period from 29 January 2022 to 28 January 2023, the contract sum was about \$1.39 million.*

Note 41: *The serviceability level is calculated by dividing the net serviceable time by the scheduled available time for check-in or check-out service (after deducting closedown time such as for maintenance/repair).*

shall pay to the Government liquidated damages as specified in the contract. For the 10-month period from February to November 2022, the committed serviceability level (i.e. at least 99%) had not been met in 5 (50%), 9 (90%) and 5 (50%) months for the library stations on Hong Kong Island, in Kowloon and the New Territories respectively (with serviceability level ranging from 95.89% to 98.99%) (Note 42). In Audit's view, LCSD needs to ascertain the reasons for the persistent non-compliance with the performance standard on the serviceability of some self-service library stations and take measures to minimise service disruption; and

- (b) *Need to consider laying down guidelines on issue of service suspension notices.* According to LCSD, a service suspension notice will be put up at the self-service library station and on HKPL website for urgent maintenance. Audit noted that:
- (i) from January to August 2022, there were 446 fault cases which required urgent maintenance works, of which 84 (19%) cases were classified as "critical" and 362 (81%) cases were classified as "non-critical" (averaging about 4 critical and 15 non-critical fault cases per month for each station). However, suspension notices had not been issued on HKPL website for these urgent maintenance cases; and
 - (ii) there was no guideline setting out the criteria (e.g. length of service suspension time) for issuing service suspension notices.

Upon enquiry, LCSD informed Audit in February 2023 that suspension notices would be published on HKPL website and posted on-site when there were any scheduled/prolonged urgent maintenances. In Audit's view, LCSD needs to consider laying down guidelines setting out the criteria (e.g. length of service suspension time) for issuing service suspension notices for self-service library stations and take measures to ensure compliance.

Note 42: *For the months when the serviceability level was not met, LCSD deducted the liquidated damages from the fees paid to the contractor.*

Need to strengthen monitoring of community libraries

3.51 Under the “Libraries@neighbourhood — Community Libraries Partnership Scheme”, HKPL collaborates with non-profit-making organisations and local groups in providing community-based library services. These organisations and groups are offered block loans of library materials as well as professional advice on setting up community libraries tailored to the needs of their target users. As at 31 December 2022, there were 191 community libraries (involving about 66,000 library materials), of which 66 (35%) libraries were open to the public and 125 (65%) libraries were accessible by members of the partnership organisations.

3.52 In its guidelines, LCSD requires its staff to pay a site visit to the organisation and provide professional advice to the organisation for maintaining and managing the stock in the community library at least once a year. The inspection checklist for the goodwill visit includes observation of the general operation and usage of the community library, as well as comments and recommendations for improvement. According to LCSD, goodwill visits were conducted for the 191 community libraries from January 2022 to January 2023. Audit noted that:

- (a) the goodwill visits were conducted on-site and via telephone for 118 (62%) libraries and 73 (38%) libraries respectively. According to LCSD, visits were conducted via telephone due to the COVID-19 outbreak from 2020 to late 2022 where social distancing measures to fight epidemic were in place, and the community libraries were either closed or provided limited services restricting the conduct of goodwill visits. For goodwill visits conducted via telephone, assessment of the physical conditions of HKPL’s library materials and library environment (as required in the inspection checklist) could not be carried out; and
- (b) for the attendance and usage statistics as required in the inspection checklist, of the 191 community libraries:
 - (i) the attendance data was only reported for 57 (30%) libraries. According to LCSD, the data was not available for 49 (26%) libraries due to the suspension of service (e.g. due to the COVID-19 epidemic and renovation), 47 (24%) libraries due to layout constraints (e.g. only overall attendance of the entire venue was available), and 38 (20%) libraries due to manpower constraints (e.g. shortage of manpower); and

- (ii) lending service was not available for 129 libraries. For the remaining 62 libraries with lending service provided, the number of books issued to public/members was reported for 38 (62%) libraries. According to LCSD, the number was not available for 12 (19%) libraries as lending service was suspended temporarily (e.g. due to the COVID-19 epidemic and renovation), and 12 (19%) libraries due to manpower constraints or with no particular reason.

3.53 With the gradual resumption to normalcy of society, Audit considers that LCSD needs to conduct on-site goodwill visits to community libraries as required, and explore measures to facilitate operators of the community libraries to report attendance and usage statistics as appropriate for monitoring and identifying room for improvement.

Audit recommendations

3.54 Audit has *recommended* that the Director of Leisure and Cultural Services should:

- (a) take measures to improve the usage of the book drop service at MTR stations (e.g. stepping up publicity efforts);
- (b) conduct a review of the effectiveness of the book drop service at MTR stations taking into account the changes in the passenger flow at MTR stations and the latest developments;
- (c) ascertain the reasons for the persistent non-compliance with the performance standard on the serviceability of some self-service library stations and take measures to minimise service disruption;
- (d) consider laying down guidelines setting out the criteria (e.g. length of service suspension time) for issuing service suspension notices for self-service library stations and take measures to ensure compliance;
- (e) conduct on-site goodwill visits to community libraries as required; and

- (f) **explore measures to facilitate operators of the community libraries to report attendance and usage statistics as appropriate for monitoring and identifying room for improvement.**

Response from the Government

3.55 The Director of Leisure and Cultural Services agrees with the audit recommendations. He has said that:

- (a) LCSD is taking measures to enhance the publicity with a view to improving the usage of the book drop service at MTR stations in 2023, including:
 - (i) promotion on HKPL website, in My Library App and LCSD Plusss (social media platforms of LCSD);
 - (ii) publicising the service in social media; and
 - (iii) reaching out to community libraries, schools and NGOs to widely publicise the service to local community;
- (b) the introduction of the MTR book drop service aims to facilitate commuters of the MTR to return library materials conveniently. In view of MTR's latest development, LCSD will conduct a review of service points and the effectiveness of the book drop service in 2023, taking into account the addition of new MTR stations and the change of passenger flow;
- (c) the persistent non-compliance with the performance standard on the serviceability of some self-service library stations had mainly arisen from the ageing of the library station dispensers, relatively complicated mechanical operation of the machines and inadequate support from the maintenance contractor during the COVID-19 epidemic. LCSD will replace the existing library station dispensers with new kinds of equipment to resolve the problem of ageing and minimise the service disruption. The works are targeted for completion in 2024;

- (d) LCSD will review the current operations and prepare guidelines for issuing service suspension notices for self-service library stations in 2023 to ensure compliance;
- (e) with the resumption to normalcy after the epidemic, LCSD has already resumed on-site goodwill visits to community libraries annually; and
- (f) LCSD has been closely working with the operators of the community libraries and provided professional advice to address their operational problems, including exploring measures and tools (such as a computerised spreadsheet template) to facilitate record taking of community libraries on attendance and usage statistics.

PART 4: USE OF INFORMATION TECHNOLOGY AND PUBLICITY EFFORTS

4.1 This PART examines LCSD's work in the use of IT and publicity efforts for HKPL, focusing on the following areas:

- (a) use of IT in provision of library services (paras. 4.2 to 4.29); and
- (b) publicity efforts and extension activities (paras. 4.30 to 4.39).

Use of information technology in provision of library services

4.2 According to the Strategic Plan of HKPL (2020-2025), one of the missions of HKPL is to enhance quality of library services by leveraging on new technology and the use of IT (see para. 1.9(e)). LCSD manages HKPL with the support of two major library IT systems, namely NGILS and MMIS (see Note 4 to para. 1.13). According to LCSD, SLS is being developed to enhance the quality, cost-effectiveness and customer friendliness of the facilities and services of HKPL.

4.3 LCSD maintains websites for HKPL (hereinafter collectively referred to as library websites), including:

- (a) HKPL website for providing library information such as searching the library catalogue, reserving or renewing library materials, checking readers' personal loan records, and checking library addresses and opening hours;
- (b) MMIS website for browsing digitalised library materials (e.g. Hong Kong old newspapers, arts and artist clippings and HKPL publications) in MMIS and providing access to e-books and e-databases; and
- (c) e-Resources website for accessing e-books, e-databases and digital collections (e.g. old newspapers and photograph collections).

4.4 LCSD also provides two mobile apps for HKPL (hereinafter collectively referred to as library mobile apps), namely “My Library” and “Multimedia Information”, for readers to access library services through mobile devices, as follows:

- (a) the functions of My Library App include access to personal library accounts, searching, reserving and renewing library materials, and offering addresses and contact information for all libraries; and
- (b) Multimedia Information mobile app (hereinafter referred to as MMIS App) allows users to access digitised resources in MMIS from mobile devices.

Delay in development of SLS

4.5 In February 2019, the Finance Committee of LegCo approved the commitment of \$877.3 million for the development of SLS. According to the information provided to the Finance Committee:

- (a) NGILS and MMIS would reach the end of their serviceable life by 2021 when technical support for the obsolete hardware or software would no longer be available in the market and the scope for further enhancement would either be not feasible or limited;
- (b) the new system would replace the existing two major systems (see (a) above) with wider use of information and communications technology and self-service facilities enabled with RFID technology (Note 43). The anticipated benefits of the new system included streamlining the workflow of processing returned materials, providing smart multi-functional

Note 43: *RFID is a generic term for technologies that use radio waves to automatically identify objects. According to LCSD, RFID technology allows the introduction of more user-friendly self-service facilities and services, including: (a) borrowing of library materials inside the library by using patrons’ own mobile devices, where patrons could check out items instantly with simple taps complementary to RFID-enabled self-charging terminals; (b) provision of smart multi-functional self-service kiosks to cover a wide array of library services including patron registration, facility booking, activity enrolment, printing, payment and catalogue searching; and (c) installation of smart lockers or dispensers for patrons to pick up their reserved items, rendering it unnecessary for them to queue up for such services.*

self-service kiosks, exploring the extension of library hours in a more cost-effective way, providing a single platform for all forms of library resources (e.g. physical books, e-books and digitised images) using a single, unified and customer-friendly user interface, and facilitating the collection and analysis of data on patrons' profile, usage, reading habits and interest for planning, procurement, maintenance (including stocktaking), promotion and development of library collections and services (see para. 2.58);

- (c) savings and cost avoidance would also be achieved upon decommissioning of the existing systems and full implementation of the new system (e.g. efficiency gain after the full implementation of RFID-enabled and self-service facilities, and for system maintenance and contract staff costs of existing NGILS and MMIS); and
- (d) the new system would be implemented in phases with the aim of launching all the core functions (including Digital Resources Management and Integrated Library System) by mid-2023 and the remaining functions by 2024. The implementation of RFID would start from late 2021 in individual branches, while full implementation at all libraries together with the remaining functions would be rolled out by 2024.

4.6 LCSD awarded contracts to contractors for the development of SLS (Note 44) by open tender or quotation. Audit noted that there were delays in the implementation of SLS. According to the revised implementation schedule as of December 2022, the expected dates of launching all core functions and the full implementation of SLS were March 2024 and September 2025 respectively (i.e. about 9 months later than the target dates of June 2023 and December 2024 respectively). Appendix B shows the implementation schedule of SLS. According to LCSD:

Note 44: *LCSD awarded nine contracts at a total contract sum of \$1,035.5 million for the development of SLS, of which \$603.8 million was capital expenditure funded under the project vote approved by LegCo Finance Committee in February 2019, \$426.8 million was recurrent expenditure (i.e. 10-year maintenance charge) and \$4.9 million was for feasibility study of redevelopment of HKPL information systems. According to LCSD, the actual expenditure for development of SLS as of December 2022 was about \$16.1 million.*

- (a) the implementation schedule was revised mainly because of the longer-than-expected time required for the tendering process due to complication of the tender and the outbreak of the COVID-19 epidemic; and
- (b) the implementation schedule was also affected by the manpower issues of the contractors' project teams, including high staff turnover and under-estimation of time for manpower replacement.

4.7 According to LCSD, the implementation of SLS will bring about a number of benefits and achieve savings and cost avoidance (see para. 4.5(b) and (c)). To ensure the timely implementation of SLS, Audit considers that LCSD needs to step up monitoring of the development progress of SLS and the contractors' performance including their actions to address the manpower issues.

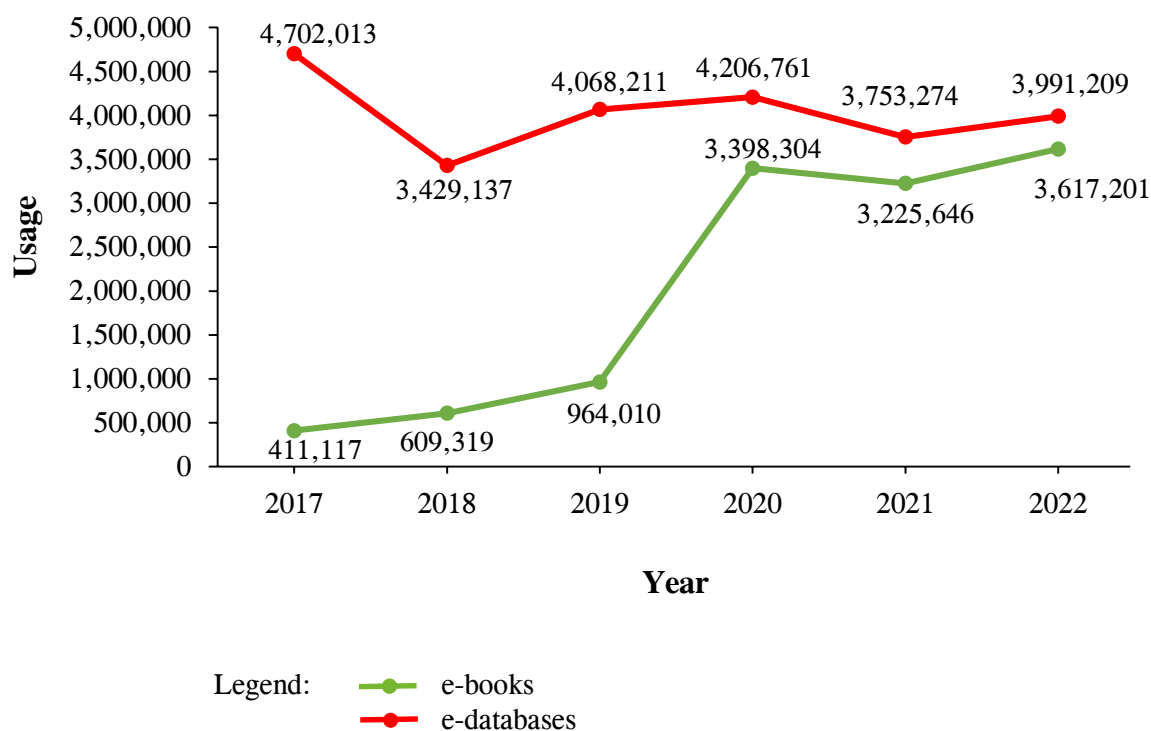
Need to strengthen actions in improving usage and accessibility of e-resources

4.8 ***Need to keep under review usage of e-databases.*** As of December 2022, HKPL provided 14 e-book collections (with over 490,000 e-books) and 83 e-databases. The usage of e-books and e-databases from 2017 to 2022 is shown in Figure 4. Audit noted that:

- (a) the usage of e-books (based on the number of e-books consulted (i.e. borrowed or downloaded)) increased by about 780% from 411,117 in 2017 to 3,617,201 in 2022; and
- (b) the usage of e-databases (based on various statistics including the number of searches, logins and tracks played) decreased by about 15% from 4,702,013 in 2017 to 3,991,209 in 2022.

Figure 4

Usage of e-books and e-databases
(2017 to 2022)



Source: LCSD records

4.9 According to LCSD, the reasons for the fluctuations in the usage of e-databases were mainly as follows:

- (a) the significant drop in the usage in 2018 was mainly due to decrease in the usage of an e-database providing the news searching service (from 3.5 million in 2017 to 2.2 million in 2018), which was probably caused by the growing trend for the public browsing news stories through mobile devices and social media; and
- (b) the drop in the usage in 2021 was mainly due to the cessation of the subscription of an e-database, which had the highest usage (1.9 million) among all e-databases in 2020, since December 2020. According to LCSD, the e-database was not available for subscription. The usage of e-databases

rebounded to about 4 million after the full resumption of library services since April 2022.

4.10 Audit noted that the usage of e-databases in 2022 (i.e. about 4 million) was still about 15% below the level in 2017 (i.e. about 4.7 million). In Audit's view, LCSD needs to keep under review the usage of e-databases and take actions to improve the usage as appropriate (e.g. exploring subscriptions to other e-databases with content that is in high public demand).

4.11 *Scope for enhancing accessibility of e-books and e-databases.* The e-books and e-databases have to be accessed through the platforms provided by respective service providers. Readers may use the e-books and e-databases via the following means:

- (a) access via the Internet with library accounts (i.e. remote access); and
- (b) use the workstations in static libraries during opening hours.

4.12 As of December 2022, all of the 14 e-book collections could be remotely accessed by readers via the Internet. However, for e-databases, Audit noted that:

- (a) of the 83 e-databases, 40 (48%) e-databases could be remotely accessed and 43 (52%) e-databases had to be accessed by using the workstations in static libraries; and
- (b) of the 43 e-databases for use at static libraries, 33 (77%) could be accessed at all libraries while 10 (23%) could only be accessed at designated libraries (ranging from 1 to 7 libraries, averaging 5 libraries).

4.13 HKPL currently operates different and separate platforms and systems for searching and accessing different types of library materials, such as physical books, digitised materials, e-books and journals. Furthermore, e-book services are provided through different service providers using different platforms, access procedures and interfaces. According to LCSD:

Use of information technology and publicity efforts

- (a) this compartmentalised approach renders it difficult, inconvenient and confusing for library patrons to understand, search, access and use the e-books and library collections; and
- (b) SLS will provide a single platform, via web portal and mobile app, for all forms of library resources using a single, unified and customer-friendly user interface. SLS will also allow popular external search engines to display relevant HKPL items in their search results, and help patrons locate the library materials and services of HKPL they are looking for in a more efficient manner.

4.14 Audit noted that as of December 2022:

- (a) the online catalogue and search engines of HKPL website and My Library App only included physical library materials;
- (b) different search engines for electronic library materials were used for the library websites and mobile apps. For example:
 - (i) for MMIS website, the search engine included information for individual e-books but not for individual articles/materials in e-databases (only the titles of the related e-databases were shown in the search results);
 - (ii) for MMIS App, the search engine only included information available in MMIS App such as old newspapers, but not other electronic library materials (e.g. e-books and e-databases); and
 - (iii) for e-Resources website, readers were required to login with library accounts before conducting the search for articles/materials in e-databases. For e-books, the searching had to be conducted through individual platforms provided by the service providers after logging in with library accounts;
- (c) for MMIS App, when readers chose the category of “Digital Collection” in the mobile app, they would be redirected to MMIS website (i.e. could not view digital collection directly in MMIS App); and

- (d) the single platform for searching all forms of library resources in SLS (see para. 4.13(b)) was expected to be implemented in March 2024.

4.15 Upon enquiry, LCSD informed Audit in March 2023 that:

- (a) for accessibility of e-databases (see para. 4.12), for commercial reasons, some service providers were not willing to provide remote access to HKPL, probably owing to restriction of license agreement between e-database vendors and their content providers (copyright holders). Even if some vendors might be willing to provide access, the cost would be too high and not value for money; and
- (b) for search engines of library websites and mobile apps (see para. 4.14), it was an industry practice that e-databases only allowed registered users to search and use their contents for the purpose of protection of their copyrights and related interests. Upon the launch of SLS, a discovery service would be provided for the public to search meta data of e-databases of the service providers without login to the HKPL patron account. The extent of databases covered would depend on the databases provided by the service providers.

4.16 In Audit's view, in order to enhance the accessibility of e-databases, LCSD needs to keep under review the need for providing remote access for more e-databases and/or at more libraries as appropriate. LCSD also needs to take measures to enhance the search engines of library websites and mobile apps upon the launch of SLS (e.g. enhancing the completeness of library resources available for searching).

4.17 ***Need to strengthen monitoring of usage of individual e-books.*** E-books are available for online reading and/or borrowing (download) (Note 45). For some e-book collections, there is a quota for concurrent use of each e-book. Audit noted that as of December 2022, of the 14 e-book collections, 5 (36%) e-book collections

Note 45: *The articles/materials in e-databases are only available for online reading. According to LCSD, most e-databases are gigantic repository of very rich information resources containing millions of records, and it will not be feasible to require e-database service providers to provide usage figures down to item level.*

allowed unlimited concurrent online reading while the remaining 9 (64%) e-book collections were with a quota for concurrent online reading (ranging from 1 to 40 concurrent users). According to LCSD, for the 9 e-book collections with a quota for concurrent online reading:

- (a) the service provider of only 2 (22%) collections could provide the statistics on the turnaway rate (i.e. the rate of access that was “turned away” when the quota for concurrent online reading had been exceeded); and
- (b) borrowing (Note 46) was not available for 2 e-book collections. For the remaining 7 e-book collections, there were quotas for borrowing, but the statistics on the reservation number (Note 47) and turnaway rate for borrowing e-books (when the quota for concurrent borrowing was exceeded) were not readily available.

4.18 Audit selected the e-book collection with the highest usage in 2022 for examination to ascertain the demand for borrowing individual e-books. The e-book collection had a quota for concurrent on-line reading (2 concurrent users) and a quota for concurrent borrowing for each e-book (ranging from 1 to 15 copies) as of December 2022. On 9 February 2023, among the most popular books recommended by the e-book collection platform, Audit selected 30 e-books for examination and noted that 14 (47%) e-books could not be borrowed immediately, with the number of readers reserving the e-books ranging from 1 to 335 (averaging 42 readers). For each e-book, there were 1 to 15 copies available for borrowing and assuming readers borrow the e-books for 7-day (i.e. the maximum loan period), the waiting time would range from 4 days to about 3.2 years (averaging 217 days). On the other hand, all the 30 e-books concerned were available for online reading.

4.19 Upon enquiry, LCSD informed Audit in March 2023 that:

Note 46: *For borrowing of e-books, the borrowing limit varies among different e-book collections. In general, each registered borrower can borrow a maximum of 4 items for a 7-day period in each e-book collection.*

Note 47: *An e-book is not available for borrowing if the number of copies borrowed has reached the total number of copies (i.e. the quota) subscribed by HKPL. Readers can make a reservation and will be notified when the e-book becomes available.*

- (a) it monitored and assessed e-book collections through a mixture of quantitative and qualitative measures of performance, such as use counts, reservation numbers, user feedback, comments and enquiries. Besides, all e-book platforms (except two platforms due to technical issues) could provide usage statistics of individual e-books; and
- (b) for the 30 e-books selected by Audit (see para. 4.18), an “online reading” function (with 2 concurrent users) was provided in the e-book platform that enabled readers to read the whole e-book online instantly even though it could not be borrowed immediately. For the 14 e-books which could not be borrowed immediately, LCSD had conducted test on 1 March 2023 and found that they were all available for online reading.

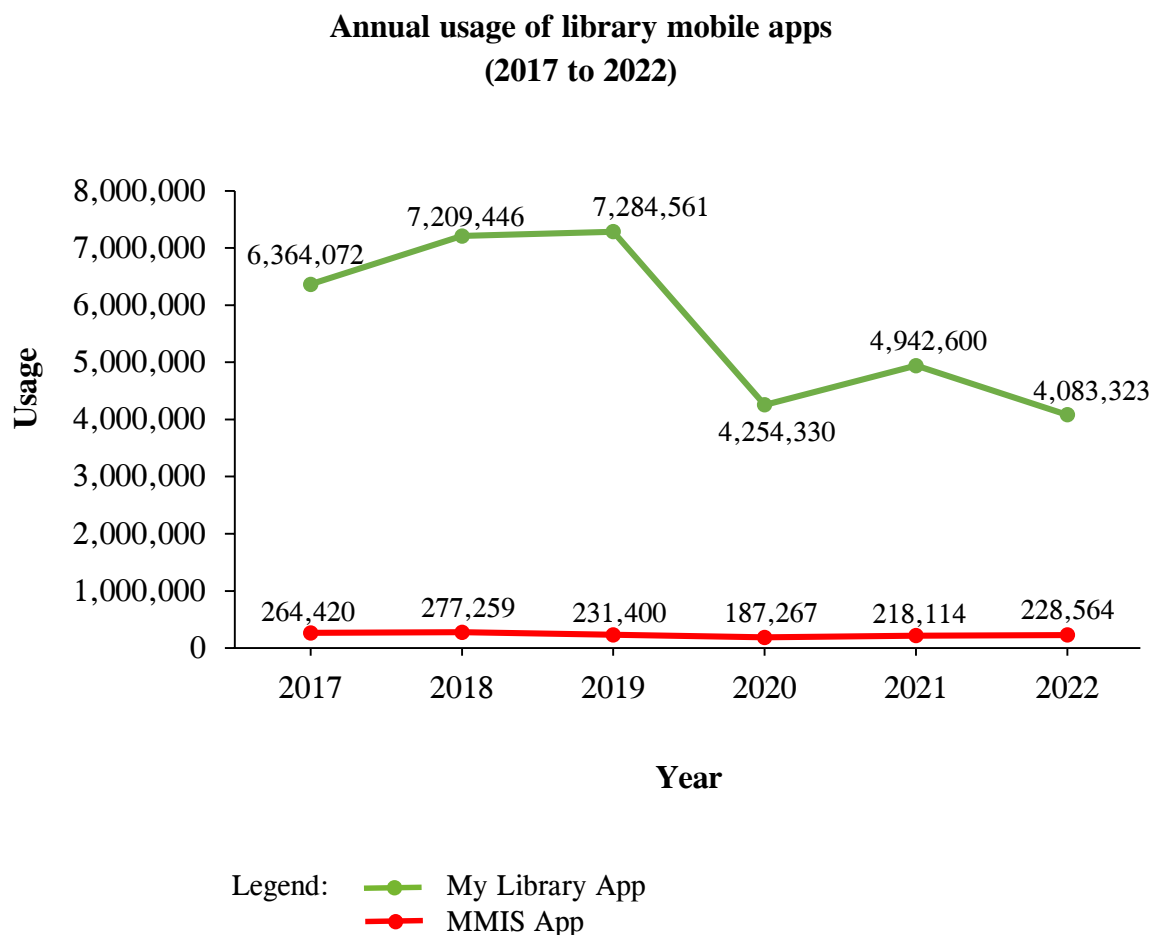
4.20 Audit noted that the statistics on the reservation number and turnaway rate for borrowing individual e-books were not readily available (see para. 4.17). In Audit’s view, LCSD needs to strengthen measures in monitoring the usage of individual e-books for planning and management purposes. Besides, while online reading was available in the e-book platform, there were no notification messages to remind readers about such option when the e-books could not be borrowed immediately. Audit considers that LCSD needs to explore with the service providers the feasibility of providing such services.

Scope for improving functions provided by library mobile apps

4.21 LCSD launched My Library App and MMIS App in September 2014 and December 2014 respectively for users to access library services through their mobile devices. Audit noted that:

- (a) the annual usage of My Library App decreased by about 36% from 6,364,072 in 2017 to 4,083,323 in 2022, while that for MMIS App decreased by about 14% from 264,420 in 2017 to 228,564 in 2022 (see Figure 5). According to LCSD, owing to the COVID-19 epidemic since 2020, libraries had been temporarily closed, and the unavailability of borrowing services directly affected the intention of readers to search the library catalogue and make reservations for library items, and thus leading to the drop in the overall usage; and

Figure 5



Source: LCSD records

- (b) the number of downloads and annual usage of MMIS App was significantly lower than that of My Library App. As at 31 December 2022, the cumulative number of downloads for My Library App was 711,980, which was about 10 times that of MMIS App (70,737). For 2022, the annual usage of My Library App was 4,083,323, which was about 18 times that of MMIS App (228,564). In this connection, Audit noted that the annual usage of MMIS website in 2022 was 7,516,186, which was about 33 times that of MMIS App. Upon enquiry, LCSD informed Audit in March 2023 that:
- (i) the most popular digitised materials in MMIS (i.e. “Old Hong Kong Newspapers”) were best viewed with MMIS desktop version. The “Hong Kong Arts and Artist Clippings” collection was also popular and accessible via library terminals only. Thus, the usage of MMIS

website via the desktop was generally much higher than that of its App; and

- (ii) with the change in Internet technology, MMIS App would be retired upon the launch of the Digital Resources Management function under SLS. The function was target to be launched in the fourth quarter of 2023.

4.22 Audit noted that the categories of some popular collections in MMIS (such as “Old Hong Kong Newspapers” and “Hong Kong Arts and Artist Clippings”— see para. 4.21(b)(i)) were not available in MMIS App. In Audit’s view, LCSD needs to take measures to enhance the functions of the new library mobile app under SLS to improve the services (e.g. facilitating the viewing of more digitised materials).

Some information on websites and library mobile apps outdated, inaccurate or incomplete

4.23 Audit examined the information on websites and library mobile apps and found that some information was outdated, inaccurate or incomplete, including the following:

- (a) ***Information on MMIS App.*** As of January 2023:
 - (i) for a book which was not available for borrowing since May 2021 (i.e. for about 1.5 years up to January 2023), the introduction of the book was still available under the “Literary Authors Sound Recording” category on MMIS App;
 - (ii) an audio recording available on MMIS App under the “Old stories for 18 districts” category was breaking intermittently when playing and inaudible; and
 - (iii) under the “Joy of Photography” category, the latest talk available on MMIS App was that held on 13 December 2019 while the latest talk related to Photography on MMIS website was held on 17 December 2022. During that three-year period, a total of

Use of information technology and publicity efforts

10 talks had been held but they were not available on MMIS App; and

- (b) *Transportation information for libraries.* Audit examined the transportation information for all the 70 static libraries as of December 2022 and noted that:
- (i) for 14 (20%) libraries, while 23 bus/green minibus routes serving their locations had been cancelled for about 3 months to 11 years (averaging 3.7 years), the related information was still available on HKPL website and My Library App; and
 - (ii) while the transportation information for the Hong Kong Central Library was available on My Library App, it was not available on HKPL website. According to LCSD, the relevant information on HKPL website had been mistakenly removed.

4.24 In Audit's view, LCSD needs to take measures to ensure that the information provided on library websites and mobile apps is accurate, complete and up-to-date.

Need to improve web accessibility of library mobile apps and websites

4.25 According to the Office of the Government Chief Information Officer (OGCIO), it is important to ensure that contents of all government websites and mobile apps are accessible to the general public including persons with disabilities. OGCIO has issued various circulars and guidelines to ensure that the content disseminated through government websites and mobile apps is accessible to persons with disabilities and is in compliance with the standards promulgated by the World Wide Web Consortium.

4.26 Audit examined the library mobile apps and websites and noted that some requirements in OGCIO's circulars and guidelines had not been complied with, as follows:

- (a) ***Transcript, captions or sign language for audios and videos.*** According to the “Baseline Accessibility Criteria for Government Mobile App” and the “Guidelines on Dissemination of Information through Government Websites”, government mobile apps and websites should provide transcript, captions or sign language for pre-recorded audio and video media to enable understanding of the media content. However, Audit noted that as of December 2022, transcript, captions or sign language were not provided for audios and videos on MMIS App and HKPL website;
- (b) ***Error suggestion.*** According to the “Baseline Accessibility Criteria for Government Mobile App”, government mobile apps should provide error prevention for transactions. Audit noted that as of December 2022, for MMIS App, the function of error suggestion for correction of input errors was not provided; and
- (c) ***Language type.*** According to the “Guidelines on Dissemination of Information through Government Websites”, government websites should be available in traditional and simplified Chinese and English. Audit noted that as of December 2022, My Library App was only available in traditional Chinese and English, but not in simplified Chinese. While it is not a requirement for government mobile apps, as a good practice, there are merits for enhancing My Library App for supporting simplified Chinese.

4.27 In light of the audit findings, Audit considers that LCSD needs to take measures to improve the web accessibility of library mobile apps and websites, and to ensure compliance with the requirements in the circulars and guidelines on dissemination of information on government websites and mobile apps.

Audit recommendations

4.28 **Audit has *recommended* that the Director of Leisure and Cultural Services should:**

- (a) **step up monitoring of the development progress of SLS and the contractors’ performance including their actions to address the manpower issues;**

Use of information technology and publicity efforts

- (b) keep under review the usage of e-databases and take actions to improve the usage as appropriate (e.g. exploring subscriptions to other e-databases with content that is in high public demand);**
- (c) keep under review the need for providing remote access for more e-databases and/or at more libraries as appropriate;**
- (d) take measures to enhance the search engines of library websites and mobile apps upon the launch of SLS (e.g. enhancing the completeness of library resources available for searching);**
- (e) strengthen measures in monitoring the usage of individual e-books for planning and management purposes;**
- (f) explore with the service providers the feasibility of providing notification messages on the e-book platforms to remind readers about the availability of online reading when the e-books cannot be borrowed immediately;**
- (g) take measures to enhance the functions of new library mobile app under SLS to improve the services (e.g. facilitating the viewing of more digitised materials);**
- (h) take measures to ensure that the information provided on library websites and mobile apps is accurate, complete and up-to-date; and**
- (i) take measures to improve the web accessibility of library mobile apps and websites, and to ensure compliance with the requirements in the circulars and guidelines on dissemination of information on government websites and mobile apps.**

Response from the Government

4.29 The Director of Leisure and Cultural Services agrees with the audit recommendations. He has said that:

Use of information technology and publicity efforts

- (a) the revised implementation schedule for SLS was mainly due to the complication of the tender and the outbreak of the COVID-19 epidemic (see para. 4.6(a)). LCSD has been closely monitoring the progress of development for SLS, and following up with contractors on measures to address the manpower issues, with a view to maintaining a stable and sufficient workforce for implementation of the SLS project;
- (b) LCSD has been closely monitoring and reviewing the usage of e-databases, and will continue to subscribe to e-databases of high public demand in pace with the supply of market as appropriate;
- (c) LCSD has been keeping under review the subscription of more e-databases with remote access in pace with the supply of market as appropriate;
- (d) LCSD will enhance the search engines of library websites and mobile apps upon the implementation of SLS by including different kinds of library resources available for searching as far as practicable, taking into consideration the industry practice and business agreements on the access of e-resources;
- (e) LCSD has been closely monitoring and will continue to strengthen the monitoring of e-book usage at title level with a view to acquiring suitable type and quantity of e-books for meeting the public demand;
- (f) LCSD is exploring with e-book service providers the feasibility of providing new functions of:
 - (i) making the function of online reading more visible to users;
 - (ii) providing suggestions to readers on borrowing other related titles when the requested titles are not available for immediate borrowing; and
 - (iii) informing readers of new edition of the same book which is available for borrowing;

Use of information technology and publicity efforts

- (g) LCSD will ensure easier and convenient use of the digital collections of HKPL on mobile devices during the implementation of SLS, the preparation for implementation of which is now in full swing. In the interim, LCSD will advance the retirement of MMIS App to enable the use of digital collections in MMIS direct with web browsers on mobile devices in 2023 so that the experience in remote access to the collections on mobile or desktop version will be consistent;
- (h) LCSD will step up its effort to ensure that the information provided on library websites and mobile apps is accurate, complete and up-to-date by adopting the following measures with immediate effect:
 - (i) reviewing and updating information on websites and mobile apps quarterly;
 - (ii) checking monthly to ensure quality and up-to-datedness of digitised materials in MMIS App; and
 - (iii) checking monthly to ensure that the information is up-to-date in My Library App; and
- (i) LCSD is committed to ensuring that the websites and apps of HKPL conform to the World Wide Web Consortium Web Content Accessibility Guidelines 2.0 Level AA requirements to the maximum extent possible in accordance to the assessment and requirements of OGCIO. To improve the web accessibility, there will be a speech to text function for transcribing the audio-visual materials in MMIS, and provision of transcript or captions for digitised audio-visual library materials upon the launch of SLS. In the interim, LCSD will arrange to provide subtitles to selected recorded programmes produced by HKPL, such as subject talks, for archival in MMIS. While MMIS App will soon be retired, there will be an enhanced feature to support spell check or suggestion in the search function of new library websites and mobile apps under SLS. Furthermore, My Library App will be able to support simplified Chinese upon the launch of SLS.

Publicity efforts and extension activities

4.30 LCSD aims to promote good reading habits and foster the development and appreciation of literature. According to LCSD, extension activities form an integral part of library services. The educational and recreational programmes such as reading programmes, storytelling for children, book displays, exhibitions and subject talks organised throughout the year at the libraries all contribute to promote the use of library facilities, inculcate life-long reading habits and to enhance the public appreciation of the importance of free access to up-to-date information.

Need to strengthen actions in organising extension activities

4.31 LCSD has set in its COR a key performance target (i.e. attendance at extension activities programmes) and an indicator (i.e. extension activities programmes) in respect of extension activities programmes for HKPL. Table 15 shows the number and attendance of extension activities programmes from 2015 to 2022. Audit noted that:

- (a) ***Decrease in number of extension activities programmes.*** The number of extension activities programmes increased by about 10% from 21,461 in 2015 to 23,608 in 2018. The number decreased by about 1% to 23,278 in 2019, and further dropped by 81% to 4,316 in 2020. While the number increased to 14,735 in 2021 and further to 15,193 in 2022, it was still on the low side when compared with the pre-COVID-19 level. Audit also noted that while the overall number of extension activities programmes decreased by about 35% from 23,278 in 2019 to 15,193 in 2022, that organised by 36 static libraries decreased by more than 35% to 78% (averaging 42%); and
- (b) ***Performance target on attendance not achieved.*** For attendance at extension activities programmes, HKPL did not meet the target of 19.1 million in 2019 to 2022, with shortfalls ranging from 3% to 78%.

Table 15

Number and attendance of extension activities programmes
(2015 to 2022)

Year	Extension activities programmes (a) (No.)	Attendance at extension activities programmes			
		Target (b) ('000)	Actual (c) ('000)	Variance (d) = (c) – (b) ('000)	Variance % (e) = (d) ÷ (b) × 100% (%)
2015	21,461	19,100	19,594	494	3 %
2016	22,396	19,100	19,261	161	1 %
2017	22,882	19,100	19,419	319	2 %
2018	23,608	19,100	19,684	584	3 %
2019	23,278	19,100	18,620	(480)	-3 %
2020	4,316	19,100	4,167	(14,933)	-78 %
2021	14,735	19,100	8,264	(10,836)	-57 %
2022	15,193	19,100	7,383	(11,717)	-61 %

Source: Audit analysis of LCSD records

4.32 Upon enquiry, LCSD informed Audit in February 2023 that:

- (a) the decrease in attendance in 2019 was due to the occasional disruption to the opening hours of libraries caused by black-clad violence. The shortfalls between the target and actual figures in 2020 and 2021 were mainly due to the impact of anti-epidemic measures, including the temporary closure of public libraries and the cancellation of extension activities;
- (b) due to the temporary closure of libraries, the significant decrease in the number of library extension activities, reduced capacity of physical activities and limited admission quota for library programmes under the impact of the COVID-19 epidemic and the implementation of social distancing measures, the attendance of library extension activities could not

be restored to the pre-COVID-19 level despite the increase in the number of online/hybrid programmes in 2021/22; and

- (c) with the gradual resumption to normalcy of society and the resumption of normal operation of public libraries, it was expected that both the number and attendance of extension activities would increase. HKPL would optimise the hybrid presentation of selected events of the signature programmes to generate dual mode participation of live audience and online viewing. Popular programmes, for example, book talks and sharing sessions by local authors would be organised to extend reach to youngsters and to tour readers in the book-finding experience.

4.33 Audit noted that for the extension activities programmes organised in 2020, 2021 and 2022, only about 3%, 3.7% and 3.4% of the programmes were delivered online or in hybrid mode. In Audit's view, LCSD needs to strengthen actions in organising extension activities (e.g. delivering more extension activities in different modes) and achieving the performance target on attendance.

Need to strengthen monitoring of extension activities

4.34 ***Room for improvement in monitoring and reporting attendance of extension activities.*** Audit examined the attendance of each extension activity in 2022 (see Table 16) and noted the following issues:

- (a) ***Need to strengthen monitoring of achievement of target attendance for individual extension activities.*** Audit noted that the attendance of some extension activities was on the low side. As shown in Table 16, 4,361 (29%) of 15,193 activities organised had attendances of 10 or less, including 15 activities with nil attendance. Upon enquiry, LCSD informed Audit in March 2023 that:
 - (i) attendance size of extension activities would depend on various factors, including the quota of the event or capacity of the event venue. The quota for storytelling sessions or interactive workshops would usually be below 40 participants, while the capacity for subject talks would range from 30 to 290, subject to the venue size. On the other hand, for book displays or other exhibitions at libraries

which were held for extended period without limitation on the quota/capacity, the attendance would be on the high side; and

- (ii) in 2022, the capacity of on-site library activities had been reduced due to various social distancing measures. The 15 extension activities with nil attendance in 2022 included reading programmes for children and youth (i.e. assessment of book reports) and user education activities for adult and junior as readers might prefer to join the activities when the epidemic subsided.

Audit noted that, as of February 2023, no management information had been compiled for monitoring the actual attendance against the target attendance for individual extension activities. To facilitate the evaluation and planning of such activities, LCSD needs to strengthen monitoring in this regard; and

- (b) ***Scope for improvement in reporting attendance number of extension activities.*** Audit noted that the activity with the highest attendance (i.e. about 52,000) in 2022 was an online activity hosted on a thematic website (which provided a variety of articles to cultivate readers' habit of reading everyday) and its attendance was counted by the number of clicks of articles. Upon enquiry, LCSD informed Audit in March 2023 that:

- (i) for the online activity, readers could click and view the articles available on the thematic website during the programme period from September 2020 to January 2022 (Note 48); and
- (ii) the number of clicks of articles was counted as attendance for the online activity which encouraged readers to read an article regularly to build up the reading habit. Each click was counted as some readers would like to read an article for many times.

Audit noted that in 2022, the number and attendance of online extension activities accounted for about 3.1% and 6.7% of the total number and attendance of extension activities respectively. As online extension

Note 48: *The attendance of the online activity in 2020, 2021 and 2022 was about 100,000, 271,000 and 52,000 respectively.*

activities may play an increasingly important role in future, LCSD needs to consider elaborating on the attendance figures of extension activities in its COR (see para. 4.31(b)) and keep under review the need to separately report physical attendance and visits to online extension activities in future.

Table 16

**Attendance of each extension activity
(2022)**

No. of attendance of each activity	No. of activities
Nil	15 (0%) } 4,361
1 to 10	4,346 (29%) } (29%)
11 to 20	2,193 (15%)
21 to 50	1,943 (13%)
51 to 100	1,387 (9%)
101 to 500	2,029 (13%)
501 to 1,000	1,268 (8%)
1,001 to 5,000	1,735 (11%)
5,001 to 10,000	146 (1%)
10,001 to 52,000 (Note)	131 (1%)
Total	15,193 (100%)

Source: Audit analysis of LCSD records

Note: For the 131 activities with attendance ranging from 10,001 to 52,000, the average number of attendance of each activity was about 15,870.

4.35 Management information on evaluation of extension activities not regularly compiled. According to LCSD, it collects feedback from participants of most extension activities, where applicable. However, Audit noted that LCSD staff had not regularly compiled management information (e.g. highlights or summaries) on the feedback of the participants and reported the results (e.g. overall rating by types of activities) for monitoring by senior management. In Audit's view, LCSD needs to regularly compile management information (e.g. highlights or summaries) on evaluation of extension activities for monitoring purpose.

Need to keep under review the way forward for programmes funded by additional funding

4.36 As announced in the 2018-19 Budget Speech, an additional \$200 million would be allocated to HKPL to promote reading among children and families in the coming five years (i.e. from 2018-19 to 2022-23). According to LCSD, with the new funding, HKPL has implemented various new initiatives aiming to promote the reading culture at the territory-wide and district levels. Apart from innovative reading and outreaching programmes (e.g. Library-on-Wheels and pop-up library events), publicity efforts have been stepped up to reach out the public which include the set-up of two social media accounts and the thematic website of “Reading is Joyful”, and the launch of a branding campaign that tied in with HKPL’s 60th anniversary to promote HKPL as a joyful and interesting place for reading and exploration.

4.37 As of December 2022, of the additional funding of \$200 million, the estimated expenditure from 2018-19 to 2022-23 was about \$183.42 million. In January 2022, LCSD completed a review of the effectiveness of the programmes funded by the additional funding. According to the review, the programmes were successful and influential in arousing the interest of the youth in reading and expanding the readership. As of January 2023, LCSD had yet to decide the way forward for the programmes funded by the additional funding. In view of the benefits of the programmes as identified in the review, Audit considers that LCSD needs to keep under review the need for continuing the programmes funded by the time-limited additional funding with its existing resources as appropriate.

Audit recommendations

4.38 **Audit has *recommended* that the Director of Leisure and Cultural Services should:**

- (a) **strengthen actions in organising extension activities (e.g. delivering more extension activities in different modes) and achieving the performance target on attendance;**
- (b) **strengthen monitoring of the achievement of target attendance for individual extension activities to facilitate the evaluation and planning of extension activities;**

- (c) **consider elaborating on the attendance figures of extension activities in LCSD's COR and keep under review the need to separately report physical attendance and visits to online extension activities in future;**
- (d) **regularly compile management information (e.g. highlights or summaries) on evaluation of extension activities for monitoring purpose; and**
- (e) **keep under review the need for continuing the programmes funded by the time-limited additional funding with LCSD's existing resources as appropriate.**

Response from the Government

4.39 The Director of Leisure and Cultural Services agrees with the audit recommendations. He has said that:

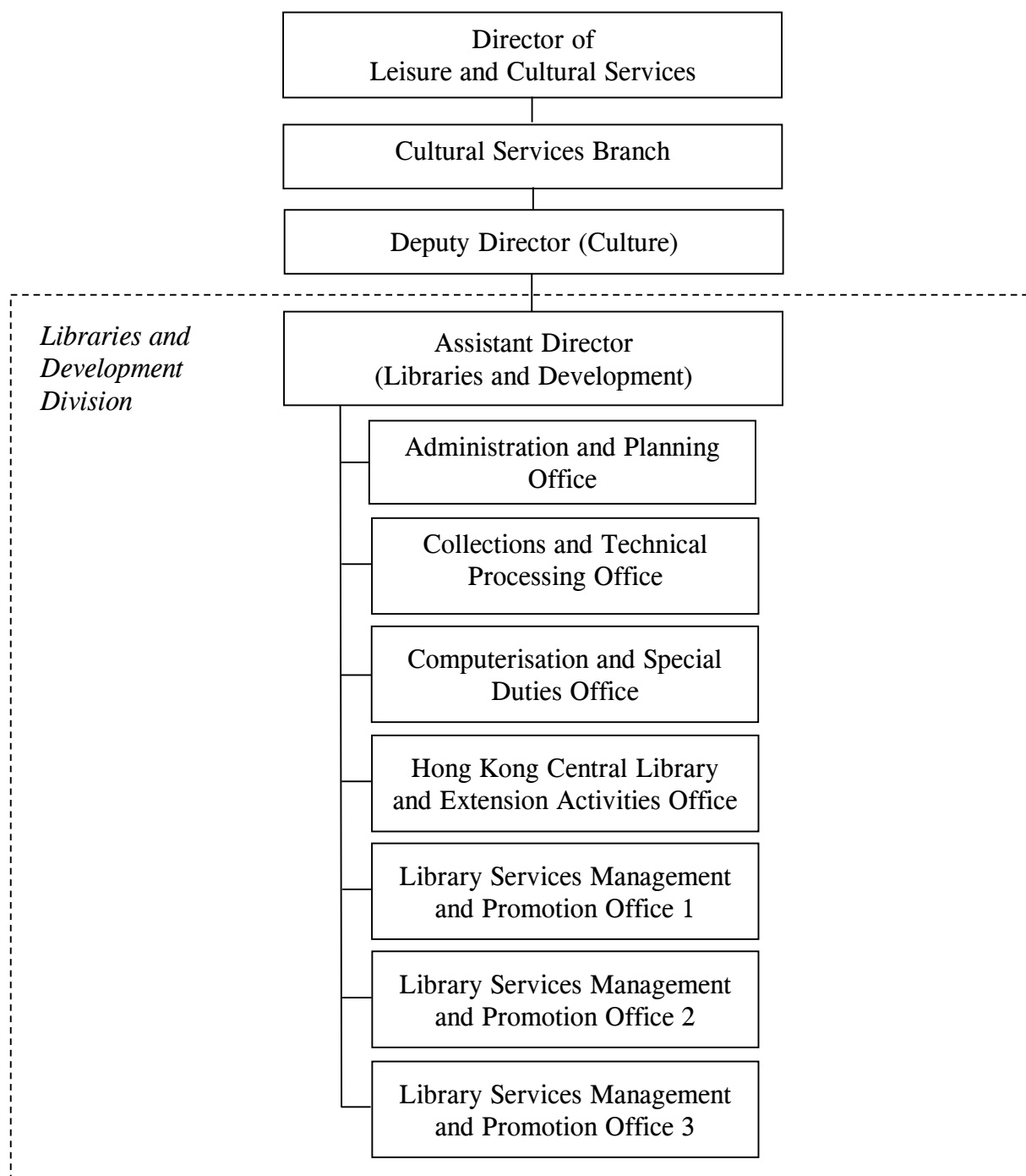
- (a) the shortfalls between the target and actual figures for attendance at extension activities programmes in 2020 and 2021 were mainly due to the impact of the COVID-19 epidemic (see para. 4.32). Organising extension activities in online or hybrid mode requires significant additional programme cost and post-production effort. LCSD has already been organising, and will continue to organise extension activities in hybrid or online mode to reach out to a larger audience by optimising existing resources. To further achieve the performance target on attendance, LCSD will take the following actions:
 - (i) enhancing the promotion and publicity of online programmes on social media platforms, at branch libraries and schools as well as library outreach programmes; and
 - (ii) arranging selected events of signature programmes, popular talks and meet-the-author sessions in online or hybrid mode to generate dual mode participation of live audience and online viewing;
- (b) although the quota may vary given the different nature of activities and venue size, LCSD has already been taking measures to step up monitoring of the achievement of target attendance for individual extension activities,

Use of information technology and publicity efforts

including the comparison of event quota or target audience size with the actual attendance in the evaluation of individual extension activities from 2023-24 onwards;

- (c) LCSD will consider to elaborate the attendance figures of extension activities delivered in different modes in its COR in future;
- (d) LCSD has already been collecting feedback from participants of library extension activities through completion of evaluation forms. HKPL will regularly compile summaries and report the feedback of the participants of major types of library extension activities, such as subject talks and storytelling workshops, etc. for monitoring by senior management from 2023-24; and
- (e) LCSD has decided to continue the programmes previously funded by the time-limited additional funding, and will absorb the recurrent costs of the programmes after the expiry of the funding.

**Leisure and Cultural Services Department:
Organisation chart (extract)
(31 December 2022)**



Source: LCSD records

Remarks: Only the branch/division responsible for the management of Hong Kong Public Libraries are shown.

Implementation schedule of Smart Library System (December 2022)

Activity	Target completion date (Note 1)	Actual/ revised completion date	Delay
(a) Tender preparation	September 2019	September 2019	—
(b) Tendering and award of contract	December 2020	September 2021	9 months
(c) System analysis and design of core library functions	September 2021	August 2022	11 months
(d) System development of core library functions	September 2022	June 2023	9 months
(e) Launch of core library functions — Digital Resources Management (Note 2)	December 2022	August 2023	8 months
(f) Launch of core library functions — Integrated Library System (with RFID enabled in all libraries) (Note 3)	June 2023	March 2024	9 months
(g) Launch of other RFID-enabled equipment — Other ancillary RFID-enabled equipment including book drops, dispensers, e-lockers in all branch libraries	March 2024	November 2024	8 months
(h) Launch of remaining library functions such as Business Intelligence System (Note 4)	December 2024	September 2025	9 months

Source: Audit analysis of LCSD records

Note 1: The target completion date was based on the information provided to the Finance Committee of LegCo in 2019.

Note 2: Digital Resources Management provides functions for cataloguing, managing and delivering digital contents that are either owned/licensed by HKPL or under the Hong Kong Memory Project. The digital resources will cover images, digitised materials and audio-visual materials.

Note 3: Integrated Library System serves as the entry point for patrons to access HKPL services round the clock via the Internet, and includes a mobile app that integrates with various library functions and services (e.g. registration, search, payment, and access to e-resources).

Note 4: Business Intelligence System provides data analytic functions to HKPL staff via a business intelligence platform which manages data extraction, accumulation, and pre-defined and ad hoc data analysis.

Acronyms and abbreviations

Audit	Audit Commission
CDM	Collection Development Meeting
CDP	Collection development plan
COR	Controlling Officer's Report
FSTB	Financial Services and the Treasury Bureau
HKPL	Hong Kong Public Libraries
IFLA	International Federation of Library Associations and Institutions
IT	Information technology
LCSD	Leisure and Cultural Services Department
LegCo	Legislative Council
MMIS	Multimedia Information System
MTR	Mass Transit Railway
NGILS	Next Generation Integrated Library System
NGO	Non-governmental organisation
OGCIO	Office of the Government Chief Information Officer
RFID	Radio Frequency Identification
SLA	Service Level Agreement
SLS	Smart Library System
TPU	Technical Processing Unit
UNESCO	United Nations Educational, Scientific and Cultural Organization

CHAPTER 7

Development Bureau Lands Department

**Provision of map products and spatial data
services to the public by the Lands Department**

**Audit Commission
Hong Kong
31 March 2023**

This audit review was carried out under a set of guidelines tabled in the Provisional Legislative Council by the Chairman of the Public Accounts Committee on 11 February 1998. The guidelines were agreed between the Public Accounts Committee and the Director of Audit and accepted by the Government of the Hong Kong Special Administrative Region.

Report No. 80 of the Director of Audit contains 8 Chapters which are available on our website at <https://www.aud.gov.hk>



Audit Commission
6th Floor, High Block
Queensway Government Offices
66 Queensway
Hong Kong

Tel : (852) 2867 3423
Fax : (852) 2824 2087
E-mail : enquiry@aud.gov.hk

PROVISION OF MAP PRODUCTS AND SPATIAL DATA SERVICES TO THE PUBLIC BY THE LANDS DEPARTMENT

Contents

	Paragraph
EXECUTIVE SUMMARY	
PART 1: INTRODUCTION	1.1 – 1.10
Audit review	1.11
Acknowledgement	1.12
PART 2: MAINTENANCE OF MAP PRODUCTS	2.1
Updating of map products	2.2 – 2.11
Audit recommendations	2.12
Response from the Government	2.13
Other related issues	2.14 – 2.19
Audit recommendations	2.20
Response from the Government	2.21
PART 3: DISSEMINATION OF MAP PRODUCTS AND SPATIAL DATA TO THE PUBLIC	3.1
Releasing of map products and spatial data for public use	3.2 – 3.14

	Paragraph
Audit recommendations	3.15
Response from the Government	3.16
Provision of geospatial portals	3.17 – 3.22
Audit recommendations	3.23
Response from the Government	3.24
PART 4: DEVELOPMENT OF THREE-DIMENSIONAL DIGITAL MAP	4.1
Three-dimensional digital map	4.2 – 4.17
Audit recommendations	4.18
Response from the Government	4.19
Appendices	Page
A : Survey and Mapping Office of the Lands Department: Organisation chart (extract) (30 November 2022)	63
B : Acronyms and abbreviations	64

PROVISION OF MAP PRODUCTS AND SPATIAL DATA SERVICES TO THE PUBLIC BY THE LANDS DEPARTMENT

Executive Summary

1. Maps are closely related to daily lives of the public and are effective tools for location-searching and route-planning. They are also used for public administration, town planning, housing, land management and development, as well as leisure purposes by the Government, private sectors and the public. Spatial data refers to any data with reference to a specific geographical location. With the development of technology and the popularity of smartphones, spatial data has been integrated into daily lives and continues to change the lifestyles and habits of the public. Spatial data touches almost every aspect of daily lives and is indispensable for smart cities.

2. The Survey and Mapping Office (SMO) of the Lands Department (LandsD), among other duties, is responsible for the provision of map products (in digital and paper forms) and spatial data services to the public (including professionals from different sectors). These map products and spatial data are disseminated to the public through various channels and geospatial portals. In 2021-22, a total of 30,011 copies of map products were sold to the public (with total revenue of about \$1,773,000) and the total download numbers of various digital map products and spatial data were about 3,648,000.

3. In late 2017, the Government announced the Smart City Blueprint for Hong Kong and put forward the strategy to encourage the use of open data for smart city innovations and facilitate the sharing of geospatial data and support various smart city applications. Three-dimensional (3D) digital map is one of the core components of the digital infrastructure underpinning Hong Kong's smart city development. LandsD is responsible for the development of 3D digital map. The Audit Commission (Audit) has recently conducted a review of the provision of map products and spatial data services to the public by LandsD.

Executive Summary

Maintenance of map products

4. *Scope for improvement in updating of 1:1000 topographic map.* The 1:1000 topographic map (also known as basic map) covering the whole territory of Hong Kong is the largest scale topographic map. According to LandsD, SMO (through its 10 District Survey Offices (DSOs)) adopts continuous updating approach to update the 1:1000 topographic map (comprising 3,331 map sheets as of November 2022). DSOs identify changes of map details in the basic map based on data collected from various sources and their change identification work. DSOs carry out the consequential map updating work on a job basis. A job arises when map details in a basic map are found to have changed. DSOs update the changes in the basic map as soon as practicable (paras. 1.5(a) and 2.2(a)). Regarding the updating of 1:1000 topographic map:

- (a) according to LandsD's guidelines, change identification work should be scheduled for all map sheets for execution at intervals of 1 to 5 years. In other words, change identification work for each map sheet should be carried out at least once every 5 years. However, Audit noted that, as of November 2022, the latest change identification work for 96 map sheets was carried out more than 5 years and up to 12.3 years (averaging 6.4 years) ago (i.e. not meeting the stipulated timeframe in LandsD's guidelines). According to LandsD, the areas covered by the 96 map sheets were non-active or remote areas. The change identification work for 23 (24%) map sheets had been carried out between December 2022 and February 2023. For the 73 (76%) remaining map sheets, it would accord priority for the change identification work (para. 2.3(a));
- (b) Audit noted that there was no time limit set for completion of basic map updating jobs by DSOs. As of December 2022, the 10 DSOs had a total of 749 outstanding basic map updating jobs, of which 305 (41%) had remained outstanding for more than 1 year and up to 7 years (averaging 2 years) after job creation between 2015 and 2021 (para. 2.3(b));
- (c) according to LandsD, DSOs maintain management information (under their own templates and not standardised) on the updating status of each map sheet and the progress of basic map updating jobs. Audit noted that DSOs had not regularly provided such management information to senior management of LandsD (para. 2.3(c)); and

Executive Summary

- (d) between August and December 2022, SMO awarded three 1-year service contracts for outsourcing some basic map updating work of the 10 DSOs at a total contract sum of \$3.7 million. For 16 (80%) of the 20 basic map updating jobs ordered under the service contracts and with deadlines for submission of deliverables by the contractors in 2022, there were delays in submission of deliverables by the contractors, ranging from 1 to 84 days (averaging 31 days) (para. 2.3(d)).

5. ***Scope for implementing early automatic map generalisation for updating medium to small-scale topographic maps.*** Based on the 1:1000 topographic map, SMO updates by means of map generalisation other medium to small-scale topographic maps (i.e. scales of 1:5000, 1:10000, 1:20000, 1:50000 and 1:200000). According to LandsD, the current practice of manual map generalisation leads to long revision cycle of maps (about half year) and ineffective generalisation among maps in various scales. In October 2022, LandsD obtained funding approval of \$17.2 million for a project on the implementation of automatic map generalisation workflow for 1:10000 topographic map. According to LandsD, with the successful implementation of the automatic map generalisation workflow, it is anticipated that the 1:10000 topographic map dataset could be updated and released in 3 months or less after the update of the 1:1000 topographic map dataset. The project is targeted to be completed in December 2024 and was under tender preparation stage as of January 2023. In Audit's view, LandsD needs to take measures to ensure that the project is completed as scheduled with a view to implementing early automatic map generalisation for all scales of topographic maps (paras. 2.5 and 2.6).

6. ***Some digital orthophotos not updated for a long time.*** The digital orthophoto DOP5000 series and DOPM50-L0 series cover the whole territory of Hong Kong in 192 tiles and one single image respectively. They are updated as and when necessary and there is no minimum updating frequency for the two series. Audit noted that as of November 2022, 107 (56%) of the 192 tiles of DOP5000 series had not been updated for 7 or more years (up to 7.6 years) and the DOPM50-L0 series had not been updated for 6.4 years (para. 2.7).

7. ***Need to closely monitor the service conditions of large format digital aerial camera system and take measures to ensure the timely replacement of the system.*** LandsD uses a large format digital aerial camera (LFDAC) system to take aerial photographs in the territory of Hong Kong and produces photogrammetric products from these aerial photographs for usage including updating of the 1:1000 topographic

Executive Summary

map. The digital aerial camera will be mounted on two fixed-wing aircraft of the Government Flying Service (GFS) for performing aerial photography work on a shared-use basis. Audit noted that LFDAC system was approaching its end-of-service-life in May 2023. According to LandsD: (a) with regular maintenance and supply of essential consumables and spare parts, LFDAC system is expected to maintain service in the coming years up to December 2026; and (b) replacement of LFDAC system was being planned. As the new LFDAC system needs to be compatible with GFS aircraft, LandsD started discussions with GFS in February 2022 for the replacement plan. In this connection, Audit noted that LandsD took about 4 years in the previous procurement, including installation, airworthiness certification and testing before commissioning of LFDAC system in December 2016. In Audit's view, LandsD needs to closely monitor the service conditions of LFDAC system and take measures to ensure the timely replacement of the system with a view to continuing the provision of quality aerial photography service (paras. 2.14 to 2.16).

Dissemination of map products and spatial data to the public

8. According to LandsD, opening up digital map products would enable the public, academia and businesses to make greater use of spatial data in research and application development. Since 2012, LandsD has been identifying suitable digital map products and spatial data for opening up to the public for free browsing and downloading. As of December 2022, certain paper and digital map products were available for sale at a charge to the public through various sales channels (i.e. Hong Kong Map Service 2.0 (HKMS 2.0), SMO Map Sales Outlets and reseller outlets), while most digital map products and spatial data were released to the public for free browsing and downloading for commercial and non-commercial uses (paras. 3.2 and 3.3).

9. ***Scope for digitising more paper map products and further opening up digital map products for free downloading.*** In general, paper map products are facing diminishing demand in recent years, while the demand for digital map products and spatial data had significantly increased since opening up for free downloading. Audit noted that, as of December 2022, there was no digital version for certain paper map products (e.g. countryside maps), and digital aerial photograph (Series:DAP) products were still for sale at a charge and not opened up for free downloading. According to LandsD, it had reviewed the need for digitisation of countryside map, and needs to evaluate the financial and technical implications of opening up digital aerial

Executive Summary

photograph (Series:DAP) products for free downloading due to their huge volume and file size. In Audit's view, LandsD needs to keep under review the need for digitising more paper map products and further opening up digital map products for the public's free browsing and downloading (paras. 3.5 to 3.7).

10. ***Need to keep under review the need for closing down SMO Map Sales Outlets.*** LandsD's reviews in May and June 2021 found 7 SMO Map Sales Outlets with more obvious drop in sales activities after the launch of HKMS 2.0 in August 2018. In the event, 4 Map Sales Outlets were closed down in December 2021. Audit noted that, as of January 2023, LandsD was considering whether the remaining 3 Map Sales Outlets at Central, Fanling and West Kowloon would be closed down. In Audit's view, LandsD needs to make early decision on whether and when to close down the remaining 3 SMO Map Sales Outlets and keep under review the need for closing down other SMO Map Sales Outlets (paras. 3.9 and 3.10).

11. ***Scope for enhancing stock management.*** Paper map products were classified as either printed map (printed by the Government Logistics Department based on LandsD's printing order) or print-on-demand maps (printed in-house by LandsD upon receipt of sales order). According to LandsD, printed map becomes unserviceable upon revision to new edition and unserviceable printed maps can no longer be sold to the public. Audit noted that, as of November 2022, the stock levels of certain types of printed maps far exceeded their respective annual sales volumes in 2021-22. For example, while the sales volume of two-dimensional Topographic Map 1:100000 (colour version) was 127 copies in 2021-22, it had stock of 1,021 copies as of November 2022 (paras. 3.11 and 3.12).

12. ***Decreasing usage and low download number of VoiceMapHK.*** According to LandsD, VoiceMapHK (a mobile app) was developed to support the digital inclusion initiative for the visually impaired community with a population of 175,000 in Hong Kong. However, Audit noted that the actual number of usage sessions of VoiceMapHK decreased from 1,511 in 2017-18 to less than 70 in both 2020-21 and 2021-22, and the accumulated number of downloads of the mobile app as of November 2022 was only about 9,000 (para. 3.18).

Development of three-dimensional digital map

13. 3D digital map is one of the core components of the digital infrastructure underpinning Hong Kong's smart city development. LandsD is responsible for the development of 3D digital map (including territory-wide 3D digital map, 3D pedestrian network and 3D indoor map) with a funding of \$150 million. It aims to develop high-quality 3D digital map by phases and strives to cover the whole territory by end of 2023 (paras. 4.2 and 4.3).

14. *Need to continue to closely monitor the implementation progress of territory-wide 3D digital map.* Audit noted that the implementation of territory-wide 3D digital map (comprising 6 phases) was behind schedule: (a) Phase 1 (Kowloon East) was completed 11 months later than the original target completion date; and (b) for the 5 remaining phases (involving 5 areas), as of December 2022, they were either in progress or under tender assessments, and their expected completion dates were 2 to 6 months later than their original target completion dates. According to LandsD, based on the experience gained from Phase 1 project, enhanced measures had been taken for the 5 remaining phases, such as strengthening the manpower of project consultants for monitoring the progress and improving the communication among LandsD, consultants and contractors. In Audit's view, LandsD needs to continue to closely monitor the implementation progress of territory-wide 3D digital map with a view to ensuring its timely completion (paras. 4.5 to 4.7).

15. *Need to keep under review the utilisation of 3D pedestrian network.* According to LandsD, the 3D pedestrian network is a set of 3D line features capable of supporting innovative applications. Its dataset was published and made free to the public in December 2020, and was further updated in September 2022. The numbers of downloads for 3D pedestrian network dataset were 200, 1,971 and 2,569 in 2020 (from December 2020), 2021 and 2022 (up to November 2022) respectively. In Audit's view, LandsD needs to keep under review the utilisation of 3D pedestrian network and step up promotional activities as needed to encourage more users to utilise the 3D pedestrian network (paras. 4.8 and 4.9).

16. *Need to closely monitor the implementation progress of 3D indoor map.* In 2020, LandsD commissioned a pilot project on creation of 3D indoor maps, which covered 158 buildings mainly located in Kowloon East. After the completion of the pilot project in March 2021, LandsD aims to develop the 3D indoor map by phases

Executive Summary

to cover the accessible interior of buildings and structures for 1,250 buildings across the territory by end of 2023. As of January 2023, contracts for Phase 1 (covering 390 buildings) and Phase 2 (covering 420 buildings) were expected to be completed by March and December 2023 respectively. The contract for Phase 3 (covering 440 buildings) was planned to be awarded in third quarter of 2023 with target completion date in second quarter of 2024 (i.e. behind the scheduled date of end of 2023) (paras. 4.11 to 4.13).

17. *Need to obtain consents from property owners/property management companies for opening up the 3D indoor map.* According to LandsD: (a) the data of 3D indoor map was intended to be shared with government bureaux/departments for internal uses and further study. It subsequently reviewed the opening up of the 3D indoor maps of the 158 buildings under the Kowloon East pilot project and planned to release the 3D indoor maps for those buildings (with consents obtained) to the public in December 2022. As of March 2023, it was still obtaining consents of property owners/property management companies of the 158 buildings and planned to open up those 3D indoor maps upon their consents; and (b) for those 1,250 buildings across the territory (see para. 16), it would obtain consents from relevant property owners/property management companies before and during the course of project implementation period. In Audit's view, LandsD needs to take measures to early obtain consents from the property owners/property management companies for opening up their buildings' 3D indoor maps to the public (paras. 4.14, 4.16 and 4.17).

Audit recommendations

18. **Audit recommendations are made in the respective sections of this Audit Report. Only the key ones are highlighted in this Executive Summary. Audit has *recommended* that the Director of Lands should:**

Maintenance of map products

- (a) **regarding 1:1000 topographic map, take measures to ensure that DSOs carry out the change identification work for all map sheets in accordance with the timeframe in LandsD's guidelines (para. 2.12(a)(i));**

Executive Summary

- (b) regarding basic map updating jobs, take measures to ensure that such jobs (particularly those long outstanding ones) are completed as early as practicable and consider setting a time limit for their completion (para. 2.12(b));
- (c) require DSOs to provide regular management information on the updating status of each sheet of the 1:1000 topographic map and the progress of basic map updating jobs under a standard template to LandsD's senior management for monitoring purposes (para. 2.12(c));
- (d) regarding basic map updating work under related service contracts, step up measures to ensure the timely submission of deliverables by the contractors (para. 2.12(d)(i));
- (e) take measures to ensure that the project on the implementation of automatic map generalisation workflow for 1:10000 topographic map is completed as scheduled (para. 2.12(f));
- (f) consider setting updating frequency for digital orthophoto DOP5000 series and DOPM50-L0 series (para. 2.12(g)(i));
- (g) closely monitor the service conditions of LFDAC system and take measures to ensure the timely replacement of the system (para. 2.20(a));

Dissemination of map products and spatial data to the public

- (h) keep under review the need for digitising more paper map products and further opening up digital map products for the public's free browsing and downloading (para. 3.15(a) and (b));
- (i) make early decision on whether and when to close down SMO Map Sales Outlets at Central, Fanling and West Kowloon, and keep under review the need for closing down other SMO Map Sales Outlets (para. 3.15(d));
- (j) make estimates of the print quantities of printed map as inventory as accurately as possible (para. 3.15(e));

Executive Summary

- (k) **review whether the stocks of printed maps on hand are still serviceable and consider the disposal methods for those unserviceable printed maps (para. 3.15(g));**
- (l) **keep under review the usage and download number of LandsD's mobile apps with a view to enhancing the mobile apps (para. 3.23(a));**

Development of three-dimensional digital map

- (m) **continue to closely monitor the implementation progress of territory-wide 3D digital map with a view to ensuring its timely completion (para. 4.18(a));**
- (n) **keep under review the utilisation of 3D pedestrian network and step up promotional activities as needed to encourage more users to utilise the 3D pedestrian network (para. 4.18(b));**
- (o) **closely monitor the implementation progress of 3D indoor map with a view to ensuring its timely completion (para. 4.18(c)); and**
- (p) **take measures to early obtain consents from the property owners/property management companies for opening up their buildings' 3D indoor maps to the public (para. 4.18(d)).**

Response from the Government

19. The Director of Lands accepts the audit recommendations.

PART 1: INTRODUCTION

1.1 This PART describes the background to the audit and outlines the audit objectives and scope.

Background

1.2 Maps are closely related to daily lives of the public and are effective tools for location-searching and route-planning. They are also used for public administration, town planning, housing, land management and development, as well as leisure purposes by the Government, private sectors and the public. The Government has a long history in producing map products (e.g. Hong Kong Map of 1897). Map products have evolved over the years (e.g. evolving from black and white maps in the 1960s, full-colour maps in the 1970s to computerised mapping since the mid-1990s).

1.3 Spatial data refers to any data with reference to a specific geographical location. With the development of technology and the popularity of smartphones, spatial data has been integrated into daily lives and continues to change the lifestyles and habits of the public. Spatial data touches almost every aspect of daily lives and is indispensable for smart cities (see para. 1.10).

1.4 The Survey and Mapping Office (SMO) of the Lands Department (LandsD), among other duties (Note 1), is responsible for the provision of map products and spatial data services to the public (including professionals from different

Note 1: *SMO is the survey, mapping and geospatial data agency of the Government. Apart from the provision of map products and spatial data services, SMO is also responsible for other duties, including: (a) provision of support to the Land Survey Authority (i.e. the Director of Lands) in administering the Land Survey Ordinance (Cap. 473); (b) provision of land boundary survey services in support of the Government's land administration functions (e.g. permanent and short term land disposals, government land allocation, small house application, land acquisition and clearance, land exchange, land control and management, lease modification and lease enforcement); (c) provision of land boundary advisory services to other government bureaux/departments in support of their discharge of statutory functions and enforcement actions; and (d) establishment and maintenance of a territory-wide positioning infrastructure for Hong Kong.*

Introduction

sectors) (Note 2). SMO provides the public with various types of map products in digital and paper forms, and geospatial data (Note 3) of Hong Kong. It is committed to the provision of accurate and up-to-date map products and geospatial data to support the rapid development of Hong Kong. SMO is organised into four divisions, under which there are a number of supporting sections and 10 District Survey Offices (DSOs — Note 4). An extract of SMO's organisation chart as at 30 November 2022 is at Appendix A. SMO had 1,352 staff (including both civil servants and contract staff) as of November 2022 and its total expenditure in 2021-22 was \$862.6 million (Note 5).

Maintenance of map products

1.5 SMO provides various types of map products in digital and paper forms for various purposes for use by the public and is responsible for the maintenance of these map products. Categories of map products include:

Note 2: *According to LandsD, government bureaux/departments can also make use of the map products and spatial data services provided to the public. In this connection, SMO also provides mapping and spatial data services to government bureaux/departments upon their requests in support of their operations, including: (a) mapping advisory services, which ensure that the geographic information on maps prepared for use in legislation is represented accurately and delivered effectively from cartographic perspective; (b) reprographic services, which mainly cover aerial photography, desktop publishing, image manipulation, graphic and motion design, video production, large format scanning, printing and lamination, wall map production and exhibits presentation; (c) Geospatial Information Hub, which supports the internal operation and information sharing within the Government; and (d) geospatial information project advisory services (e.g. collaboration on geo-enabling the data or implementing initiatives in geospatial-related applications).*

Note 3: *The terms “spatial data” and “geospatial data” are used interchangeably in this Audit Report.*

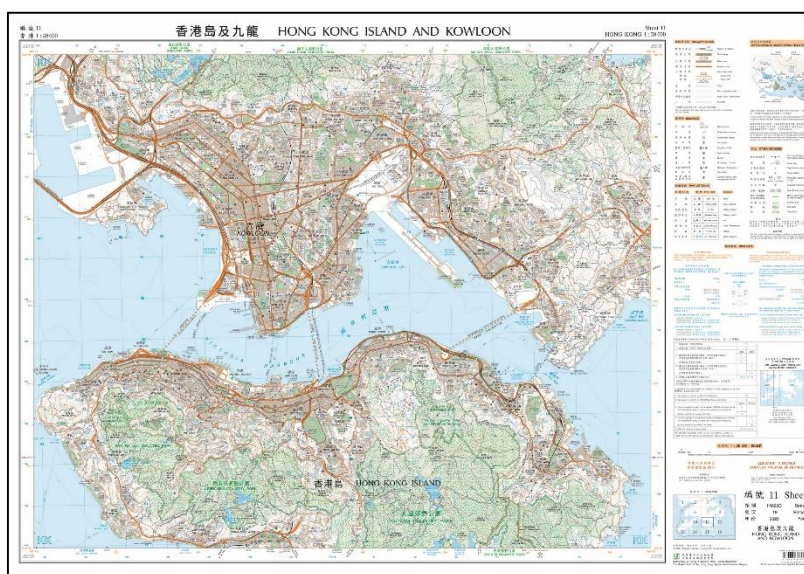
Note 4: *The 10 DSOs are DSO/Hong Kong, DSO/Islands, DSO/Kowloon, DSO/North, DSO/Sai Kung, DSO/Shau Tin, DSO/Tai Po, DSO/Tsuen Wan and Kwai Tsing, DSO/Tuen Mun and DSO/Yuen Long.*

Note 5: *According to LandsD: (a) apart from the provision of map products and spatial data services to the public, SMO is also responsible for other duties (see Note 1 to para. 1.4) and provides mapping and spatial data services to government bureaux/departments (see Note 2 to para. 1.4); and (b) breakdown of staff resources and expenditure solely for the provision of map products and spatial data services to the public is not available.*

- (a) **Two-dimensional (2D) topographic maps.** SMO provides a comprehensive set of 2D topographic maps in different scales to the public. The 1:1000 topographic map (also known as basic map — Note 6) covering the whole territory of Hong Kong is the largest scale topographic map. Based on the 1:1000 topographic map, SMO also provides by means of map generalisation (see Note 20 to para. 2.2(b)) other medium to small-scale topographic maps, such as scales of 1:5000, 1:10000, 1:20000 (see Figure 1 for an example), 1:50000 and 1:200000. Digital form of the above topographic maps (see Figure 2 for an example) has become open data and the public can use them for both commercial and non-commercial purposes;

Figure 1

**1:20000 paper topographic map
(May 2020)**

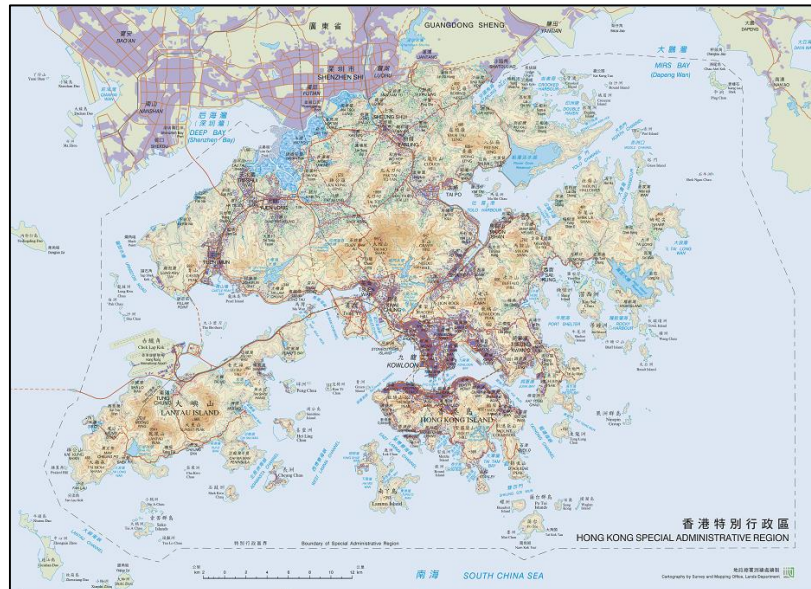


Source: LandsD records

Note 6: The terms “1:1000 topographic map” and “basic map” are used interchangeably in this Audit Report.

Figure 2

1:200000 digital topographic map
(October 2022)

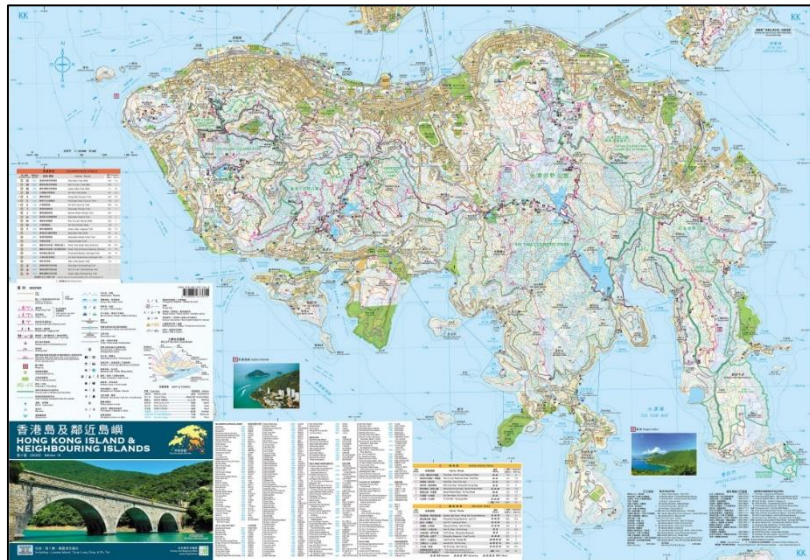


Source: LandsD records

- (b) **Thematic maps.** SMO provides various thematic maps to the public. The major ones include:
- (i) **Countryside maps.** This is a series of footpath maps comprising five sheets (see Figure 3 for an example). Each map shows detailed information of leisure amenities and footpaths. This map series helps hikers and nature lovers explore rural areas and country parks. It is printed on water-proof paper on both sides and folded; and

Figure 3

**Countryside map: Hong Kong Island and Neighbouring Islands
(July 2022)**

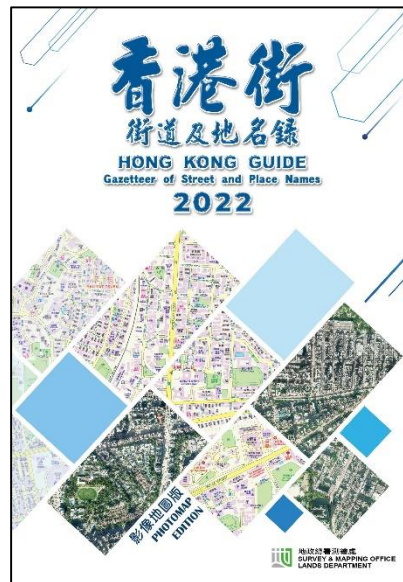


Source: LandsD records

- (ii) ***Hong Kong Guide.*** The Hong Kong Guide (see Figure 4 for an example) is a comprehensive guide to streets and places of Hong Kong. It consists of maps covering the whole territory of Hong Kong; and

Figure 4

**Hong Kong Guide
(January 2022)**

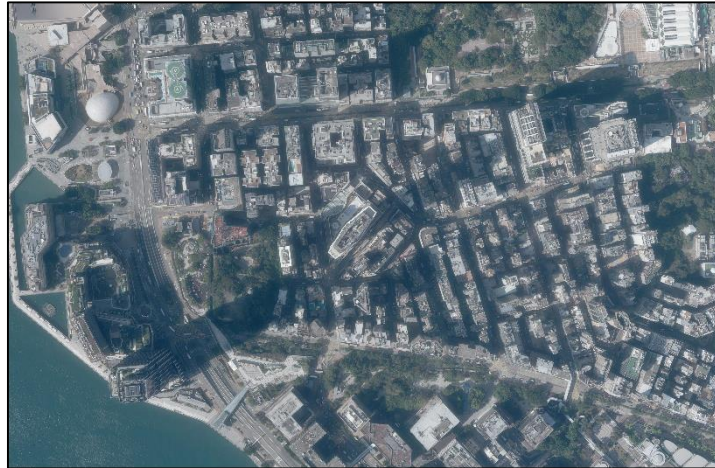


Source: LandsD records

- (c) ***Aerial photographs and image products.*** Apart from maps, SMO also provides various aerial photographs and image products to the public, including:
- (i) ***Aerial photographs.*** SMO undertakes aerial photography in the territory of Hong Kong at different altitudes for producing various types of aerial photographs including vertical and oblique aerial photographs (see Photographs 1 and 2 for examples). It provides aerial photographs in digital form. Copies of these aerial photographs in the form of duplicate and enlargement are also available upon order; and

Photograph 1

**A vertical aerial photograph of Tsim Sha Tsui
(January 2022)**



Source: LandsD records

Photograph 2

**An oblique aerial photograph of the Victoria Harbour
(January 2018)**



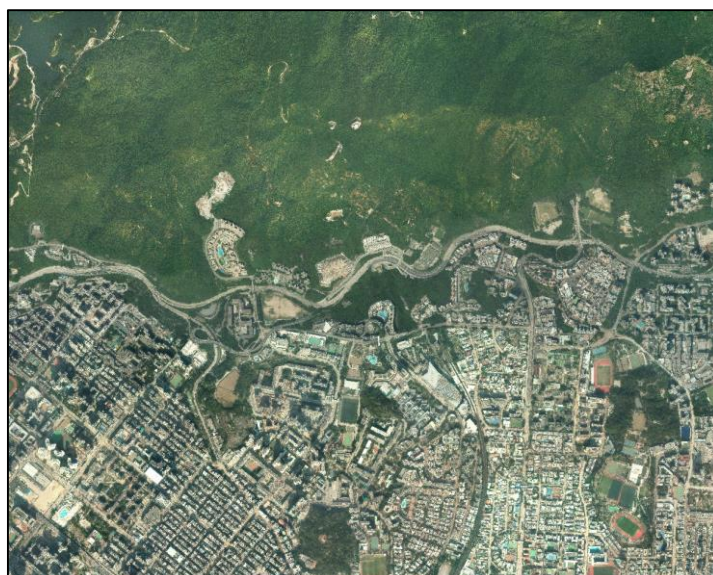
Source: LandsD records

Introduction

- (ii) ***Digital orthophotos.*** Digital orthophoto (see Photograph 3 for an example) is an image map produced by SMO featuring pictorial information of ground features as contained in geometrically rectified aerial photographs and has a uniform scale. With the use of digital photogrammetry technology, the rectification process applied to the original aerial photographs aims to remove the geometric distortions of the photographic images caused by topographic relief and camera tilt.

Photograph 3

**A digital orthophoto of Cheung Sha Wan, Shek Kip Mei and Kowloon Tong
(December 2019)**



Source: LandsD records

Dissemination of map products and spatial data to the public

1.6 ***Dissemination of map products.*** As of December 2022, 31 paper map products and 4 digital aerial photograph (Series:DAP) products (Note 7) from SMO were available for sale at a charge to the public through the following channels:

Note 7: *Digital aerial photograph (Series:DAP) products are the digital format of an aerial photograph produced from its original aerial film by means of scanning or captured by the large format digital aerial camera, and with resolution of 1,800 dots per inch or above.*

- (a) ***Hong Kong Map Service 2.0 (HKMS 2.0).*** HKMS 2.0 (developed and maintained by SMO — Note 8) is a website providing round-the-clock service to the public for searching and ordering different types of map products, and downloading digital map products;
- (b) ***SMO Map Sales Outlets.*** The SMO Map Sales Outlets (Note 9) provide another channel to the public for ordering the map products. According to LandsD, staff at SMO Map Sales Outlets will also assist the public to order or download the digital map products through HKMS 2.0 where necessary; and
- (c) ***Reseller outlets.*** Some popular paper map products (e.g. countryside maps) are also available for sale at reseller outlets (e.g. designated post offices, country park visitor centres and bookshops).

1.7 ***Opening up of digital map products and spatial data to the public for free use.*** According to LandsD:

- (a) opening up the digital map products enables the public, academia and businesses to make greater use of spatial data in research and application development. In light of the Government's Open Data Policy promulgated by the Office of the Government Chief Information Officer (OGCIO), SMO has been identifying suitable map products and spatial data for releasing to the public for free use;

Note 8: *HKMS 2.0 replaced the Hong Kong Map Service website, which had been operated since 2010, as the new one-stop platform for map products for the public in August 2018. Compared to Hong Kong Map Service, HKMS 2.0 has streamlined the ordering process (e.g. no registration is required for purchasing paper map products), and is also connected with the Hongkong Post's delivery service to allow delivery of paper map products to designated locations.*

Note 9: *As of December 2022, there were 8 SMO Map Sales Outlets, including: (a) 2 SMO Map Publications Centres (located at North Point and Yau Ma Tei); and (b) 6 DSOs (located at West Kowloon, Sai Kung, Tai Po, Yuen Long, Fanling and Central).*

Introduction

- (b) since April 2021, except 4 digital aerial photograph (Series:DAP) products which are still available for sale at a charge (see para. 1.6), most digital map products previously available for sale at a charge (e.g. digital 2D topographic maps and three-dimensional (3D) spatial data) have been released to the public for free browsing and downloading; and
 - (c) as of December 2022, 28 digital map products/spatial datasets were opened up and available for free browsing and downloading on HKMS 2.0 (see para. 1.6(a)), the Hong Kong GeoData Store (see para. 1.9(d)), the Common Spatial Data Infrastructure (CSDI) portal (Note 10), and/or the Public Sector Information Portal (“data.gov.hk”) (Note 11).
- 1.8 ***Sales and downloading of map products and spatial data.*** In 2021-22:
- (a) a total of 30,011 copies of the 31 paper map products and 4 digital aerial photograph (Series:DAP) products were sold to the public (Note 12) (with total revenue of about \$1,773,000); and
 - (b) the total download numbers of various digital map products and spatial data (except those 4 digital aerial photograph products available for sale at a charge) were about 3,648,000.

Note 10: *The Development Bureau takes the lead in developing CSDI which operates as a one-stop data portal where the public (including government bureaux/departments) can search and view a wide range of data, and also download the data as raw materials and tap the data in innovative uses through value-added products. CSDI portal was made available for public use in December 2022.*

Note 11: *The Public Sector Information Portal (“data.gov.hk”) is coordinated by OGCIO with the participation of government bureaux/departments and public/private organisations to disseminate various types of Public Sector Information for free re-use for both commercial and non-commercial purposes.*

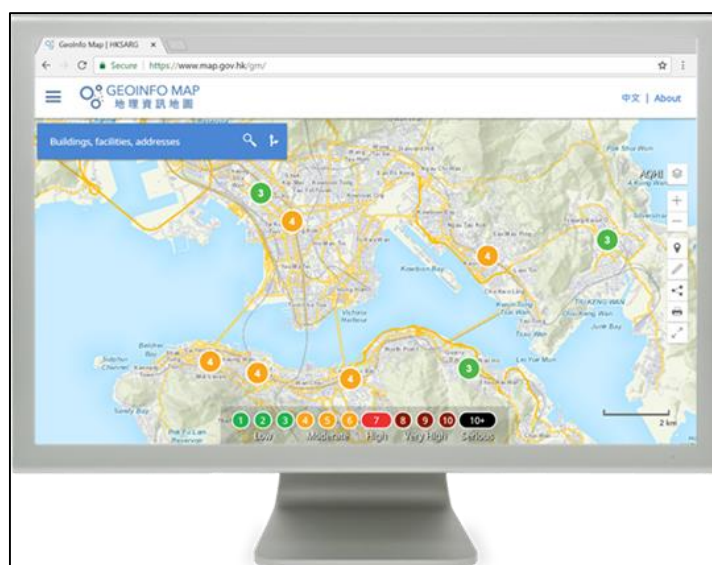
Note 12: *According to LandsD, government bureaux/departments can also order and purchase these map products through HKMS 2.0 or make direct requests to SMO using specific government forms. A total of 82,353 copies of various map products were distributed to government bureaux/departments in 2021-22 (with total revenue of about \$278,000).*

1.9 **Geospatial portals.** LandsD integrates vast amount of spatial data from various sources and provides web-based geospatial information services to the public. It aims at improving accessibility and availability of geospatial information. In view of the rising geospatial awareness and increasing public needs for open spatial data, LandsD has developed and launched different geospatial portals to the public. Major geospatial portals provided to the public include:

- (a) **GeoInfo Map.** The GeoInfo Map is a public web-map service (see Figure 5), which provides free and convenient public access to maps of Hong Kong, and the location and related information about various public facilities and services. Government bureaux/departments (B/Ds) can release their latest geospatial data to the public through this platform;

Figure 5

GeoInfo Map

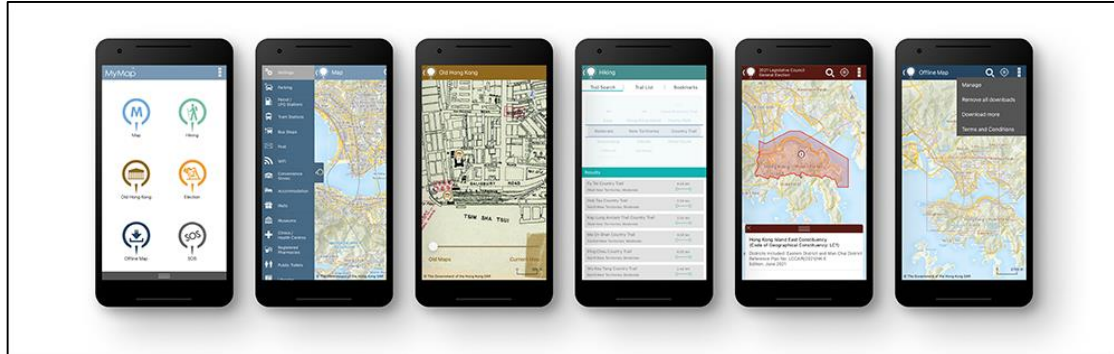


Source: LandsD records

- (b) **MyMapHK.** MyMapHK is an all-in-one mobile map app (see Figure 6), which provides the public with a convenient and on-the-go access to maps published by LandsD and integrated geospatial information about public facilities in Hong Kong;

Figure 6

MyMapHK



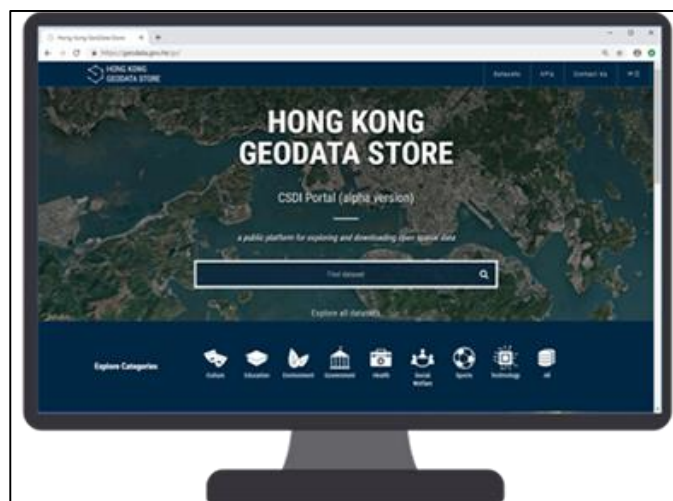
Source: LandsD records

- (c) **VoiceMapHK.** VoiceMapHK is a digital inclusion mobile map app, which provides visually impaired people with a one-stop access to geospatial information in Hong Kong, and facilitates them to retrieve location information; and
- (d) **Hong Kong GeoData Store.** The Hong Kong GeoData Store (see Figure 7) is the alpha version portal for CSDI (Note 13) and open spatial data initiative to facilitate the sharing of geospatial data. According to LandsD, as CSDI portal was made available for public use in December 2022 (see Note 10 to para. 1.7(c)), the Hong Kong GeoData Store will cease operation in August 2023.

Note 13: According to LandsD, the alpha version portal refers to the early version of the portal demonstrating the concepts of CSDI portal.

Figure 7

Hong Kong GeoData Store



Source: LandsD records

Development of 3D digital map

1.10 In late 2017, the Government announced the Smart City Blueprint for Hong Kong and put forward the strategy to encourage the use of open data for smart city innovations and facilitate the sharing of geospatial data and support various smart city applications. 3D digital map is one of the core components of the digital infrastructure underpinning Hong Kong's smart city development (Note 14). LandsD is responsible for the development of 3D digital map. According to LandsD, 3D digital map can support a wide range of functions including urban planning, land management, project development, environmental studies, traffic studies, landscape design as well as other technical assessments. It also promotes the development of various applications and enables users' better grasp of the spatial information of a specific location. To meet the increasing needs of 3D applications and better understand a modern city like Hong Kong, SMO aims to develop a full-fledged 3D digital map covering the whole territory by end of 2023.

Note 14: *Apart from 3D digital map, CSDI portal (see Note 10 to para. 1.7(c)) is also a core component of the digital infrastructure underpinning Hong Kong's smart city development.*

Introduction

Audit review

1.11 In October 2022, the Audit Commission (Audit) commenced a review of the provision of map products and spatial data services to the public by LandsD. The audit review has focused on the following areas:

- (a) maintenance of map products (PART 2);
- (b) dissemination of map products and spatial data to the public (PART 3); and
- (c) development of 3D digital map (PART 4).

Audit has found room for improvement in the above areas and has made a number of recommendations to address the issues.

Acknowledgement

1.12 Audit would like to acknowledge with gratitude the full cooperation of the staff of LandsD during the course of the audit review.

PART 2: MAINTENANCE OF MAP PRODUCTS

2.1 This PART examines LandsD's work in maintenance of map products, focusing on:

- (a) updating of map products (paras. 2.2 to 2.13); and
- (b) other related issues (paras. 2.14 to 2.21).

Updating of map products

2.2 SMO provides various types of map products in digital and paper forms for various purposes for use by the public (see para. 1.5). According to LandsD, SMO's major map products for use by the public (Note 15) include 2D topographic maps in different scales, thematic maps of countryside maps and Hong Kong Guide, aerial photographs and digital orthophotos. The datasets for 2D topographic maps in different scales and thematic maps of countryside maps and Hong Kong Guide are stored and maintained in LandsD's computer mapping systems (Note 16). Aerial photographs and digital orthophotos are stored and maintained in another system. SMO updates these major map products, as follows:

- (a) **1:1000 2D topographic map.** This map product covers the whole territory of Hong Kong (comprising 3,331 map sheets (source files) as of November 2022) and is the largest scale topographic map. According to LandsD, SMO (through its 10 DSOs) adopts continuous updating approach to update the 1:1000 topographic map (which serves as the basic map for updating other medium to small-scale topographic maps (see (b) below)). DSOs identify changes of map details in the basic map based on data

Note 15: *According to LandsD, other SMO's map products for use by the public include street maps, flying charts and satellite image maps.*

Note 16: *According to LandsD, the datasets for 2D topographic maps in different scales and thematic maps of countryside maps and Hong Kong Guide are stored and maintained in two computer mapping systems, namely the Land Information System (for the 1:1000 and 1:5000 topographic map datasets) and the Mapping System (for the datasets for small-scale topographic maps (i.e. scales of 1:10000, 1:20000, 1:50000 and 1:200000) and thematic maps of countryside maps and Hong Kong Guide).*

Maintenance of map products

collected from various sources (Note 17) and their change identification work (Note 18) which is scheduled for all map sheets at intervals of 1 to 5 years. DSOs carry out the consequential map updating work on a job basis. A job arises when map details in a basic map are found to have changed (Note 19). DSOs update the changes in the basic map as soon as practicable;

- (b) ***Medium to small-scale 2D topographic maps.*** According to LandsD, the 1:1000 topographic map, which covers the whole territory of Hong Kong and is the largest scale topographic map, serves as the main data source for updating and deriving topographic maps in smaller scales. Based on the 1:1000 topographic map, SMO (through its Mapping Section) updates by means of map generalisation (Note 20) other medium to small-scale topographic maps (i.e. scales of 1:5000, 1:10000, 1:20000, 1:50000 and 1:200000);
- (c) ***Thematic maps (including countryside maps and Hong Kong Guide).*** According to LandsD, SMO (through its Mapping Section) collects relevant data or information for updating and providing thematic maps according to the updating frequency of map products;

Note 17: *The data is collected from various sources, including: (a) photogrammetric products; (b) as-built drawings and engineering layouts or data of major infrastructure and building projects from relevant B/Ds or their consultants; (c) field surveys; and (d) news and the media.*

Note 18: *According to LandsD, change identification work refers to desktop study performed by DSOs to identify the changes in the 1:1000 topographic map, with reference to data collected from various sources (such as aerial photographs and as-built drawings).*

Note 19: *According to LandsD: (a) updating jobs for major infrastructure are accorded with the highest priority; and (b) other updating jobs are prioritised according to the amount and types of new map features involved. High priorities are given to jobs of updating man-made features (e.g. building related features, roads, railways and artificial slopes). Lower priorities are given to jobs of updating natural features and minor details (e.g. relief, spot heights and contours).*

Note 20: *According to LandsD, map generalisation is a process of reducing the amount of details on a map in a meaningful way. Due to the limited available space on the smaller scale maps, features are generalised or simplified to maintain the legibility of map details of each map scale.*

- (d) ***Aerial photographs.*** According to LandsD, SMO (through its Photogrammetric and Aerial Survey Section) takes aerial photographs annually covering the whole territory of Hong Kong at various altitudes; and
- (e) ***Digital orthophotos.*** With the use of digital photogrammetry technology, SMO (through its Photogrammetric and Aerial Survey Section) produces digital orthophotos from aerial photographs. Digital orthophoto products have four series (i.e. DOP5000, DOP1000-1963, DOP1000-1982 and DOPM50-L0), which are classified based on the sizes of image resolution and the types of source photographs used.

Scope for improvement in updating of 1:1000 topographic map

2.3 As of November 2022, the 1:1000 topographic map had 3,331 map sheets. The updating work for these map sheets is based on data collected from various sources and the change identification work which is scheduled for all map sheets at intervals of 1 to 5 years. A job arises when map details in a basic map are found to have changed (see para. 2.2(a)). Regarding the updating of 1:1000 topographic map:

- (a) according to LandsD's guidelines, change identification work should be scheduled for all map sheets for execution at intervals of 1 to 5 years. In other words, change identification work for each map sheet should be carried out at least once every 5 years. However, Audit noted that, as of November 2022, the latest change identification work for 96 map sheets was carried out more than 5 years and up to 12.3 years (averaging 6.4 years) ago (i.e. not meeting the stipulated timeframe in LandsD's guidelines). The dates of the latest change identification work for the 96 map sheets were between September 2010 and November 2017. In March 2023, LandsD informed Audit that:
 - (i) change identification work was scheduled at intervals of 1 to 5 years and high priority would be given to major infrastructure and areas with man-made features (e.g. building related features, roads, railways and artificial slopes); and

Maintenance of map products

- (ii) the areas covered by the 96 map sheets were non-active or remote areas (e.g. hilly areas, outlying coastal areas, countryside, sea and border). The change identification work for 23 (24%) of the 96 map sheets had been carried out between December 2022 and February 2023. For the 73 (96 – 23) (76%) remaining map sheets, it would review the existing resources and accord priority for the change identification work;
- (b) according to LandsD, DSOs review all available information and the outstanding basic map updating jobs quarterly and determine whether internal deployment, external assistance and/or other resources are required for completing the outstanding jobs. Audit noted that:
 - (i) there was no time limit set for completion of basic map updating jobs by DSOs; and
 - (ii) as of December 2022, the 10 DSOs had a total of 749 outstanding basic map updating jobs, of which 305 (41%) had remained outstanding for more than 1 year and up to 7 years (averaging 2 years) after job creation between 2015 and 2021;
- (c) according to LandsD, DSOs maintain management information (under their own templates and not standardised) on the updating status of each map sheet and the progress of basic map updating jobs. Audit noted that DSOs had not regularly provided such management information to senior management of LandsD. In Audit's view, there is merit for LandsD to require DSOs to provide regularly such management information under a standard template to its senior management for monitoring purposes;

- (d) between August and December 2022, SMO awarded three 1-year service contracts (Contracts A to C) for outsourcing some basic map updating work (Note 21) of the 10 DSOs at a total contract sum of \$3.7 million (Note 22). Since contract commencement and up to December 2022, DSOs issued a total of 17 work instructions under Contracts A and B (Note 23) ordering 20 basic map updating jobs (Note 24) with deadlines for submission of deliverables by the contractors in 2022. Audit noted that:
- (i) ***Delays in submission of deliverables by the contractors.*** According to Contracts A and B, the contractors were required to complete basic map updating jobs and submit deliverables to LandsD within the required timeframe (Note 25) from the date of issuance of the corresponding work instruction. For 16 (80%) of the 20 updating

Note 21: *According to LandsD, the outsourcing arrangement is to cope with staff redeployment in DSOs to facilitate the transformation of SMO from a traditional mapping agency to geospatial data agency and authority contributing to the development of smart city in Hong Kong. SMO adopted a progressive approach in outsourcing the basic map updating work, as follows: (a) in 2021, SMO awarded two 6-month service contracts (covering the period from 22 February 2021 to 21 August 2021) as pilot projects for outsourcing some basic map updating work of 4 DSOs (i.e. DSO/Kowloon, DSO/North, DSO/Tai Po and DSO/Yuen Long). The two service contracts were completed in October 2021 at a total cost of \$0.7 million. According to LandsD, the delays in completion were mainly due to a “warm-up period” for the contractors to get familiarised with SMO’s basic map updating workflow (which was outsourced for the first time) and insufficient staff resources of the contractors in light of the coronavirus disease (COVID-19) epidemic in 2021; and (b) after reviewing the implementation of the two pilot projects, SMO decided to continue the outsourcing arrangement and extend the coverage to all DSOs.*

Note 22: *Each contract covered 3 or 4 DSOs and had a contract sum ranging from \$1.1 million to \$1.4 million.*

Note 23: *As of December 2022, for Contract C, no work instruction was issued since contract commencement in December 2022.*

Note 24: *Basic map updating jobs include identification of changes based on aerial photographs or orthophotos, acquisition and compilation of spatial data from as-built drawings or engineering layouts, and field surveys.*

Note 25: *The time allowed for completion of updating jobs and submission of deliverables to LandsD varied, depending on the types of updating job ordered under work instructions and ranging from 7 to 15 working days from the date of issuance of the corresponding work instruction.*

Maintenance of map products

jobs, there were delays in submission of deliverables by the contractors, ranging from 1 to 84 days (averaging 31 days);

- (ii) ***Delays in notification of comments on deliverables by DSOs.***
According to Contracts A and B, DSOs would normally notify the contractors their comments (if any) within 15 working days counting from the date of receipt of the contractors' submitted deliverables. For 3 (27%) of 11 updating jobs with notification deadlines in 2022, there were delays in notification of comments on deliverables by DSOs, ranging from 8 to 16 days (averaging 11 days); and
- (iii) in this connection, according to LandsD, it would review the effectiveness of the outsourcing arrangement under Contracts A to C and consider the way forward for outsourcing strategy (e.g. including 2D and 3D map updating) in the fourth quarter of 2023; and

1:1000 paper topographic map

- (e) the 1:1000 paper topographic map (comprising 3,319 map sheets as of November 2022 — Note 26) is created based on the database in the computer mapping system for dissemination via print-on-demand services. Regarding the updating of 1:1000 paper topographic map:
 - (i) LandsD provides a list showing the creation date of each sheet of the 1:1000 paper topographic map on its website. According to LandsD, after carrying out the change identification work, if the consequential map updating work for a sheet of the 1:1000 paper topographic map is not required, DSOs would not revise the map sheet's creation date; and

Note 26: *According to LandsD, the number of paper map sheets of 3,319 sheets is fewer than that of 3,331 map sheets (source files) as mentioned in paragraph 2.2(a). The slight difference arises because 12 (3,331 – 3,319) map sheets cover only water areas in reservoirs or beaches and no features are to be presented on maps in paper form. Therefore, the number of topographic maps in paper form is slightly different.*

- (ii) Audit noted that, as of November 2022, for 207 sheets of the 1:1000 paper topographic map, their creation dates were between May 2012 and November 2017. However, after their creation dates, change identification work was carried out for them between May 2018 and November 2022. In this connection, LandsD has not provided in any source (e.g. its website) the date of the latest change identification work for a map sheet. Audit considers that providing such information could facilitate users to better understand the updating status.

2.4 In Audit's view, LandsD needs to:

- (a) regarding 1:1000 topographic map, take measures to ensure that DSOs:
 - (i) carry out the change identification work for all map sheets in accordance with the timeframe in LandsD's guidelines; and
 - (ii) complete the change identification work for the 73 map sheets as mentioned in paragraph 2.3(a)(ii) as early as practicable;
- (b) regarding basic map updating jobs:
 - (i) take measures to ensure that such jobs (particularly those long outstanding ones) are completed as early as practicable; and
 - (ii) consider setting a time limit for their completion;
- (c) require DSOs to provide regular management information on the updating status of each sheet of the 1:1000 topographic map (e.g. when change identification work was carried out and when it was updated) and the progress of basic map updating jobs (e.g. long outstanding jobs) under a standard template to its senior management for monitoring purposes;
- (d) regarding basic map updating work under related service contracts:
 - (i) step up measures to ensure the timely submission of deliverables by the contractors;

Maintenance of map products

- (ii) timely notify the contractors of its comments on deliverables submitted by them; and
- (iii) complete the review of the effectiveness of outsourcing arrangement for basic map updating work as scheduled with a view to setting the way forward for outsourcing strategy; and
- (e) consider providing further information on the updating status (e.g. date of the latest change identification work) of map products (e.g. 1:1000 paper topographic map) with a view to facilitating users to better understand the updating status.

Scope for implementing early automatic map generalisation for updating medium to small-scale topographic maps

2.5 Regarding the updating of medium to small-scale topographic maps (i.e. scales of 1:5000, 1:10000, 1:20000, 1:50000 and 1:200000):

Manual map generalisation leads to long revision cycle

- (a) based on the 1:1000 topographic map, SMO updates by means of map generalisation (see Note 20 to para. 2.2(b)) other medium to small-scale topographic maps (Note 27). According to LandsD:
 - (i) its current practice of updating medium to small-scale maps from larger scale maps requires lots of generalisation operations which are carried out manually; and
 - (ii) the current practice of manual map generalisation leads to long revision cycle of maps and ineffective generalisation among maps in various scales. Under the current practice, after the update of the 1:1000 topographic map dataset, it takes about half year to have the

Note 27: *According to LandsD, the 1:5000 and 1:10000 topographic maps are generalised from the 1:1000 topographic map dataset while the 1:20000, 1:50000 and 1:200000 topographic maps are generalised from the 1:10000 topographic map dataset.*

map revised manually for the whole territory of Hong Kong in all smaller scale topographic map datasets;

Automatic map generalisation

- (b) to enhance the map updating process and shorten the revision cycle, SMO explored the feasibility on streamlining the map generalisation workflow. In March 2021, SMO awarded a service contract to conduct a feasibility study on deriving small-scale map from large-scale map using automatic map generalisation. In March 2022, the feasibility study was completed at a cost of \$7.8 million (Note 28). According to the final study report of the feasibility study, an acceptable result of automated map generalisation would be achievable subject to the enrichment of the source data, enhancement of the mapping specifications and development of automated generalisation tools. On this basis, the final study report provided some recommendations for the next steps to be taken by SMO, including source data assessment and enrichment in the short term, automated map generalisation and creation for 1:10000 topographic map in the mid term and generalisation for all scales of topographic maps in the long term. According to LandsD, it would make reference to the experience gained and recommendations in the feasibility study to implement automatic map generalisation for all map scales in phases; and
- (c) in October 2022, LandsD obtained funding approval of \$17.2 million (Note 29) for a project on the implementation of automatic map generalisation workflow for 1:10000 topographic map. The scope of the project also includes reviewing source data, recommending the aspects on enrichment of source data and recommending actions to be taken for full-scale implementation of automatic map generalisation for other map scales. According to LandsD:

Note 28: *The amount was funded under the TechConnect (block vote), which was set up in 2017 by the then Innovation and Technology Bureau to support government departments in implementing technology projects so as to enhance operational efficiency and improve public services.*

Note 29: *The amount is funded under a block allocation (i.e. Subhead A007GX — New administrative computer systems) under the Capital Works Reserve Fund Head 710 (Computerisation). The Government Chief Information Officer can authorise expenditure under the block allocation under delegated authority.*

Maintenance of map products

- (i) with the successful implementation of the automatic map generalisation workflow, it is anticipated that the 1:10000 topographic map dataset could be updated and released in 3 months or less after the update of the 1:1000 topographic map dataset; and
- (ii) the project is targeted to be completed in December 2024 and was under tender preparation stage as of January 2023.

2.6 In Audit's view, LandsD needs to take measures to ensure that the project on the implementation of automatic map generalisation workflow for 1:10000 topographic map is completed as scheduled with a view to implementing early automatic map generalisation for all scales of topographic maps so as to shorten the revision cycle of maps and achieve effective generalisation among maps in various scales.

Some digital orthophotos not updated for a long time

2.7 Audit noted that some digital orthophotos were not updated for a long time, as follows:

- (a) ***Digital orthophoto DOP5000 series.*** The DOP5000 series (Note 30) covers the whole territory of Hong Kong and is compiled mainly from the recent aerial photographs taken at various flying heights (from 2,000 feet to 9,000 feet). The DOP5000 series is supplied on tile basis and a full set of the series has 192 tiles. Regarding the updating work, according to LandsD:
 - (i) the DOP5000 series is updated as and when necessary and there is no minimum updating frequency for this series. In this connection, Audit noted that, as of November 2022, 107 (56%) of the 192 tiles of DOP5000 series had not been updated for 7 or more years

Note 30: *The DOP5000 series has an image resolution of 0.2 metres in terms of ground sample distance per pixel and is commonly used as a 1:5000 map for general purpose by architects, engineers, planners, developers, etc.*

(up to 7.6 years). The last update dates of the 107 tiles of DOP5000 series were between May and December 2015 (Note 31); and

(ii) a service contract was awarded in October 2021 for partial updating of DOP5000 series (covering northern New Territories region) and was completed at a cost of \$1.1 million (Note 32) in February 2022. The updated tiles were expected to be released in the first quarter of 2023. In this connection, Audit noted that:

- according to the minutes of supervisory staff meetings of the Photogrammetric and Aerial Survey Section held between October 2021 and September 2022, submissions from the contractor were rejected by SMO for three times and the target release date of the next update of DOP5000 series was revised from February 2022 to the first quarter of 2023; and
- as of January 2023, the updated tiles of DOP5000 series had not yet been released; and

(b) ***Digital orthophoto DOPM50-L0 series.*** The DOPM50-L0 series (Note 33) shows the whole territory of Hong Kong in one single image with grid lines and text information maintained. According to LandsD, the DOPM50-L0 series is updated as and when necessary and there is no minimum updating frequency for this series. In this connection, Audit noted that, as of November 2022, the DOPM50-L0 series had not been updated for 6.4 years (i.e. last updated in June 2016).

Note 31: *The 85 (192 – 107) remaining tiles of DOP5000 series were last updated between August 2018 and December 2019.*

Note 32: *The amount was funded under LandsD departmental vote.*

Note 33: *The DOPM50-L0 series has an image resolution of 5 metres in terms of ground sample distance per pixel.*

Maintenance of map products

2.8 In Audit's view, regarding digital orthophoto, LandsD needs to:

- (a) consider setting updating frequency for digital orthophoto DOP5000 series and DOPM50-L0 series;
- (b) take measures to ensure that the updated tiles of digital orthophoto DOP5000 series are released as scheduled; and
- (c) take measures to ensure that submissions from contractors for updating digital orthophotos meet its required quality.

Need to keep under review the publication of Hong Kong Guide

2.9 The Hong Kong Guide is a comprehensive guide to streets and places of Hong Kong. It consists of maps covering the whole territory of Hong Kong and was first published in 1976. The electronic version of Hong Kong Guide (i.e. e-HongKongGuide) has been available for free browsing and downloading since 2017. It provides map users a convenient means of accessing geographic and community facilities information via computer and mobile devices.

2.10 Both Hong Kong Guide and e-HongKongGuide are updated and published once a year and the 2022 edition was released in January 2022. In view of the increasing trend of using maps in digital form and the need to make better use of available resources, SMO conducted a review of the publication of Hong Kong Guide in May 2022 and decided to cease the publication of Hong Kong Guide 2023 while maintaining and enhancing e-HongKongGuide continuously. According to LandsD, enhancements of the 2023 edition of e-HongKongGuide include increasing the updating frequency from once to twice a year, resizing the page to facilitate printing and producing interactive story telling maps.

2.11 The 2023 edition of e-HongKongGuide was released on 31 January 2023. According to LandsD, it will conduct a review in 2023 to decide the way forward for the publication of Hong Kong Guide (both the book and electronic versions) taking into account feedback from users. In Audit's view, LandsD needs to complete the review of the publication of Hong Kong Guide as soon as possible with a view to further enhancing its map products.

Audit recommendations

- 2.12 **Audit has *recommended* that the Director of Lands should:**
- (a) **regarding 1:1000 topographic map, take measures to ensure that DSOs:**
 - (i) **carry out the change identification work for all map sheets in accordance with the timeframe in LandsD's guidelines; and**
 - (ii) **complete the change identification work for the 73 map sheets as mentioned in paragraph 2.3(a)(ii) as early as practicable;**
 - (b) **regarding basic map updating jobs:**
 - (i) **take measures to ensure that such jobs (particularly those long outstanding ones) are completed as early as practicable; and**
 - (ii) **consider setting a time limit for their completion;**
 - (c) **require DSOs to provide regular management information on the updating status of each sheet of the 1:1000 topographic map (e.g. when change identification work was carried out and when it was updated) and the progress of basic map updating jobs (e.g. long outstanding jobs) under a standard template to LandsD's senior management for monitoring purposes;**
 - (d) **regarding basic map updating work under related service contracts:**
 - (i) **step up measures to ensure the timely submission of deliverables by the contractors;**
 - (ii) **timely notify the contractors of LandsD's comments on deliverables submitted by them; and**
 - (iii) **complete the review of the effectiveness of outsourcing arrangement for basic map updating work as scheduled with a view to setting the way forward for outsourcing strategy;**

Maintenance of map products

- (e) **consider providing further information on the updating status (e.g. date of the latest change identification work) of map products (e.g. 1:1000 paper topographic map) with a view to facilitating users to better understand the updating status;**
- (f) **take measures to ensure that the project on the implementation of automatic map generalisation workflow for 1:10000 topographic map is completed as scheduled with a view to implementing early automatic map generalisation for all scales of topographic maps so as to shorten the revision cycle of maps and achieve effective generalisation among maps in various scales;**
- (g) **regarding digital orthophoto:**
 - (i) **consider setting updating frequency for digital orthophoto DOP5000 series and DOPM50-L0 series;**
 - (ii) **take measures to ensure that the updated tiles of digital orthophoto DOP5000 series are released as scheduled; and**
 - (iii) **take measures to ensure that submissions from contractors for updating digital orthophotos meet LandsD's required quality; and**
- (h) **complete the review of the publication of Hong Kong Guide (both the book and electronic versions) as soon as possible with a view to further enhancing LandsD's map products.**

Response from the Government

2.13 The Director of Lands accepts the audit recommendations. He has said that LandsD will:

- (a) **endeavour to carry out the change identification work for 1:1000 topographic map at an interval of 1 to 5 years and accord priority for completing the change identification work for the 73 map sheets as mentioned in paragraph 2.3(a)(ii);**

- (b) review the departmental guidelines and consider setting target timeline to ensure that basic map updating jobs are completed as early as practicable;
- (c) review and enhance the current reporting mechanism in respect of the updating of 1:1000 topographic map with the use of information technology for strengthening the monitoring of work progress by the senior management;
- (d) review the departmental guidelines and mechanism for enhancing the efficiency of contract administration. It will also complete the review of the effectiveness of outsourcing arrangement for basic map updating work before the expiry of the existing contracts;
- (e) consider showing the dates of the latest change identification work on topographic map sheets so as to facilitate map readers to understand the updating status;
- (f) closely monitor the progress of the project on automatic map generalisation workflow for 1:10000 topographic map with a view to implementing early automatic map generalisation for all scales of topographic maps;
- (g) review and streamline the current procedures of updating digital orthophotos, and also consider setting up a cycle for this updating work;
- (h) review and enhance the requirements for deliverables in future contracts for updating digital orthophotos and closely monitor the quality of submissions for meeting its requirements; and
- (i) complete the review of the publication of Hong Kong Guide (both the book and electronic versions) by mid-2023 with a view to further enhancing its map products.

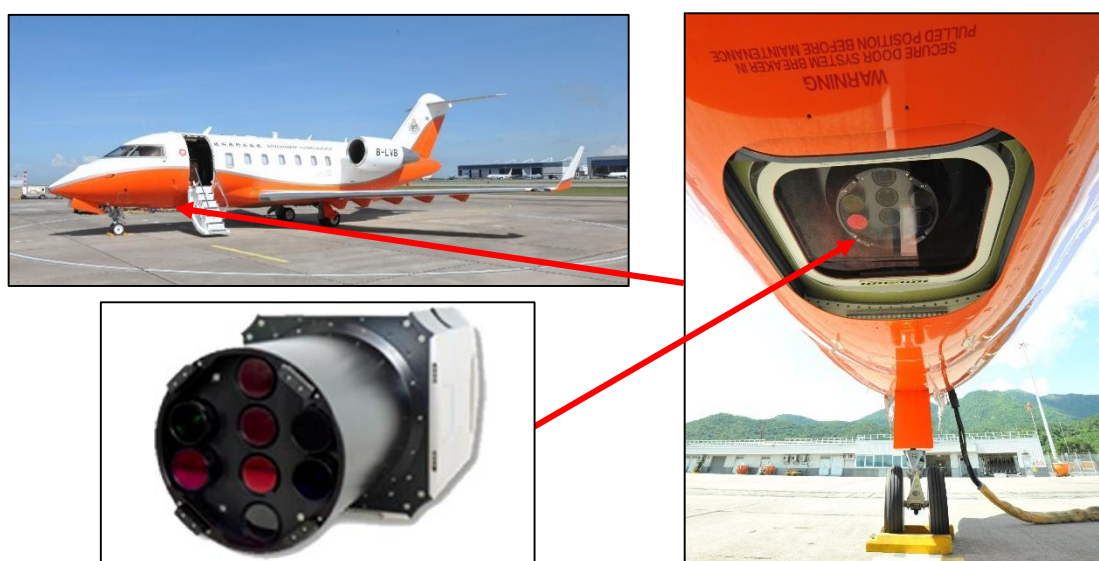
Other related issues

Need to closely monitor the service conditions of large format digital aerial camera system and take measures to ensure the timely replacement of the system

2.14 LandsD uses a large format digital aerial camera (LFDAC) system to take aerial photographs in the territory of Hong Kong and produces photogrammetric products (e.g. digital orthophotos) from these aerial photographs. One of the usage of these photogrammetric products is updating of the 1:1000 topographic map. LFDAC system comprises a digital aerial camera, photogrammetric software and hardware system, and an office-based digital image data offline storage system. The digital aerial camera will be mounted on two fixed-wing aircraft of the Government Flying Service (GFS) for performing aerial photography work on a shared-use basis. Before performing aerial photography work, LandsD needs to apply for flight in GFS aircraft, and prepares a proposed flight diagram for GFS. On the day of flying, LandsD will install the digital aerial camera on GFS aircraft (see Photograph 4). Upon completion of the flight, LandsD will dismount the digital aerial camera from the aircraft. Table 1 shows the cost of LFDAC system and related software for the production of photogrammetric products.

Photograph 4

Digital aerial camera installed on GFS aircraft



Source: LandsD records

Table 1

LFDAC system and related software

Particulars	Commissioning date	Expected life span	Cost (\$)	2022 maintenance cost (\$)
LFDAC system (including interchangeable lens system)	19.12.2016	10 years from delivery date of May 2013 (Note)	13,900,383	1,016,906
Image processing software	2.2.2018	5 years from commissioning date	1,380,651	831,636
Automatic digital surface model generation software	1.2.2019		460,000	
Automatic orthophoto mosaic generation software	2.2.2021		1,058,000	

Source: LandsD records

Note: According to LandsD, LFDAC system was delivered in May 2013 and its service life will end in May 2023.

2.15 Audit noted that LFDAC system was approaching its end-of-service-life in May 2023. According to LandsD:

- (a) LFDAC system had been suffering from various technical problems (e.g. voltage problem) due to ageing and LandsD had requested for maintenance service from the manufacturer whenever necessary. With regular maintenance and supply of essential consumables and spare parts, LFDAC system is expected to maintain service in the coming years up to December 2026; and
- (b) replacement of LFDAC system was being planned. As the new LFDAC system needs to be compatible with GFS aircraft, and fixation, fitting out and modification work will need to be fully assessed and studied of its compatibility with GFS aircraft, LandsD started discussions with GFS in February 2022 for the replacement plan. In this connection, Audit noted that LandsD took about 4 years in the previous procurement, including installation, airworthiness certification and testing before commissioning of LFDAC system in December 2016.

Maintenance of map products

2.16 In Audit's view, LandsD needs to closely monitor the service conditions of LFDAC system and take measures (including drawing up an implementation timetable and system transition plan) to ensure the timely replacement of the system with a view to continuing the provision of quality aerial photography service.

Need to make good use of unmanned aerial vehicle and continue to explore and use new technologies in updating map products

2.17 Apart from LFDAC system, LandsD has explored other new technologies (e.g. unmanned aerial vehicle (UAV) and airborne light detection and ranging (Note 34)) in updating map products. LandsD uses UAV to take aerial photographs for measurement purposes and production of survey products (e.g. orthophoto). Due to the relatively low flying heights, the process of photograph capturing by UAV is not affected by cloud layers. According to LandsD, UAV is a more cost-effective means for small areas and UAV orthophoto is an alternative tool in basic map updating which can provide efficient support for urgent tasks.

2.18 As of December 2022, DSOs had 41 UAVs, ranging from 3 to 7 UAVs in each DSO, in support of their operations, including basic map updating work. Audit noted that, during the period from 2018 to 2022:

- (a) 8 DSOs made use of UAVs in updating basic maps. The number of times of using UAVs in updating basic maps by each DSO varied, ranging from 6 to 221 times. While the total number of times of using UAVs in updating basic maps by the 8 DSOs generally increased from 44 times in 2018 to 284 times in 2021, it decreased to 126 times in 2022; and
- (b) 2 DSOs had not made use of UAVs in updating basic maps (Note 35).

Note 34: *According to LandsD, airborne light detection and ranging is a highly effective airborne laser scanning method for acquiring height data over a large area for modelling the terrain or surface of land features.*

Note 35: *According to LandsD, the 2 DSOs had made use of UAVs for other purposes (e.g. taking aerial photographs) during the period from 2018 to 2022.*

2.19 In Audit's view, LandsD needs to:

- (a) make good use of UAV in basic map updating work as far as practicable; and
- (b) continue to explore and use new technologies in updating map products.

Audit recommendations

2.20 **Audit has *recommended* that the Director of Lands should:**

- (a) **closely monitor the service conditions of LFDAC system and take measures (including drawing up an implementation timetable and system transition plan) to ensure the timely replacement of the system with a view to continuing the provision of quality aerial photography service;**
- (b) **make good use of UAV in basic map updating work as far as practicable; and**
- (c) **continue to explore and use new technologies in updating map products.**

Response from the Government

2.21 The Director of Lands accepts the audit recommendations. He has said that LandsD will:

- (a) reinforce the monitoring of the service conditions of LFDAC system and work with GFS to draw up an implementation plan and relevant transitional arrangements for timely replacement of the system;
- (b) scale up the use of UAV in basic map updating amongst DSOs; and
- (c) continue to look into and engage new technologies in updating map products by keeping abreast of emerging mapping technologies.

PART 3: DISSEMINATION OF MAP PRODUCTS AND SPATIAL DATA TO THE PUBLIC

3.1 This PART examines LandsD's work in dissemination of map products and spatial data to the public, focusing on:

- (a) releasing of map products and spatial data for public use (paras. 3.2 to 3.16); and
- (b) provision of geospatial portals (paras. 3.17 to 3.24).

Releasing of map products and spatial data for public use

3.2 ***Open Data Policy.*** In light of the Government's Open Data Policy, SMO has been identifying suitable map products and spatial data for releasing to the public for free use (see para. 1.7(a)). According to LandsD:

- (a) its digital map products have been widely used by businesses and educational entities for various uses including land boundary surveys, town planning, engineering design, environmental studies, transportation management, publications, online maps, academic research and various types of data analysis;
- (b) opening up digital map products would enable the public, academia and businesses to make greater use of spatial data in research and application development. Free digital map data would facilitate the development of a digital economy, thereby realising the visions of the Smart City Blueprint for Hong Kong (see para. 1.10) and bringing benefits to society as a whole;
- (c) since 2012, it has been identifying suitable digital map products and spatial data (previously not for sale), together with those newly developed digital map products and spatial data, for opening up to the public for free browsing and downloading, for example:

Dissemination of map products and spatial data to the public

- (i) 3D visualisation map (2017 version) (Note 36);
 - (ii) e-HongKongGuide;
 - (iii) historical maps;
 - (iv) old photos of Hong Kong; and
 - (v) 3D pedestrian network (see para. 4.3(b)); and
- (d) since 13 April 2021, except the 4 digital aerial photograph (Series:DAP) products (see Note 7 to para. 1.6) still for sale at a charge, all digital map products (previously for sale at a charge) were released for free browsing and downloading by the public, for example:
- (i) digital 2D topographic maps (at different scales);
 - (ii) digital land boundary maps;
 - (iii) Geo-reference database (Note 37);
 - (iv) digital orthophotos;
 - (v) digital aerial photographs (L0 Version) (which is a compressed image of the digital aerial photograph (Series:DAP) and with resolution of 300 dots per inch); and

Note 36: *The 3D visualisation map (2017 version) dataset was created mainly by aerial imageries taken in 2017 and 2018, which shows topographical and exterior features terrains, buildings and infrastructures of selected areas of the New Territories and part of Kowloon. The dataset was released to the public for free downloading by batch since 2020.*

Note 37: *Geo-reference database is a database storing building name and address, site polygon and road centre line in various formats.*

Dissemination of map products and spatial data to the public

- (vi) 3D spatial data (Note 38).

3.3 As of December 2022, certain map products (including both paper and digital map products) were available for sale at a charge to the public, while most digital map products and spatial data were released to the public for free browsing and downloading for commercial and non-commercial uses, as follows:

- (a) ***Saleable map products.*** 31 paper map products (Note 39) and 4 digital aerial photograph (Series:DAP) products were available for sale and disseminated to the public through HKMS 2.0 (Note 40), SMO Map Sales Outlets and reseller outlets (see para. 1.6). In 2021-22, total sales volume of saleable map products to the public were 30,011 copies, with total revenue of about \$1,773,000. Table 2 shows the sales of map products to the public by category from 2017-18 to 2021-22; and

Note 38: *3D spatial data is a set of territory-wide digital 3D model data created in 2011 to represent the shape, appearance and position of various types of ground features including building, infrastructure and terrain.*

Note 39: *The 31 paper map products available for sale at a charge included 11 2D topographic maps in different scales, 11 thematic maps and 9 aerial photographs and image products.*

Note 40: *According to LandsD, HKMS 2.0 had been operated since August 2018 (see Note 8 to para. 1.6(a)) with development cost amounting to \$9.65 million, which was then maintained in-house.*

Dissemination of map products and spatial data to the public

Table 2

Sales of map products to the public (2017-18 to 2021-22)

Map product	Sales volume (copies)				
	2017-18	2018-19	2019-20	2020-21	2021-22
(A) Paper map products (31 products)					
(i) 2D topographic maps (11 products)					
2D topographic maps	24,546 (49%)	23,075 (56%)	19,947 (58%)	15,138 (47%)	16,404 (55%)
(ii) Thematic maps (11 products)					
Countryside maps	19,681 (39%)	12,591 (30%)	9,873 (29%)	13,185 (41%)	10,139 (34%)
Hong Kong Guide	855 (2%)	1,294 (3%)	824 (2%)	587 (2%)	679 (2%)
Other thematic maps (Note 1)	2,124 (4%)	1,317 (3%)	876 (3%)	1,311 (4%)	814 (2%)
(iii) Aerial photographs and image products (9 products)					
Paper aerial photographs	2,340 (4%)	1,704 (4%)	1,186 (3%)	684 (2%)	982 (3%)
Other image products (Note 2)	175 (1%)	185 (1%)	120 (1%)	61 (1%)	71 (1%)
(B) Digital aerial photograph (Series:DAP) products (4 products)					
Digital aerial photographs (Series:DAP)	348 (1%)	1,216 (3%)	1,302 (4%)	992 (3%)	922 (3%)
Total	50,069 (100%)	41,382 (100%)	34,128 (100%)	31,958 (100%)	30,011 (100%)

Source: LandsD records

Note 1: Other thematic maps include street map, flying charts, photo books, thematic maps for HK Annual Report, urban maps and town maps.

Note 2: Other image products include satellite image maps, orthophoto maps and HKSAR false colour infrared aerial photo mosaic.

- (b) **Digital map products and spatial data opened up for free browsing and downloading.** As of December 2022, 28 digital map products and spatial data were opened up and available for free browsing and

Dissemination of map products and spatial data to the public

downloading (Note 41) on HKMS 2.0, Hong Kong GeoData Store, CSDI portal and/or Public Sector Information Portal (“data.gov.hk”) (see para. 1.7(c)). In 2021-22, the total number of downloads of major digital map products and spatial data were about 3,648,000. Table 3 shows the number of downloads of major digital map products and spatial data by the public from 2017-18 to 2021-22.

Table 3
Number of downloads of major digital map products and spatial data
by the public
(2017-18 to 2021-22)

Digital map product and spatial data	Number of downloads				
	2017-18	2018-19	2019-20	2020-21	2021-22
14 products (previously not for sale) released for free downloading (see para. 3.2(c))					
3D visualisation map (2017 version)	— (0%)	— (0%)	— (0%)	378,164 (61%)	2,855,666 (78%)
e-HongKongGuide	113,430 (80%)	89,423 (61%)	89,193 (48%)	124,133 (20%)	142,425 (4%)
Others (Note 1)	— (0%)	13,373 (9%)	46,598 (25%)	80,243 (13%)	145,102 (4%)
Sub-total (A)	113,430 (80%)	102,796 (70%)	135,791 (73%)	582,540 (94%)	3,143,193 (86%)
14 products (previously for sale at a charge) released for free downloading since April 2021 (see para. 3.2(d))					
Digital 2D topographic maps	19,448 (14%)	29,153 (20%)	29,094 (16%)	24,998 (3%)	199,479 (5%)
Digital aerial photographs (L0 Version)	969 (1%)	1,194 (1%)	533 (1%)	1,027 (1%)	182,546 (5%)
3D spatial data	3,749 (2%)	3,898 (3%)	3,561 (2%)	1,432 (1%)	59,397 (2%)
Others (Note 2)	4,477 (3%)	8,589 (6%)	14,843 (8%)	7,543 (1%)	63,127 (2%)
Sub-total (B)	28,643 (20%)	42,834 (30%)	48,031 (27%)	35,000 (6%)	504,549 (14%)
Total (A+B)	142,073 (100%)	145,630 (100%)	183,822 (100%)	617,540 (100%)	3,647,742 (100%)

Source: LandsD records

Note 1: Others included, for example, historical maps, old photos of Hong Kong and 3D pedestrian network.

Note 2: Others included, for example, digital land boundary maps, digital orthophotos and Geo-reference database.

Note 41: The 28 digital map products and spatial data available for free browsing and downloading included 14 products previously not for sale (see para. 3.2(c)) and 14 products previously for sale at a charge (see para. 3.2(d)).

Scope for digitising more paper map products and further opening up digital map products for free downloading

3.4 As shown in Tables 2 and 3, Audit noted that:

- (a) ***Decrease in sales volume of paper map products.*** Sales of paper map products (i.e. 31 paper map products available for sale — see para. 3.3(a)) had decreased from 2017-18 to 2021-22, in particular, the two most popular paper map products (i.e. 2D topographic maps (at different scales) and countryside maps, which accounted for over 85% of the total sales volume during the period), as follows:
 - (i) ***2D topographic maps.*** From 2017-18 to 2021-22, the sales volume of 2D topographic maps decreased by 33%, from 24,546 copies to 16,404 copies; and
 - (ii) ***Countryside maps.*** From 2017-18 to 2021-22, the sales volume of countryside maps decreased by 48%, from 19,681 copies to 10,139 copies (Note 42); and
- (b) ***Significant increase in download numbers of digital map products and spatial data since opening up for free downloading.*** The download numbers of digital map products and spatial data since opening up for free downloading increased significantly as follows:
 - (i) the number of downloads of products previously not for sale (see para. 3.2(c)) increased significantly from 113,430 in 2017-18 to 3,143,193 in 2021-22; and

Note 42: *Countryside maps are maps with detailed information of leisure amenities and footpaths, which helps hikers and nature lovers explore rural areas and country parks. According to LandsD, a hiking module had been developed in MyMapHK (see para. 1.9(b)) since it was launched in 2014 to: (a) provide digital map at various scales with detailed information of hiking trails to the public; and (b) help hikers plan and explore the rural areas and country parks in a more interactive manner.*

- (ii) while the number of downloads of products previously for sale at a charge remained steady during the period 2017-18 to 2020-21, it had significantly increased from 35,000 in 2020-21 to about 505,000 in 2021-22 since opening up most digital map products in April 2021 (see para. 3.2(d)).

3.5 *Need to keep under review the need for digitising more paper map products and further opening up digital map products for free downloading.* In general, paper map products are facing diminishing demand (see para. 3.4(a)), while the demand for digital map products and spatial data had significantly increased since opening up for free downloading (see para. 3.4(b)). Audit noted that, as of December 2022, there was no digital version for certain paper map products (e.g. countryside maps, urban map and town map), and digital aerial photograph (Series:DAP) products were still for sale at a charge and not opened up for free downloading (Note 43).

3.6 According to LandsD:

- (a) it had reviewed the need for digitisation of countryside map. It decided not to produce e-countryside map but to continue to enhance the hiking module in its mobile app MyMapHK which provides digital map at various scales with detailed information of hiking trails and value-added functions (e.g. searching hiking trails) to the public; and
- (b) digital aerial photograph (Series:DAP) products are huge in volume and file size. It needs to evaluate the financial and technical implications of opening them up for free downloading.

3.7 As the opening up of digital map products would enable the public, academia and businesses to make greater use of spatial data in research and application development, and the availability of free digital map data would facilitate the development of a digital economy (see para. 3.2(b)). Furthermore, there was

Note 43: *Audit noted that, since LandsD opened up digital aerial photographs (L0 Version) for free browsing and downloading in April 2021 (see para. 3.2(d)), the respective number of downloads had increased significantly by 17,675% from 1,027 in 2020-21 to 182,546 in 2021-22.*

Dissemination of map products and spatial data to the public

considerable demand for the printed countryside maps in recent years (sales volume ranged from 9,873 to 13,185 copies from 2019-20 to 2021-22, accounting for about 30% to 40% of total sales volume of map products — see Table 2 in para. 3.3(a)). In Audit's view, LandsD needs to keep under review the need for:

- (a) digitising more paper map products (e.g. countryside maps, urban map and town map); and
- (b) further opening up digital map products (i.e. digital aerial photograph (Series:DAP)) for the public's free browsing and downloading.

Scope for improvement in management of sales channels

3.8 As of December 2022, the sales channels of LandsD's map products to the public were HKMS 2.0, SMO Map Sales Outlets and reseller outlets (see para. 1.6). HKMS 2.0 (launched in August 2018) provides round-the-clock service to the public for searching and ordering different types of map products, streamlines the ordering process and enhances the delivery service (see para. 1.6(a)). Table 4 shows the sales of map products to the public by sales channel from 2018-19 to 2021-22.

Table 4

Sales of map products to the public by sales channel (2018-19 to 2021-22)

Sales channel	Sales volume (copies)			
	2018-19	2019-20	2020-21	2021-22
SMO Map Sales Outlets	29,768 (72%)	21,776 (64%)	17,757 (56%)	18,274 (61%)
Reseller outlets	8,930 (22%)	6,923 (20%)	8,713 (27%)	7,432 (25%)
HKMS 2.0	2,684 (6%) (Note)	5,429 (16%)	5,488 (17%)	4,305 (14%)
Total	41,382 (100%)	34,128 (100%)	31,958 (100%)	30,011 (100%)

Source: LandsD records

Note: The sales volume covered August 2018 (i.e. month of launching HKMS 2.0) to March 2019 only.

3.9 According to LandsD:

HKMS 2.0

- (a) Upon the launch of HKMS 2.0 in August 2018, it has encouraged visitors at the Map Sales Outlets to browse map information and place orders through HKMS 2.0 anytime and anywhere;

SMO Map Sales Outlets

- (b) there were 12 Map Sales Outlets before December 2021 (Note 44). In view of the drop in sales volume of certain Map Sales Outlets as found in LandsD's reviews in 2021 (see (c) and (d) below), LandsD closed down 4 Map Sales Outlets (see (d)(i) below) in December 2021. Since then, the number of SMO Map Sales Outlets has been reduced from 12 to 8 (Note 45);

Reviews of SMO Map Sales Outlets

- (c) in May 2021, after analysing the changes of sales in the 12-month period before and after the launch of HKMS 2.0 in August 2018, and past sales statistics of all Map Sales Outlets, it was noted that the overall sales of Map Sales Outlets had been reduced after the launch of HKMS 2.0. In particular, the drop of sales activities of 7 Map Sales Outlets under 7 DSOs located at Fanling, Central, Wan Chai, Sha Tin, Tsuen Wan, Tuen Mun and West Kowloon was more obvious than others; and

Note 44: *Before December 2021, there were 12 SMO Map Sales Outlets, including: (a) 2 SMO Map Publications Centres and 6 DSOs, which were still in operation as of December 2022 (see Note 9 to para. 1.6(b)); and (b) 4 DSOs (located at Wan Chai, Sha Tin, Tsuen Wan and Tuen Mun), which were closed down in December 2021.*

Note 45: *According to LandsD, the breakdown for the office area, number of staff and related costs for operating each Map Sales Outlets is not available as: (a) Map Sales Outlets are part of office space used for daily operations; and (b) staff would not standby at the counter table to wait for customer. They are also responsible for other daily duties (e.g. plan production, updating land information and preparing various sales report and statistics). When there is customer, staff would then attend the counter table to provide sales and related services.*

- (d) after conducting further review in June 2021, LandsD formulated the following plans for the 7 SMO Map Sales Outlets with more obvious drop in sales:
- (i) ***Closure of 4 Map Sales Outlets in the first stage.*** The first stage would include closing down the Map Sales Outlets under 4 DSOs located at Wan Chai, Sha Tin, Tsuen Wan and Tuen Mun. In December 2021, these 4 Map Sales Outlets were closed down;
 - (ii) ***Further review of 2 Map Sales Outlets in the second stage.*** The decision on whether to close down the Map Sales Outlets under 2 DSOs located at Central and Fanling would be determined after the implementation of the first stage; and
 - (iii) ***SMO Map Sales Outlet under DSO at West Kowloon.*** The sales volume generated from the Map Sales Outlet under DSO at West Kowloon remained at a low level. However, in view of the consideration of changing the Map Publications Centre at Yau Ma Tei (another Map Sales Outlet which is near the Map Sales Outlet under DSO at West Kowloon) into a promotional venue for mapping and spatial data services in future, LandsD decided not to close down the Map Sales Outlet under DSO at West Kowloon at this stage.

3.10 Audit noted that there was scope for improvement in management of sales channels, as follows:

- (a) ***Need to further encourage the use of HKMS 2.0 for browsing and placing orders for map products.*** The proportions of sales volume of map products disseminated through HKMS 2.0 remained relatively low in recent years (i.e. ranged from 14% to 17% from 2019-20 to 2021-22) and the majority of sales volume was still generated from SMO Map Sales Outlets (see Table 4 in para. 3.8). In Audit's view, LandsD needs to take measures to further encourage the public to use HKMS 2.0 for browsing and placing orders for map products; and

- (b) *Need to keep under review the need for closing down SMO Map Sales Outlets.* LandsD's reviews found 7 SMO Map Sales Outlets with more obvious drop in sale activities. In the event, 4 Map Sales Outlets were closed down in December 2021. Regarding the remaining 3 Map Sales Outlets (2 at Central and Fanling — see para. 3.9(d)(ii) and 1 at West Kowloon — see para. 3.9(d)(iii)), as of January 2023, LandsD was considering whether they would be closed down. In Audit's view, LandsD needs to make early decision on whether and when to close them down and keep under review the need for closing down other SMO Map Sales Outlets.

Scope for enhancing stock management

3.11 According to LandsD:

- (a) of the 31 paper map products available for sale to the public (see Note 39 to para. 3.3(a)):
- (i) 12 products were classified as printed map (printed by the Government Logistics Department (GLD) based on LandsD's printing order), with prices ranging from \$16 to \$175; and
 - (ii) 19 products were classified as print-on-demand map (printed in-house by LandsD upon receipt of sales order), with prices ranging from \$50 to \$1,110;
- (b) for printed map, it estimates the print quantities required as inventory based on the revision cycle (to revise map to new edition), past sales volume and stock level on hand;
- (c) printed map becomes unserviceable upon revision to new edition and unserviceable printed maps can no longer be sold to the public; and
- (d) printed maps which have remained unsold for more than three years are identified as dormant stock, but would not be disposed of unless becoming unserviceable.

Dissemination of map products and spatial data to the public

3.12 Audit noted that, as of November 2022, the stock levels of certain types of printed maps far exceeded their respective annual sales volumes in 2021-22 (see Table 5). For example, while the sales volume of 2D Topographic Map 1:100000 (colour version) was 127 copies in 2021-22, it had stock of 1,021 copies as of November 2022.

Table 5

Stock balance and sales volume of printed maps (November 2022)

No.	Product	Stock balance (copies)	Sales volume in 2021-22 (copies)
1	2D Topographic Map 1:20000 (colour version)	12,047	6,724
2	2D Topographic Map 1:100000 (colour version)	1,021	127
3	2D Topographic Map 1:200000	315	121
4	Urban maps	223	14
5	Town maps	(Note)	(Note)
6	Hong Kong Guide	2,351	679
7	Countryside maps	7,815	10,139
8	Thematic maps for HK Annual Report – Hong Kong Geology	688	31 (Note)
9	Thematic maps for HK Annual Report – Hong Kong's External Merchandise Trade in 2015	2,734	
10	Hong Kong and Pearl River Delta Satellite Image Map (1:500000)	166	26
11	Photo book – Hong Kong Now and Then	27	59
12	Photo book – Flashbacks of Two Decades in Hong Kong	2,961	45

Legend: Types of printed maps with stock levels far exceeding their respective annual sales volumes in 2021-22

Source: *LandsD records*

Note: *According to LandsD, breakdown of the figures for the two products is not available.*

Dissemination of map products and spatial data to the public

3.13 In this connection, according to GLD Circular No. 3/2022 “Disposal of Government Stores”:

- (a) when any surplus stores items are identified, B/Ds should arrange for their disposal in a timely manner so as to avoid possible wastage or further deterioration due to prolonged storage and to ensure better use of available storage space and resources;
- (b) irrespective of the proposed disposal methods (including internal transfer to other B/Ds, donation, commercial disposal (Note 46) and dumping), B/Ds should ensure that all surplus stores items pending disposal are properly accounted for; and
- (c) B/Ds should consider disposal through donation and commercial disposal in parallel if a surplus stores item is unserviceable but considered to have residual value of some kind (e.g. for display, training or preservation).

3.14 In Audit’s view, LandsD needs to:

- (a) make estimates of the print quantities of printed map as inventory as accurately as possible, taking into account their revision cycle, past sales volume and stock level on hand;
- (b) consider the feasibility of converting printed maps (e.g. 2D topographic map) to print-on-demand maps with a view to enhancing stock management; and
- (c) review whether the stocks of printed maps on hand are still serviceable and consider the disposal methods for those unserviceable printed maps (e.g. through donation and commercial disposal) in accordance with GLD’s requirements.

Note 46: *Commercial disposal includes sales by quotation/tender exercise, public auction or direct sale to term contractors.*

Audit recommendations

3.15 Audit has *recommended* that the Director of Lands should:

- (a) keep under review the need for digitising more paper map products (e.g. countryside maps, urban map and town map);
- (b) keep under review the need for further opening up digital map products (i.e. digital aerial photograph (Series:DAP)) for the public's free browsing and downloading;
- (c) take measures to further encourage the public to use HKMS 2.0 for browsing and placing orders for map products;
- (d) make early decision on whether and when to close down SMO Map Sales Outlets at Central, Fanling and West Kowloon, and keep under review the need for closing down other SMO Map Sales Outlets;
- (e) make estimates of the print quantities of printed map as inventory as accurately as possible, taking into account their revision cycle, past sales volume and stock level on hand;
- (f) consider the feasibility of converting printed maps (e.g. 2D topographic map) to print-on-demand maps with a view to enhancing stock management; and
- (g) review whether the stocks of printed maps on hand are still serviceable and consider the disposal methods for those unserviceable printed maps (e.g. through donation and commercial disposal) in accordance with GLD's requirements.

Response from the Government

3.16 The Director of Lands accepts the audit recommendations. He has said that LandsD will:

Dissemination of map products and spatial data to the public

- (a) keep under review the scope for digitising more paper map products where practicable;
- (b) having regard to relevant financial and technical implications, keep under review the scope for opening up additional digital map products for the public's free browsing and downloading where practicable;
- (c) further encourage the public to use HKMS 2.0 for browsing and placing orders for map products by organising more promotional activities in its Map Sales Outlets and other publicity events;
- (d) consider closing down other SMO Map Sales Outlets upon review of the respective sales statistics and strategy;
- (e) make more accurate estimates of the print quantities of printed map as inventory and explore the feasibility of converting printed maps to print-on-demand maps with a view to enhancing stock management; and
- (f) continue to take stock of printed maps on hand annually and review their status. It will dispose of or donate unserviceable printed maps in accordance with GLD's requirements and relevant Government regulations.

Provision of geospatial portals

3.17 LandsD develops and provides handy web-map service portals to the public (see para. 1.9). According to LandsD, there were 4 commonly used geospatial portals by the public (Note 47), namely 2 websites (i.e. GeoInfo Map and Hong Kong GeoData Store) and 2 mobile apps (i.e. MyMapHK and VoiceMapHK) (see Table 6).

Note 47: *Other geospatial portals developed by LandsD for use by the public included, for example, the Interactive Map Dashboard for COVID-19, which was jointly developed and managed by the Development Bureau and LandsD for effective dissemination of information on the latest situation of the novel coronavirus epidemic in Hong Kong. LandsD had also developed geospatial portals for use by B/Ds, for example, the Geospatial Information Hub, which supports the internal operation and information sharing within the Government by distributing and sharing geospatial data and related information among B/Ds.*

Table 6

Commonly used geospatial portals developed by LandsD

Geospatial portal	Launch date	Development cost (\$ million)	Recurring cost in 2021-22 (\$ million)	Usage in 2021-22
Website				
GeoInfo Map	26.5.2010	7.33	2.05	6.3 million (usage sessions — Note 1)
Hong Kong GeoData Store	10.12.2018	9.00	(Note 2)	3.0 million (no. of dataset downloads)
Mobile app				
MyMapHK	26.6.2014	4.40 (Note 3)	(Note 2)	2.4 million (usage sessions — Note 1)
VoiceMapHK	15.3.2016			66 (usage sessions — Note 1)

Source: LandsD records

Note 1: According to LandsD: (a) a usage session initiates when a user either visits the website or opens the mobile app; (b) a session ends after the user closes the website/mobile app or ends automatically after being inactive for 30 minutes; and (c) the number of usage sessions measures how many times a website/mobile app was used within a period of time.

Note 2: According to LandsD, Hong Kong GeoData Store, MyMapHK and VoiceMapHK are maintained in-house by deploying internal resources without a separate breakdown.

Note 3: According to LandsD, breakdown of development cost between MyMapHK and VoiceMapHK was not available.

Decreasing usage and low download number of VoiceMapHK

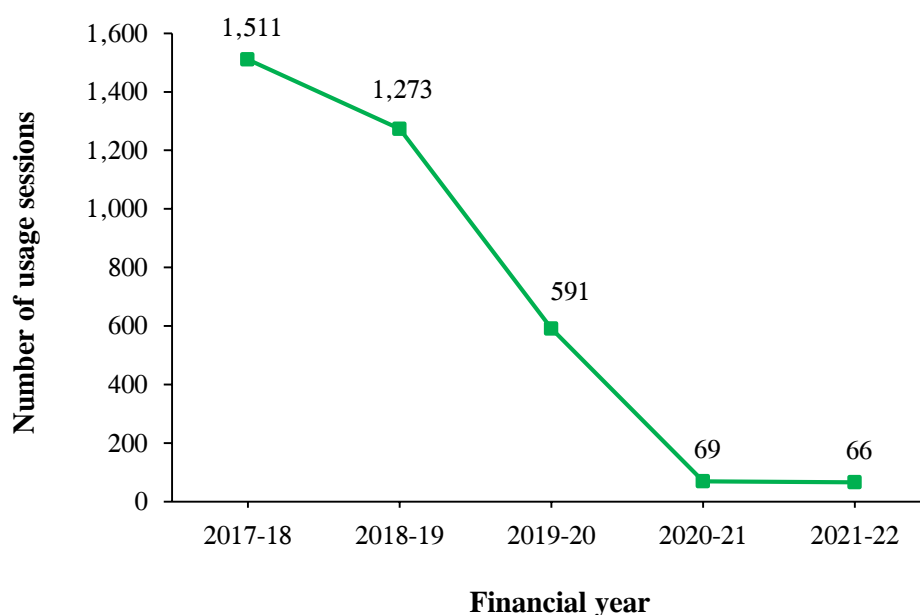
3.18 Audit noted that the decreasing usage and low download number of VoiceMapHK (a mobile app developed by LandsD) (Note 48) were as follows:

Note 48: *Regarding the usage of the 3 other commonly used geospatial portals developed by LandsD: (a) for GeoInfo Map, the number of usage sessions increased from 2.6 million in 2019-20 to 6.3 million in 2021-22; (b) for Hong Kong GeoData Store, the number of usage sessions increased from about 47,000 in 2019-20 to about 139,000 in 2021-22; and (c) for MyMapHK, the number of usage sessions increased from about 1,954,000 in 2020-21 (first year of adopting current counting algorithm of usage sessions) to about 2,374,000 in 2021-22.*

- (a) according to LandsD, VoiceMapHK was developed to support the digital inclusion initiative for the visually impaired community with a population of 175,000 in Hong Kong. However, the actual number of usage sessions of VoiceMapHK decreased from 1,511 in 2017-18 to less than 70 in both 2020-21 and 2021-22 (see Figure 8) and the accumulated number of downloads of the mobile app as of November 2022 was only about 9,000. In March 2023, LandsD advised that, due to the outbreak of the coronavirus disease (COVID-19) and the relevant anti-epidemic measures imposed, the use of VoiceMapHK by the visually impaired people for daily activities significantly decreased in 2020-21 and 2021-22; and

Figure 8

**Number of usage sessions of VoiceMapHK
(2017-18 to 2021-22)**



Legend: —■— Number of usage sessions

Source: LandsD records

- (b) at the time of launch of VoiceMapHK in March 2016, LandsD said that additional features of route planning and real-time navigation could be incorporated in future. However, as of December 2022, these additional features had still not been introduced. In December 2022, LandsD informed Audit that route planning and real-time navigation for visually impaired people requires a very high level of precision to avoid causing danger to them and it has yet to develop such technology to be incorporated to VoiceMapHK.

3.19 According to the Practice Guide for Developing Mobile Apps issued by OGCIO, a B/D should promote and market the mobile app it developed to let more people download and use it. According to LandsD, various promotional and publicity work had been conducted by LandsD since the launch of its mobile apps, including public exhibitions and school visits.

3.20 In Audit's view, LandsD needs to:

- (a) keep under review the usage and download number of its mobile apps (e.g. VoiceMapHK) with a view to enhancing the mobile apps to better meet user needs;
- (b) step up promotional and publicity activities with a view to encouraging more users to download and use its mobile apps; and
- (c) keep under review the development of new technologies and explore the feasibility of enhancing the functions of VoiceMapHK to better serve the visually impaired community's needs.

Scope for improving key performance measures

3.21 Several key performance indicators related to the commonly used geospatial portals were disclosed in LandsD's Controlling Officer's Report (COR), relating to:

Dissemination of map products and spatial data to the public

- (a) *usage rate of geospatial portals* (i.e. number of usage sessions of MyMapHK and number of requests for Application Programming Interface (Note 49) from Hong Kong GeoData Store); and
- (b) *number of datasets available on geospatial portals* (i.e. number of datasets posted onto GeoInfo Map, and number of open spatial datasets released and maintained on Hong Kong GeoData Store).

3.22 Audit noted that LandsD has regularly compiled the following information relating to usage and download numbers of geospatial portals for monitoring purpose:

- (a) usage rates of GeoInfo Map and VoiceMapHK (e.g. numbers of usage sessions of GeoInfo Map and VoiceMapHK);
- (b) download number of datasets available on Hong Kong GeoData Store; and
- (c) numbers of downloads of MyMapHK and VoiceMapHK mobile apps.

In Audit's view, there is merit for LandsD to consider including the abovementioned information as key performance measures in its COR.

Audit recommendations

3.23 Audit has *recommended* that the Director of Lands should:

- (a) **keep under review the usage and download number of LandsD's mobile apps (e.g. VoiceMapHK) with a view to enhancing the mobile apps to better meet user needs;**
- (b) **step up promotional and publicity activities with a view to encouraging more users to download and use LandsD's mobile apps;**

Note 49: *Application Programming Interface is a computer programming approach for facilitating exchange of information and executing instructions between different computer systems.*

- (c) **keep under review the development of new technologies and explore the feasibility of enhancing the functions of VoiceMapHK to better serve the visually impaired community's needs; and**
- (d) **consider including the information on usage and download numbers of LandsD's geospatial portals as mentioned in paragraph 3.22 as key performance measures in LandsD's COR.**

Response from the Government

3.24 The Director of Lands accepts the audit recommendations. He has said that LandsD will:

- (a) keep monitoring the usage and download information of its mobile apps (e.g. VoiceMapHK) and continue to enhance the apps as necessary;
- (b) step up promoting the mobile apps in various publicity channels and arrange promotional activities as appropriate;
- (c) liaise with organisations relating to visually impaired to better understand their needs and introduce corresponding enhancements to its map products; and
- (d) consider including additional usage and download information of its geospatial portals as key performance measures in its COR.

PART 4: DEVELOPMENT OF THREE-DIMENSIONAL DIGITAL MAP

4.1 This PART examines LandsD's work in the development of 3D digital map.

Three-dimensional digital map

4.2 In June 2019, the Development Bureau informed the Panel on Development of the Legislative Council that:

- (a) on a strategic level, CSDI (see Note 10 to para. 1.7(c)) and 3D digital map are core components of the digital infrastructure underpinning Hong Kong's smart city development;
- (b) to meet the increasing needs of 3D applications and better understanding of multi-level spaces of a modern city like Hong Kong, a full-fledged 3D digital map would be developed as the basemap and container for CSDI covering the entire territory by end of 2023; and
- (c) the proposed 3D digital map also covered the accessible interior of buildings and structures for supporting indoor-based locational and navigation applications.

4.3 LandsD is responsible for the development of 3D digital map with a funding of \$150 million (Note 50). According to LandsD, the development of 3D digital map included:

- (a) territory-wide 3D digital map which shows topographical and exterior features of terrain, buildings and infrastructures by 2023. 3D digital maps are not only for visualisation by the general public, but are also intended to

Note 50: *Approval of a commitment of \$150 million under General Revenue Account Subhead 700 General non-recurrent under Head 91 Lands Department to support the development of 3D digital map was sought in the context of the Appropriation Bill 2020, which was passed by the Legislative Council on 14 May 2020.*

be widely used by architecture, engineering, construction and planning communities;

- (b) 3D pedestrian network which covers the whole territory by 2020, including publicly accessible places (e.g. footways, footbridges, subways and parks) in urban areas of Hong Kong. It was further extended to the rural areas and hiking trails in country parks in 2022. The entire network is a set of 3D line features capable of supporting innovative applications, such as navigation (Note 51); and
- (c) 3D indoor map which covers the accessible interior of buildings and structures for 1,250 buildings across the territory by end of 2023.

LandsD aims to develop high-quality 3D digital map by phases and strives to cover the whole territory by end of 2023.

Note 51: *According to LandsD, the 3D pedestrian network: (a) provides a dataset in machine-readable formats with 3D line features derived from road features and road furniture (e.g. spatially related street names, wheelchair accessibility and obstacles), which can identify ascending and descending footways and indicate the length of a footpath. This can greatly enhance the accuracy of calculating the required walking time and enable users to search for the fastest and the more straight-forward routes; and (b) can support innovative applications, such as smart navigation for the visually impaired and people with other needs (e.g. wheelchair users), walkability study in the urban design, pedestrian activity study for considering the public facilities placement and reducing traffic congestion, noise and air pollution.*

Need to continue to closely monitor the implementation progress of territory-wide 3D digital map

4.4 According to LandsD:

- (a) as the technology of 3D digital mapping is rapidly evolving in the market, an incremental approach was proposed to implement the territory-wide 3D digital mapping task (Note 52) in phases; and
- (b) Kowloon East was selected as the area for the first phase (i.e. Phase 1) in implementing the territory-wide 3D digital map. There were 5 remaining phases which involved 5 areas (see Table 7 in para. 4.5).

4.5 Audit noted that, as of December 2022, the implementation of territory-wide 3D digital map was behind schedule (see Table 7), as follows:

- (a) Phase 1 (Kowloon East) was completed 11 months later than the original target completion date; and
- (b) for the 5 remaining phases (i.e. Phases 2A, 2B and 3A to 3C), as of December 2022, they were either in progress or under tender assessments, and their expected completion dates were 2 to 6 months later than their original target completion dates.

Note 52: *3D digital mapping task involved: (a) data capturing in the project area by different survey methods; and (b) generating and compiling of datasets based on data captured.*

Development of three-dimensional digital map

Table 7

Implementation of territory-wide 3D digital map (December 2022)

Phase	Area	Original target completion date	Actual/expected completion date	No. of months later than original target completion date
1	Kowloon East	August 2021	July 2022 (Note 1)	11
2A	Kowloon Central	December 2022	March 2023 (Note 2)	3
2B	Kowloon West and Hong Kong Island	June 2023	September 2023 (Note 2)	3
3A	Islands	July 2023	September 2023 (Note 2)	2
3B	New Territories West	December 2023	June 2024 (Note 3)	6
3C	New Territories East		June 2024 (Note 3)	6

Source: LandsD records

Note 1: The related contract for Phase 1 was substantially completed in July 2022.

Note 2: According to LandsD, the related contracts were awarded and were still in progress as of December 2022.

Note 3: According to LandsD, the related contracts were under tender assessment as of December 2022.

4.6 According to LandsD:

- (a) the reasons for completing Phase 1 (Kowloon East) 11 months later than the original target completion date were as follows:
 - (i) COVID-19 pandemic and corresponding quarantine as well as work-from-home arrangements had considerably affected the shipment of equipment deployed by the contractor as well as the progress of site survey and data capturing works; and

Development of three-dimensional digital map

- (ii) it was the first territory-wide 3D digital map project undertaken by LandsD in Hong Kong;
- (b) for the 5 remaining phases (i.e. Phases 2A, 2B and 3A to 3C), their expected completion dates were later than their original target completion dates due to:
 - (i) longer-than-expected run-in time for new contractors involved in the Phases 2 and 3 work, such as performing site test for equipment which was previously used in other regions and grasping project requirements and corresponding criteria accurately;
 - (ii) COVID-19 pandemic and corresponding quarantine as well as work-from-home arrangements, which significantly undermined the work efficiency and effectiveness of both consultants and contractors; and
 - (iii) extra time required in preparing the tender document for Phase 3 work based on the experience gained from Phases 1 and 2 work (e.g. revising the tender requirements to ensure market competition) for better project implementation; and
- (c) based on the experience gained from Phase 1 project, enhanced measures had been taken for the 5 remaining phases, such as strengthening the manpower of project consultants for monitoring the progress of contractors' work and improving the communication among LandsD, consultants and contractors.

4.7 In Audit's view, LandsD needs to continue to closely monitor the implementation progress of territory-wide 3D digital map with a view to ensuring its timely completion.

Need to keep under review the utilisation of 3D pedestrian network

4.8 The 3D pedestrian network dataset was published and made free to the public through Hong Kong GeoData Store in December 2020 (which covered urban areas and 5 outlying islands), and was further updated in September 2022 (extended

to cover major hiking trails inside country parks and major footpaths inside villages). According to LandsD, the numbers of downloads for 3D pedestrian network dataset were 200, 1,971 and 2,569 in 2020 (from December 2020), 2021 and 2022 (up to November 2022) respectively.

4.9 According to LandsD, the 3D pedestrian network is a set of 3D line features capable of supporting innovative applications (see para. 4.3(b)). In Audit's view, LandsD needs to keep under review the utilisation of 3D pedestrian network and step up promotional activities as needed to encourage more users to utilise the 3D pedestrian network.

Need to closely monitor the implementation progress of 3D indoor map

4.10 The 3D indoor map is one of the key components of 3D digital map. According to LandsD, in order to pursue the 3D digital map initiative, there is a need to extend the current mapping services to provide 3D indoor maps as data infrastructure so as to facilitate the development of various types of 3D indoor and routing related applications (Note 53) for the development of a smart city.

4.11 ***Pilot project on 3D indoor map.*** In 2020, LandsD commissioned a pilot project on creation of 3D indoor maps (Note 54), which covered 158 buildings (Note 55) mainly located in Kowloon East. The pilot project was completed in March 2021.

Note 53: *Supporting the integration of information obtained from different innovative solutions and technologies, the 3D indoor map might enable new applications in the areas of public safety, emergency, guidance, indoor wayfinding, facility/asset management, workspace management, unit-based land record management and building maintenance, etc.*

Note 54: *The pilot project involved data conversion to produce interior structures of 3D indoor maps, comprising 3D floors, 3D units and 3D indoor network from scanned raster drawings of building plans. Access points of each floor, such as unit entrances and exits, would also be mapped to facilitate indoor positioning. A showcase platform for the 3D indoor maps allowing navigation would also be created in the pilot project.*

Note 55: *These 158 buildings comprised mainly commercial and industrial buildings. Others included government venues, schools and training centres, hospitals and clinics, residential buildings and other public facilities such as MTR stations.*

Development of three-dimensional digital map

4.12 After the pilot project, LandsD aims to develop the 3D indoor map by phases and strives to cover the accessible interior of buildings and structures for 1,250 buildings across the territory by end of 2023 (see para. 4.3(c)). As of January 2023, the progress was as follows:

- (a) ***Phase 1 (covering 390 buildings in Kowloon).*** The related contract was awarded in January 2022 and expected to be completed by March 2023;
- (b) ***Phase 2 (covering 420 buildings on Hong Kong Island).*** The tender of related contract was invited in November 2022, and the contract was expected to be completed by December 2023; and
- (c) ***Phase 3 (covering 440 buildings in New Territories and Islands).*** The tender of related contract was being drafted, and the contract was planned to be awarded in third quarter of 2023 with target completion date in second quarter of 2024.

4.13 Audit noted that the development of 3D indoor map was targeted to be completed by end of 2023 (see para. 4.12). However, the implementation progress of Phase 3 of 3D indoor map (see para. 4.12(c)) was behind schedule. Audit considers that LandsD needs to closely monitor the implementation progress of 3D indoor map with a view to ensuring its timely completion.

Need to obtain consents from property owners/property management companies for opening up the 3D indoor map

4.14 According to LandsD:

- (a) at the planning stage, it was not intended to open the data of 3D indoor map to the public, but to share the data with B/Ds for internal uses and further study; and
- (b) it subsequently reviewed the opening up of the 3D indoor maps of the 158 buildings under the Kowloon East pilot project (see para. 4.11), and planned to release the 3D indoor maps for those buildings (with consents obtained) to the public in December 2022.

Development of three-dimensional digital map

4.15 After the completion of the pilot project on 3D indoor maps for the 158 buildings in Kowloon East, LandsD invited property owners/property management companies of the 158 buildings to:

- (a) give their views on the 3D indoor maps developed under the pilot project;
- (b) give their consents to permit LandsD to show the 3D indoor maps of their buildings to the public for preview and download; and
- (c) provide up-to-date information for any changes to their buildings regularly.

4.16 According to LandsD:

- (a) as of March 2023, it was still obtaining consents of property owners/property management companies of the 158 buildings (Note 56), and planned to open up those 3D indoor maps upon their consents; and
- (b) for those 1,250 buildings across the territory (see para. 4.12), it would obtain consents from relevant property owners/property management companies before and during the course of project implementation period with a view to preparing for opening up more 3D indoor map data to the public and facilitating the control of data privacy.

4.17 In Audit's view, LandsD needs to take measures to early obtain consents from the property owners/property management companies for opening up their buildings' 3D indoor maps to the public.

Note 56: *LandsD received the replies from property owners/property management companies of 19 buildings, of which consents were given for 14 buildings but not the other 5 buildings.*

Audit recommendations

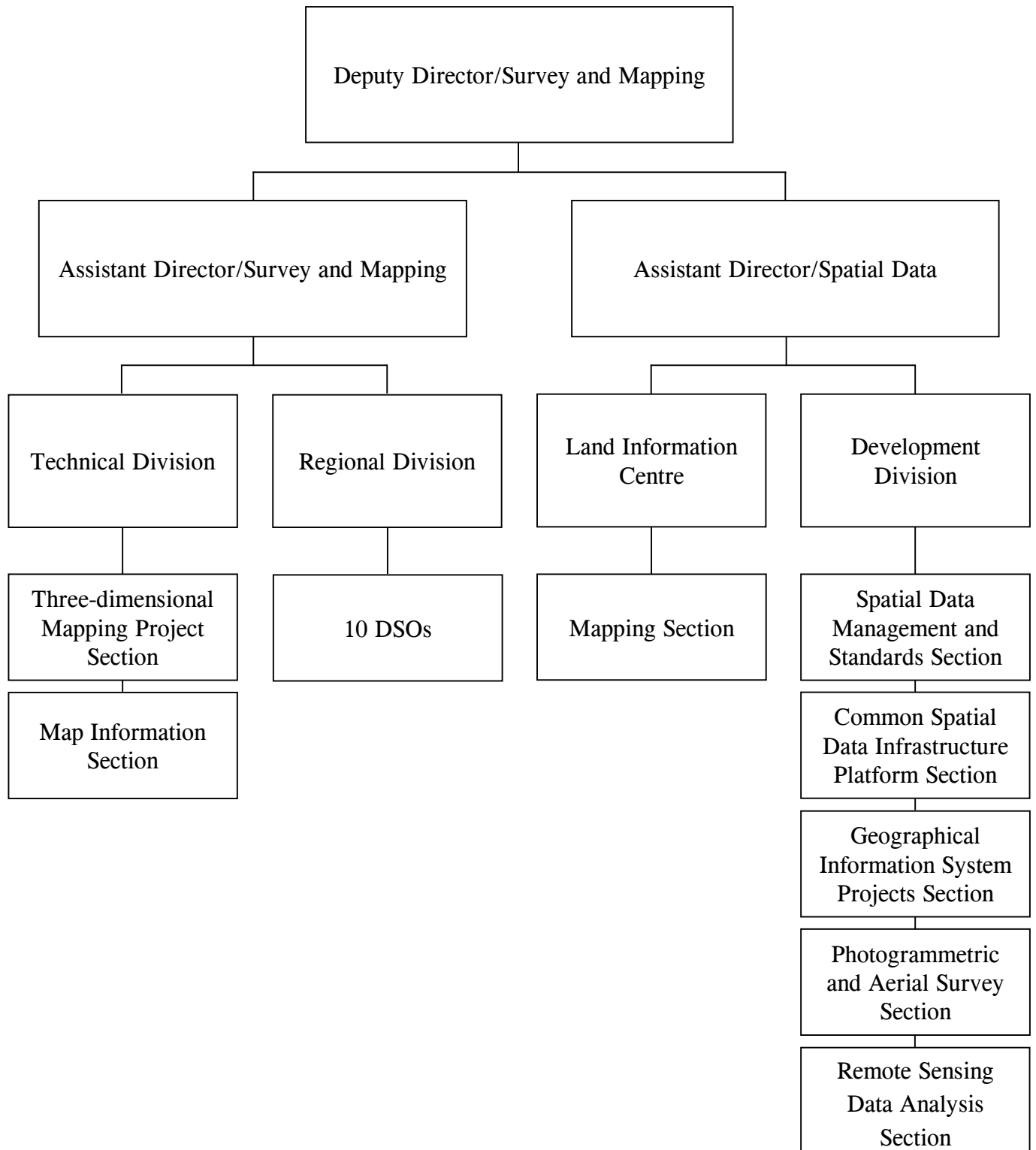
- 4.18 **Audit has *recommended* that the Director of Lands should:**
- (a) **continue to closely monitor the implementation progress of territory-wide 3D digital map with a view to ensuring its timely completion;**
 - (b) **keep under review the utilisation of 3D pedestrian network and step up promotional activities as needed to encourage more users to utilise the 3D pedestrian network;**
 - (c) **closely monitor the implementation progress of 3D indoor map with a view to ensuring its timely completion; and**
 - (d) **take measures to early obtain consents from the property owners/property management companies for opening up their buildings' 3D indoor maps to the public.**

Response from the Government

4.19 The Director of Lands accepts the audit recommendations. He has said that LandsD will:

- (a) continue to closely monitor the implementation progress of territory-wide 3D digital map with a view to ensuring its timely completion;
- (b) keep under review the utilisation of 3D pedestrian network and continue to promote it in various channels with a view to unleashing its potential;
- (c) reinforce the monitoring of the implementation progress of 3D indoor map for its timely completion; and
- (d) advance the seeking of consents from property owners/property management companies for opening up 3D indoor maps of their buildings to the public and clearly explain the merits of the project to them upfront.

**Survey and Mapping Office of the Lands Department:
Organisation chart (extract)
(30 November 2022)**



Source: LandsD records

Acronyms and abbreviations

Audit	Audit Commission
B/Ds	Government bureaux/departments
COR	Controlling Officer's Report
CSDI	Common Spatial Data Infrastructure
DSOs	District Survey Offices
GFS	Government Flying Service
GLD	Government Logistics Department
HKMS 2.0	Hong Kong Map Service 2.0
LandsD	Lands Department
LFDAC	Large format digital aerial camera
OGCIO	Office of the Government Chief Information Officer
SMO	Survey and Mapping Office
UAV	Unmanned aerial vehicle
2D	Two-dimensional
3D	Three-dimensional

CHAPTER 8

**Health Bureau
Department of Health**

Student Health Service

**Audit Commission
Hong Kong
31 March 2023**

This audit review was carried out under a set of guidelines tabled in the Provisional Legislative Council by the Chairman of the Public Accounts Committee on 11 February 1998. The guidelines were agreed between the Public Accounts Committee and the Director of Audit and accepted by the Government of the Hong Kong Special Administrative Region.

Report No. 80 of the Director of Audit contains 8 Chapters which are available on our website at <https://www.aud.gov.hk>



The Audit Commission website

Audit Commission
6th Floor, High Block
Queensway Government Offices
66 Queensway
Hong Kong

Tel : (852) 2867 3423
Fax : (852) 2824 2087
E-mail : enquiry@aud.gov.hk

STUDENT HEALTH SERVICE

Contents

	Paragraph
EXECUTIVE SUMMARY	
PART 1: INTRODUCTION	1.1 – 1.14
Audit review	1.15
General response from the Government	1.16
Acknowledgement	1.17
PART 2: ANNUAL HEALTH ASSESSMENT	2.1
Enrolment and appointment of annual health assessments	2.2 – 2.12
Audit recommendations	2.13
Response from the Government	2.14
Attendance of annual health assessments	2.15 – 2.25
Audit recommendations	2.26
Response from the Government	2.27
Health assessment activities	2.28 – 2.35
Audit recommendations	2.36
Response from the Government	2.37
Referrals and follow-ups	2.38 – 2.46
Audit recommendations	2.47
Response from the Government	2.48

	Paragraph
PART 3: ADOLESCENT HEALTH PROGRAMME	3.1
Enrolment and participation	3.2 – 3.8
Audit recommendations	3.9
Response from the Government	3.10
Programme delivery	3.11 – 3.20
Audit recommendations	3.21
Response from the Government	3.22
On-site facilitator services provided by non-governmental organisations	3.23 – 3.28
Audit recommendations	3.29
Response from the Government	3.30
PART 4: OTHER RELATED ISSUES	4.1
Health Promoting School Programme	4.2 – 4.4
Audit recommendations	4.5
Response from the Government	4.6
Provision of health promotion activities	4.7 – 4.9
Audit recommendations	4.10
Response from the Government	4.11
Resumption of services of the West Kowloon Government Offices Student Health Service Centre and Special Assessment Centre	4.12 – 4.13
Audit recommendation	4.14
Response from the Government	4.15

Paragraph

Use of the Internet Service for the System
for Managing the Assessment of Student Health 4.16 – 4.19

Audit recommendation 4.20

Response from the Government 4.21

Appendices

Page

A : Major health assessment activities provided in Student
Health Service Centres (July 2022) 69

B : Department of Health: Organisation chart (extract)
(31 October 2022) 70

C : Acronyms and abbreviations 71

STUDENT HEALTH SERVICE

Executive Summary

1. The Department of Health (DH) is the Government's health adviser and agency to execute healthcare policies and statutory functions. It safeguards the community's health through a range of promotive, preventive, curative and rehabilitative services. DH delivers healthcare services using a life-course approach through its various areas of work with emphasis on preventive care, including providing community-based health assessments, and preventive and education services to specific population groups (e.g. students). The Student Health Service (SHS) of DH provides comprehensive, promotive and preventive health programmes for primary and secondary school students according to their needs at various stages of development. It aims to safeguard the physical and psychological health of school children, and enable them to gain the maximum benefit from the education system and to develop their potentials. SHS comprises centre-based services (including annual health assessments, further assessments, other referrals and health education) and school-based services (including the Adolescent Health Programme (AHP) and the Health Promoting School Programme (HPSP)). In 2021-22, the expenditure incurred by DH for SHS amounted to about \$305 million. The Audit Commission (Audit) has recently conducted a review of SHS.

Annual health assessment

2. Centre-based services are provided to both primary and secondary school students with the aim to identify students with health problems at an early stage for timely advice and intervention. Primary and secondary school students may enrol in the annual health assessments on a voluntary basis in every school year. Enrolled students attend the Student Health Service Centres (SHSCs) for various health assessment activities to meet their needs at various stages of development (as of February 2023, there were 13 SHSCs). Students with certain health problems identified during the annual health assessments are referred for further assessments provided under SHS, including audiological assessments, dietetic assessments, further spinal assessments, optometric assessments and psychological assessments (as of February 2023, there were 4 Special Assessment Centres (SACs) providing all types of further assessments and 5 SHSCs providing some types of further assessments). Students in need of other further assessments and/or treatments are referred to other

Executive Summary

institutions (e.g. clinics of DH and the Hospital Authority) for follow-up (paras. 1.5 and 1.6).

3. ***Need to digitalise the enrolment process.*** Parents/guardians are required to complete the enrolment forms in paper format and return them to DH for arranging appointments for annual health assessments. DH uses a computer system, namely, the System for Managing the Assessment of Student Health (SMASH), to record students' particulars and manage appointments under SHS. According to DH, in general, two to four minutes were used to input data for a newly enrolled student, and one to five minutes were used to check and update SMASH records for a student who had enrolled in annual health assessments previously. Audit estimated that, for the 587,261 students enrolled in annual health assessments in 2021/22, a total of 10,662 man-hours had been used to input data and check/update SMASH records. According to DH, it has been developing a new system which will provide, among other features, electronic enrolment service by the end of 2024 (paras. 1.6, 2.3 and 2.4).

4. ***Need to maintain appropriate intervals between annual health assessments.*** According to SHS operation manual, student appointments in two consecutive years should not be too close (i.e. less than 180 days). Audit analysis of appointments of annual health assessments found that for 2017/18 to 2021/22, the intervals between the appointments in the respective years and the last assessments of 177 to 730 students were 90 days or less, and that of 3,428 to 5,305 students were between 91 to 180 days. According to DH, there might be circumstances where appointments were arranged with an interval less than 180 days (e.g. a student transferred from one school to another in the middle of the year or rescheduling of appointments) (paras. 2.5 to 2.7).

5. ***Need to monitor attendance rates of some grades.*** Audit analysis found that the overall attendance rates of annual health assessments in 2017/18 to 2021/22 ranged from 30% to 70%, of which the attendance rates of secondary school students were lower than those of primary school students. Audit further analysis found that the attendance rates of Primary 1, Secondary 1 and 6 students were 79%, 64% and 30% respectively in 2021/22. According to DH, it has taken various measures to improve the attendance rates (e.g. providing school bus service). However, the attendance rates of students of some grades were still not high, in particular for secondary schools (paras. 2.16 to 2.18).

Executive Summary

6. *Need to improve procedures in collecting feedback on SHS.* In February 2020, DH launched an online questionnaire on the SHS website to collect feedback on SHS. Audit examination of the records of the online questionnaires of February 2020 to October 2022 found that:

- (a) the online questionnaire was just put on the SHS website and no invitation for completing the questionnaire was sent to parents/guardians. In the period, only 87 questionnaires were completed; and
- (b) the major reasons for non-attendance of annual health assessments included “forgot the appointment time” (21%), “unable to change to an ideal appointment time” (19%) and “appointment time crashed with other activity” (15%) (paras. 2.19 and 2.20).

7. *Need to provide health assessment activities as scheduled.* Different health assessment activities are provided for students when they attend the annual health assessments. Some of these activities are scheduled for students of specific grades. Audit examined the provision of colour vision tests (only provided to Primary 6 students) and hearing tests (only provided to Primary 1 and Secondary 2 students) in 2019/20 to 2021/22 and found that 325 students had attended the annual health assessments but were not provided with the tests. Audit further examined records of 30 of the 325 students and found that for 11 (37%) students, the reasons for not providing the tests were not recorded (paras. 2.28 to 2.30).

8. *Need to provide health assessment activities timely for students missing activities in the preceding year.* According to DH, a student who missed a health assessment activity in a specific year is provided with the missed activity at the student’s annual health assessment in the year after (i.e. make-up test). For example, if a student missed the hearing test in Primary 1 (see para. 7), he/she will be provided with a make-up hearing test in Primary 2. Audit examination of the relevant records revealed that no make-up colour vision tests or hearing tests were provided to 938 students in 2020/21 and 2021/22 who had missed the colour vision tests or the hearing tests in the preceding year, and there was no documentation on the justifications for not providing the make-up tests (paras. 2.31 and 2.32).

Executive Summary

9. *Need to follow up non-attendance cases of further assessments provided under SHS.* Audit noted that for the further assessments provided under SHS (see para. 2) in 2017/18 to 2021/22:

- (a) the overall attendance rates ranged from 42% to 79%; and
- (b) the 5-year average attendance rates ranged from 48% to 84%, among which the dietetic assessments was the lowest. Of the 2,872 to 14,773 students referred for dietetic assessments each year, 126 and 5 students had not attended the assessments for 3 and 4 consecutive years respectively (paras. 2.39 and 2.40).

10. *Need to make use of new information technology system to follow up cases referred to medical institutions.* Students in need of further assessments (other than those provided under SHS) and/or treatments are referred to other institutions for follow-up (see para. 2). DH has been implementing a departmental-wide information technology enhancement plan. Under the plan, the Clinical Information Management System (CIMS) of DH will be enhanced and SMASH will be replaced by the enhanced system. According to DH, the enhanced CIMS will be interfaced with the Electronic Health Record Sharing System (eHRSS) of the Health Bureau for record sharing with eHRSS with patients' consent. With the new system, which was scheduled for implementation in SHS by the end of 2024, DH would be able to access the clinical records of students referred to other medical institutions through eHRSS with students or their parents'/guardians' consent (paras. 2.44 and 2.46).

Adolescent Health Programme

11. AHP is a school-based outreach programme launched in 2001 for secondary school students, their parents and teachers, for promoting students' psychosocial health, and enhancing parents' and teachers' knowledge on adolescents' psychosocial health. It comprises two programmes, namely, the Basic Life Skills Training (BLST) for Secondary 1 to 3 students, and the Topical Programme (TP) for Secondary 1 to 6 students, and their parents and teachers (paras. 1.9 and 1.10).

12. *Need to review basis of inviting schools to participate in AHP.* In May each year, DH sends letters and information about AHP to secondary schools inviting them to enrol in the programme in the coming school year. Audit noted that: (a) in

Executive Summary

2017/18 to 2021/22, 172 (34%) of 506 secondary schools had not enrolled in AHP for at least five years; and (b) since DH only invited schools that had previously enrolled in AHP to enrol in the programme for the coming school year, these 172 schools might not receive any invitation for participating in AHP. According to DH, interested schools without the invitation letters could approach the Department for enrolment. With the current manpower capacity, DH maintained the AHP service level at about 300 schools each year (paras. 3.4 to 3.6).

13. ***Need to review programme provided to parents and teachers.*** TP for parents and teachers aims to enhance their knowledge on adolescents' psychosocial health and equip them with the appropriate skills to assist their children/students throughout the adolescence. Schools may select topics under TP for parents and/or teachers to participate. Audit examined the records of TP of 2017/18 to 2021/22 and noted that the participation of teachers and parents was on the low side. For example, of the 217 schools only enrolled in TP in 2021/22, 3 schools selected topics for parents and/or teachers to participate (involving 3 programme sessions and a total of 85 parents and 32 teachers) (para. 3.7).

14. ***Need to keep under review the need to adjust AHP in light of impacts brought by coronavirus disease (COVID-19) epidemic.*** DH prepares bi-monthly reports on the commencement of programmes under BLST and TP for monitoring purpose. Audit noted that in 2019/20 to 2021/22, scheduled programmes for some grades in some schools had not commenced. According to DH, in 2019/20 to 2021/22, the outreach services of AHP were severely affected by the outbreak of the COVID-19 epidemic due to the intermittent suspension of face-to-face classes/temporary closure of schools, the half-day school arrangement, and the deployment of DH staff to assist in anti-epidemic duties. On the other hand, Audit noted that in the midst of the epidemic, due to class suspension and the lack of regular social activities, students' emotions could be easily affected (paras. 3.11 and 3.12).

15. ***Need to step up monitoring of performance of non-governmental organisations (NGOs).*** DH engages NGOs to deliver AHP collaboratively. Each programme session under BLST/TP is delivered by two DH staff from an AHP regional office (e.g. nurses, dietitians and clinical psychologists), or one staff from an AHP regional office and a registered social worker of NGO as facilitator (para. 3.23). Audit noted the following issues:

Executive Summary

- (a) ***Provision of facilitators.*** According to the contracts signed between DH and NGOs, NGOs should provide facilitators upon request. Audit noted that in 2019/20 to 2021/22, NGOs could not provide the facilitators on a number of occasions. According to NGOs, there were problems of staff shortage from time to time, hence, they were not able to provide facilitators requested by DH on some occasions. According to DH, when no NGO facilitators were provided, it had redeployed its staff to replace the NGO facilitators (paras. 3.24 and 3.25); and
- (b) ***Supervisory observations.*** According to the contracts signed between DH and NGOs, NGOs should conduct observations on facilitators' performance around one month after a facilitator has commenced conducting the programme under AHP (i.e. supervisory observations). Audit noted that in 2019/20 to 2021/22, no supervisory observations were conducted for most facilitators engaged in each year. For the remaining facilitators, about half of the supervisory observations were conducted more than one month (up to 10 months) after they had commenced providing services (para. 3.26).

Other related issues

16. ***Areas for improvement in implementation of pilot HPSP.*** DH engaged 30 schools to participate in a pilot HPSP from 2019/20. Under the programme, DH assists participating schools to identify specific health priorities and develop tailor-made school-based health promotion action plans. In implementing the pilot HPSP, DH and the participating schools collaborated and exchanged various information in order to work towards the goal of building a healthy campus (paras. 4.2 and 4.3). Audit noted the following issues:

- (a) ***Health profile reports not timely provided to schools.*** School-specific health profile reports (providing an overview of the health problems and health-related behaviours of students of the participating schools) would be provided to the participating schools every year. Audit noted that DH had provided the 2017/18 health profile reports to all 30 participating schools between May and July 2019. According to DH, due to the outbreak of the COVID-19 epidemic, the reports had not been provided since 2020. It would provide the 2021/22 health profile reports to schools between March and April 2023 (para. 4.3(a)); and

Executive Summary

- (b) ***Self-assessment checklists not submitted by some schools.*** To evaluate the readiness of schools as health-promoting schools and the implementation progress of HPSP, schools were advised to submit the self-assessment checklists to DH when the programme was launched in 2019 (i.e. baseline self-assessment) and by the end of each school year (i.e. yearly self-assessment). Audit noted that as of January 2023, of the 30 participating schools, 4 (13%) had not submitted the baseline self-assessment checklists and all yearly self-assessment checklists for 2019/20 to 2021/22, and 29 (97%), 24 (80%) and 27 (90%) schools had not submitted the yearly self-assessment checklists for 2019/20, 2020/21 and 2021/22 respectively (para. 4.3(b)).

According to DH, it was planning to revamp HPSP. Hence, the content and approach of the programme might be different from the current mode (para. 4.3).

17. ***Need to review provision of special health talks.*** Special health talks are provided by nurses and allied health staff (i.e. audiologists, clinical psychologists, dietitians and optometrists) for students with related needs. In 2017/18, 2018/19 and 2019/20, 287, 100 and 17 special health talks were conducted for 1,791, 961 and 138 participants respectively (i.e. 6, 10 and 8 participants per talk respectively). While the target number of special health talks provided has been reduced from 2018/19, Audit noted that from 2017/18 to 2018/19, the number of students with health problems identified in vision, growth and psychological health slightly increased by 2.2% (from 151,256 to 154,547), 6.7% (from 132,996 to 141,869) and 3.4% (from 13,600 to 14,066) respectively. In addition, according to an analysis conducted in September 2021 by DH on the health status of children and adolescents in Hong Kong amid the COVID-19 epidemic, the detection rates of overweight and obesity (for Primary 1 and 2, and Secondary 1 students) and visual problems (for Primary 1 students) had increased (paras. 4.8(b) and 4.9(a)).

18. ***Need to review provision of outreach health talks.*** DH had targets of providing outreach health talks on “Diet and Health” to 100 primary schools and 50 secondary schools with a high percentage of students attending the annual health assessments and a high detection rate for overweight. Audit examination of the number of outreach health talks provided in 2017/18 to 2019/20 found that DH had failed to meet the targets set and the rejection rates for such service were high (e.g. about 60% and 77% of the invited primary and secondary schools respectively rejected the invitations) (paras. 4.8(c) and 4.9(b)).

Executive Summary

19. ***Need to closely monitor the fitting-out works at the West Kowloon Government Offices SHSC and SAC.*** The West Kowloon Government Offices SHSC and SAC commenced operation in November 2019. According to DH, the SHSC and SAC were developed to strengthen service provision in Kowloon. Due to the outbreak of the COVID-19 epidemic, in late January 2020, services of the SHSC and SAC were suspended. Between March 2020 and May 2022, the West Kowloon Government Offices SHSC and SAC were converted temporarily into a DH call centre/office for handling matters relating to COVID-19 (e.g. answering public enquires and contact tracing for COVID-19 confirmed cases). In June 2022, the DH call centre/office ceased operation. According to DH, fitting-out works were required before resumption of services in November 2023 and the works had commenced on 20 March 2023 (paras. 4.12, 4.13 and 4.15).

20. ***Need to ensure timely implementation of the new system and take into account the audit findings and recommendations in this Audit Report in developing and promoting the online services.*** The Internet Service for the System for Managing the Assessment of Student Health (wSMASH) was developed by DH to facilitate parents/guardians to make enquiries and reschedule appointments, view findings of annual health assessments and recommendations, and fill in the health assessment questionnaires of students. E-mails are sent to wSMASH users to remind them of the annual health assessment appointments. Audit examined the usage of wSMASH and noted that as of October 2022, there were 129,414 active wSMASH user accounts, representing about 22% of 575,580 average number of students enrolled in annual health assessments per year from 2017/18 to 2021/22, and the number of newly registered wSMASH user accounts decreased by 6,839 (45%) from 15,165 in 2017/18 to 8,326 in 2021/22. According to DH, SMASH (including wSMASH) will be replaced by the enhanced CIMS under the departmental-wide information technology enhancement plan (see para. 10). Among other features, the enhanced system will provide more online services, such as electronic enrolment and one-stop portal for appointment scheduling. As of February 2023, the new system was scheduled for implementation by the end of 2024 (paras. 4.16 to 4.19).

Audit recommendations

21. **Audit recommendations are made in the respective sections of this Audit Report. Only the key ones are highlighted in this Executive Summary. Audit has recommended that the Director of Health should:**

Executive Summary

Annual health assessment

- (a) take measures to ensure that electronic enrolment service is provided as soon as practicable (para. 2.13(a));
- (b) take measures to ensure that an appropriate interval is maintained between annual health assessments for students as far as practicable (para. 2.13(b));
- (c) monitor the attendance rates of annual health assessments and explore further measures to improve the attendance, in particular secondary school students (para. 2.26(a));
- (d) take measures to improve the procedures in collecting feedback on SHS (e.g. invite parents/guardians to complete the online questionnaires) with a view to further improving SHS (para. 2.26(b));
- (e) take measures to ensure that health assessment activities for students of specific grades are provided as scheduled and justifications are documented for not doing so (para. 2.36(a));
- (f) take measures to ensure that make-up health assessment activities are provided timely to students who have missed the activities in the preceding year and justifications are documented for not doing so (para. 2.36(b));
- (g) take prompt follow-up actions on non-attendance cases of further assessments (para. 2.47(a));
- (h) in the long run, explore the feasibility of using the new system to follow up cases referred from SHS to medical institutions when the enhanced CIMS is interfaced with eHRSS (para. 2.47(d));

Adolescent Health Programme

- (i) review the basis of inviting schools to participate in AHP and take measures to ensure that AHP is provided to schools as appropriate (para. 3.9(a));

Executive Summary

- (j) **conduct a review of the programme provided to parents and teachers under TP, including ascertaining the reasons for the low participation, and take measures to improve the programme (para. 3.9(b));**
- (k) **keep under review the need to suitably adjust AHP (e.g. programme content and schedule) taking into account the impacts brought by the COVID-19 epidemic (para. 3.21(a));**
- (l) **step up monitoring of NGOs' performance to ensure that facilitators are provided upon request as far as possible and supervisory observations on facilitators' performance are conducted as appropriate (para. 3.29(a));**

Other related issues

- (m) **take measures to ensure that health profile reports are provided to schools and self-assessment checklists are submitted by schools in a timely manner as appropriate in future (para. 4.5(a));**
- (n) **review the provision of special health talks, taking into account the needs of students, attendance rates and participants' feedback on the services (para. 4.10(a));**
- (o) **review the provision of outreach health talks, taking into account the attendance rates, participants' feedback on the services and the reasons for rejecting the services (para. 4.10(b));**
- (p) **closely monitor the progress of the fitting-out works to ensure the resumption of services at the West Kowloon Government Offices SHSC and SAC in November 2023 (para. 4.14); and**
- (q) **take into account the audit findings and recommendations in this Audit Report in developing and promoting the online services under the new system for replacing wSMASH, and take measures to ensure that the new system is timely implemented (para. 4.20).**

Response from the Government

22. The Director of Health agrees with the audit recommendations.

PART 1: INTRODUCTION

1.1 This PART describes the background to the audit and outlines the audit objectives and scope.

Background

1.2 In view of the rapidly ageing population and increasing prevalence of chronic diseases, the Government is committed to actively promoting primary healthcare to tackle the increasing healthcare needs as well as to establish a sustainable public healthcare system. According to the Government, primary healthcare is the first point of contact for individuals and families in a continuous healthcare process which entails the provision of accessible, comprehensive, continuing, coordinated and person-centred care in the community. The Department of Health (DH) is the Government's health adviser and agency to execute healthcare policies and statutory functions. It safeguards the community's health through a range of promotive, preventive, curative and rehabilitative services. DH delivers healthcare services using a life-course approach through its various areas of work with emphasis on preventive care, including providing community-based health assessments, and preventive and education services to specific population groups (i.e. students, women and the elderly).

Student Health Service

1.3 The Student Health Service (SHS) of DH provides comprehensive, promotive and preventive health programmes for primary and secondary school

Introduction

students according to their needs at various stages of development (Note 1). It aims to safeguard the physical and psychological health of school children, and enable them to gain the maximum benefit from the education system and to develop their potentials. According to DH, the objectives of SHS are as follows:

- (a) promotion of self-reliance and self-care in prevention of ill health and maintenance of health;
- (b) prevention of ill health and early detection of diseases through regular health screening and physical examination;
- (c) provision of facilities for further assessment of disorders, and referral for early treatments and rehabilitation services; and
- (d) identification and monitoring of health problems among students to facilitate the planning of health services.

1.4 SHS comprises:

- (a) centre-based services which include annual health assessments, further assessments, other referrals and health education (see paras. 1.5 to 1.8); and
- (b) school-based services which include:

Note 1: *In addition to SHS, DH also provides preventive healthcare services to children, women and the elderly as follows:*

- (a) *the Family Health Service, which operates through its Woman Health Centres and the Maternal and Child Health Centres, provides a range of health promotion and disease prevention services to children from birth to 5 years of age and to women aged 64 years and below; and*
- (b) *the Elderly Health Service, which operates through its Elderly Health Centres and Visiting Health Teams, aims to enhance primary healthcare to elderly people living in the community, improve their self-care ability, encourage healthy living and strengthen family support so as to minimise illness and disability.*

- (i) the Adolescent Health Programme (AHP — see paras. 1.9 and 1.10); and
- (ii) the Health Promoting School Programme (HPSP — see paras. 1.11 and 1.12).

Centre-based services

1.5 **Services.** Centre-based services are provided to both primary and secondary school students (Note 2) with the aim to identify students with health problems at an early stage for timely advice and intervention (Note 3). The services are provided at the Student Health Service Centres (SHSCs) and the Special Assessment Centres (SACs), which include:

- (a) ***Annual health assessment.*** Students attend SHSCs annually for various health assessment activities to meet their needs at various stages of development. For example, body weight and height measurements, visual acuity tests, individual health counselling, hearing tests, spinal assessments and blood pressure measurements. The major health assessment activities provided at SHSCs are shown at Appendix A. As of February 2023, there were 13 SHSCs (see Table 1);
- (b) ***Further assessments.*** Students with certain health problems identified during the annual health assessments are referred for further assessments. Further assessments provided under SHS include audiological assessments,

Note 2: *According to DH, students of primary and secondary day schools are the target groups of centre-based services.*

Note 3: *According to DH, SHS is a preventive and promotive health programme instead of a therapeutic or rehabilitative one. Students with health and other problems are advised to seek further treatment, for example:*

- (a) *medical treatment at clinics of DH, the Hospital Authority or private practitioners for illnesses;*
- (b) *advice from teachers or student guidance officers from the pertinent schools for academic problems; and*
- (c) *social welfare services from the Social Welfare Department or non-governmental organisations for family problems.*

Introduction

dietetic assessments, further spinal assessments (Note 4), optometric assessments and psychological assessments. As of February 2023, there were 4 SACs providing all types of further assessments and 5 SHSCs providing some types of further assessments (see Table 2);

- (c) ***Other referrals.*** Students in need of further assessments (other than those provided under SHS) and/or treatments are referred to clinics of DH or the Hospital Authority (HA), or other institutions for follow-up (see Note 3 above); and
- (d) ***Health education.*** General health talks and workshops are provided for students attending the annual health assessments. Special health talks are provided to students with specific needs, and outreach health talks on “Diet and Health” are provided to schools with a high percentage of students attending the annual health assessments and schools with a high detection rate for overweight. To reinforce health messages, pamphlets and booklets are also distributed to students.

Note 4: *According to DH, for further spinal assessment, Moiré topography (a non-invasive and radiation-free procedure) is adopted for screening of suspected scoliosis. Depending on the conditions of the students, further follow-up by SHS and/or referral for X-ray examination may be arranged.*

Table 1

**List of SHSCs
(February 2023)**

SHSC
1. Chai Wan SHSC
2. Western SHSC (Note 1)
3. Lam Tin SHSC
4. Kowloon Bay SHSC
5. Kowloon City Lions Clubs SHSC
6. Tsz Wan Shan Wu York Yu SHSC
7. West Kowloon Government Offices SHSC (Note 1)
8. Sha Tin SHSC
9. Tai Po SHSC
10. Shek Wu Hui SHSC (Note 2)
11. South Kwai Chung SHSC
12. Tuen Mun SHSC
13. Yuen Long SHSC

Source: DH records

Note 1: The Western SHSC and the West Kowloon Government Offices SHSC are located in Sheung Wan and Yau Ma Tei respectively.

Note 2: According to DH, the Shek Wu Hui SHSC would be reprovisioned in a new site in the North District with a target to commence operation in the third quarter of 2024.

Introduction

Table 2

**List of SACs and SHSCs with further assessment services
(February 2023)**

SAC/SHSC	Assessment service				
	Audiological assessment	Dietetic assessment	Further spinal assessment	Optometric assessment	Psychological assessment
<i>SACs with all types of further assessments</i>					
1. Chai Wan SAC	✓	✓	✓	✓	✓
2. Western SAC	✓	✓	✓	✓	✓
3. Lam Tin SAC	✓	✓	✓	✓	✓
4. West Kowloon Government Offices SAC	✓	✓	✓	✓	✓
<i>SHSCs with some types of further assessments</i>					
1. Sha Tin SHSC	✗	✓	✓	✓	✓
2. Tai Po SHSC	✗	✗	✓	✗	✗
3. Shek Wu Hui SHSC (Note)	✗	✗	✓	✗	✗
4. South Kwai Chung SHSC	✗	✓	✓	✗	✗
5. Tuen Mun SHSC	✓	✓	✗	✓	✓

Legend: ✓ Assessment available
✗ Assessment not available

Source: Audit analysis of DH records

Note: According to DH, the Shek Wu Hui SHSC would be reprovisioned in a new site in the North District with a new SAC for providing all types of further assessments under SHS with a target to commence operation in the third quarter of 2024.

1.6 **Enrolment.** Primary and secondary school students may enrol in the annual health assessments of SHS on a voluntary basis in every school year (Note 5) through the following means:

- (a) **Enrolment through schools.** At the beginning of a school year, DH sends invitation letters and enrolment forms for annual health assessment of SHS to all schools (Note 6). Parents/guardians are required to complete the enrolment forms to indicate their consent for the students to join the service. Schools collect the completed forms and return them to DH for arranging appointments; and
- (b) **Direct enrolment.** For students not enrolled at the beginning of the school year through schools, the enrolment form is available for collection at SHSCs or download on the SHS website. Parents/guardians are required to complete the enrolment forms to indicate their consent for the students to join the service, and send the completed forms directly to SHSCs on or before the last working day in August for arranging appointments before 31 October of the year (see para. 1.7).

1.7 **Appointment and referral.** An appointment for annual health assessment is scheduled for each enrolled student from 1 November of a year to 31 October of the following year (Note 7) in 1 of the 13 SHSCs according to the school's location. After the annual health assessments, students in need of further assessments provided under SHS (see para. 1.5(b)) are given appointments as appropriate. Table 3 shows the number of students with appointments for annual health assessments and the number of referrals for further assessments provided under SHS in 2017/18 to 2021/22.

Note 5: *Unless otherwise specified, all years mentioned in this Audit Report refer to school years, which start on 1 September of a year and end on 31 August of the following year.*

Note 6: *According to DH, invitation letters are sent according to a school list provided by the Education Bureau every year. In 2017/18 to 2021/22, invitation letters had been sent to about 1,200 schools per year.*

Note 7: *Unless otherwise specified, centre-based services (including annual health assessments, further assessments, and health talks and workshops) provided in a school year mentioned in this Audit Report refer to services provided from 1 November of a year to 31 October of the following year.*

Table 3

Numbers of students with appointments for annual health assessments and referrals for further assessments provided under SHS (2017/18 to 2021/22)

Year	Number of students with appointments	Number of referrals for further assessments provided under SHS
2017/18	633,430	73,952
2018/19	639,011	76,103
2019/20	376,363	19,470
2020/21	72,492	15,714
2021/22	284,404	43,007

Source: Audit analysis of DH records

Remarks: According to DH, SHSCs were closed intermittently in 2019/20, 2020/21 and 2021/22 due to the outbreak of coronavirus disease (COVID-19) epidemic. In particular, in 2020/21, while the majority of SHSCs were closed most of the time, when they were open, annual health assessments were only provided to students of several grades (e.g. Primary 1, 2 and/or Secondary 1). Hence, the number of students with appointments and the number of referrals for further assessments provided under SHS in the period were significantly lower than those in other years.

1.8 Service charge. SHS is free of charge for students holding valid identity documents, such as the Hong Kong Permanent Identity Card, Hong Kong Birth Certificate with permanent resident status and Hong Kong Special Administrative Region passport (i.e. eligible persons). Non-eligible persons, such as holders of travel documents (e.g. foreign passport and the Two-way Permit) showing their status as visitors, and holders of the Form of Recognizance, have to pay on the appointment day an annual fee (e.g. \$535 for 2022/23).

AHP

1.9 Objectives. According to DH, adolescence is a period of transition with significant physical, psychological and social development. To empower adolescents

to face the challenges of growing up, DH launched AHP in 2001. AHP is a school-based outreach programme for secondary school students, their parents and teachers, and is implemented through psychological and physical health promotional activities. The programme is provided by a multi-disciplinary team comprising doctors, nurses, social workers, dietitians and clinical psychologists. The objectives are:

- (a) promoting students' psychosocial health such as self-understanding and acceptance, emotion and stress management as well as harmonious interpersonal and problem-solving skills; and
- (b) enhancing parents' and teachers' knowledge on adolescents' psychosocial health and equipping them with the appropriate skills to assist their children/students throughout the adolescence.

1.10 ***Programme features and enrolment.*** AHP adopts an interactive mode of training and experiential learning to deliver preventive programmes to the target audiences. In May each year, DH sends letters to secondary schools inviting them to enrol in AHP in the coming school year (Note 8). Schools may join either one or both of the following programmes (Note 9):

- (a) ***Basic Life Skills Training (BLST).*** BLST is provided to Secondary 1 to 3 students to equip them with knowledge, attitude and skills that can empower them to face the challenges of growing up. Examples of skills covered in BLST are healthy living, self-acceptance and stress management; and

Note 8: *Unless otherwise specified, programmes under AHP conducted in a school year mentioned in this Audit Report refer to programmes conducted from 1 August of a year to 31 July of the following year.*

Note 9: *According to DH, the outreach services of AHP have been severely affected by the COVID-19 epidemic due to the intermittent suspension of face-to-face classes/temporary closure of schools, the half-day school arrangement, and the deployment of DH staff to assist in anti-epidemic duties. As such, for 2020/21 to 2022/23, schools were only allowed to enrol in either one but not both programmes (see para. 1.10(a) and (b)). Subject to the manpower and resources of DH for AHP, both programmes may be offered upon requests from schools.*

Introduction

- (b) **Topical Programme (TP).** TP is provided to Secondary 1 to 6 students, and their parents and teachers. A wide range of topics are covered to meet the students' needs in different stages of their development, for example:
 - (i) for students — anxiety and adversity management, correct attitude and skills in learning, goal setting, sex education, and prevention on smoking, drinking and drug abuse; and
 - (ii) for parents and teachers — stress and emotion management, understanding adolescents, healthy use of the Internet, conflict management with adolescents, and handling of adolescent dating and love affairs.

Enrolled schools may select appropriate topics under BLST and/or TP for their participants, and work with DH to fit the programmes into their school schedules. Of the 508 secondary schools (except special schools) in 2021/22, 300 (59%) enrolled in AHP.

HPSP

1.11 **The “health-promoting school” framework.** The World Health Organization has been promoting a “health-promoting school” framework globally with a view to improving the health of students, school personnel, families and other members of the community through schools, and making every school a health-promoting school. In May 2018, DH set up a Working Group on Health Promoting School (Note 10) to explore the feasibility of extending the “health-promoting school” framework in Hong Kong.

1.12 **Pilot HPSP.** In March 2019, DH engaged 30 schools (including 18 primary schools, 11 secondary schools and 1 secondary-cum-primary school) to participate in a two-year pilot HPSP from 2019/20 to 2020/21 with the aim of assisting the participating schools in working towards becoming a health-promoting school, and helping DH to explore the feasibility of extending the “health-promoting school”

Note 10: *The Working Group on Health Promoting School is chaired by the head of the Family and Student Health Branch of DH (see para. 1.14), and comprises representatives from DH, the Education Bureau, a tertiary institution as well as school principals and parents.*

framework in Hong Kong. Under the programme, DH assists participating schools to identify specific health priorities and develop tailor-made school-based health promotion action plans by making reference to the health needs of their students to work towards the goal of building a healthy campus. According to DH, the pilot HPSP covers four health priority areas (i.e. physical activity, healthy eating, mental health and psychological health) with a focus on the following six key factors:

- (a) healthy school policies (i.e. to establish and document policies and practices that promote health such as physical activity, healthy eating, mental health and anti-bullying);
- (b) school's physical environment (i.e. to provide a safe, hygienic and healthy environment for learning);
- (c) school's social environment (i.e. to create a caring, respectful and supportive ambience);
- (d) community links (i.e. to link with different stakeholders and work proactively in partnership for health promotion in the community);
- (e) action competencies for healthy living (i.e. to adopt a comprehensive curriculum that helps students acquire knowledge and skills for healthy living); and
- (f) school health care and promotion services (i.e. to provide basic disease prevention, protection and health promotion services).

Due to the outbreak of the COVID-19 epidemic, the pilot HPSP was extended to 2022/23.

The Primary Healthcare Blueprint

1.13 In December 2022, the Government released the Primary Healthcare Blueprint to formulate the direction of development and strategies for strengthening Hong Kong's primary healthcare system in a bid to shift the emphasis of the present healthcare system and people's mindset from treatment-oriented to prevention-oriented for addressing the challenges brought about by an ageing

Introduction

population and the increasing prevalence of chronic diseases, with a view to enhancing the overall health and quality of life of citizens. The Blueprint puts forward the major directions of primary healthcare reform, including, among others, to progressively migrate primary healthcare services under DH to a district-based community health system. The migration will be implemented in two phases. Phase I includes the Elderly Health Centres, the Woman Health Centres (see Note 1 to para. 1.3), and the various public-private partnership programmes under DH. Phase II includes SHSCs, and Maternal and Child Health Centres (see Note 1 to para. 1.3). According to DH, as of January 2023, it was working on the migration plan with the Health Bureau.

Responsible branch

1.14 SHS is provided through the Family and Student Health Branch under the service area of the Health Services and Administration of DH (Note 11). The Branch is headed by a Consultant and supported by doctors, nurses, allied health staff (e.g. clinical psychologists and dietitians), and administrative and supporting staff of SHS. As at 31 March 2022, the staff establishment of SHS was 437, including 40 doctors, 248 nurses, 22 allied health staff, and 127 administrative and supporting staff (Note 12). An extract of the organisation chart of DH as at 31 October 2022 is at Appendix B. In 2021-22, the expenditure incurred by DH for SHS amounted to about \$305 million (Note 13).

Note 11: *Apart from SHS, the Family and Student Health Branch is also responsible for the Family Health Service (see Note 1(a) to para. 1.3).*

Note 12: *According to DH:*

- (a) *as at 31 March 2022, the strength of SHS was 391, including 30 doctors, 221 nurses, 21 allied health staff, and 119 administrative and supporting staff, representing 75%, 89%, 95% and 94% of the establishment respectively; and*
- (b) *between 2020 and 2022, due to the impact of the COVID-19 epidemic, a significant proportion of SHS staff was deployed to assist in anti-epidemic duties. Moreover, there were many vacancies in these few years.*

Note 13: *The expenditure for SHS increased by \$15 million (5%) from \$290 million in 2017-18 to \$305 million in 2021-22.*

Audit review

1.15 In November 2022, the Audit Commission (Audit) commenced a review of SHS. The audit review has focused on the following areas:

- (a) annual health assessment (PART 2);
- (b) AHP (PART 3); and
- (c) other related issues (PART 4).

Audit has found room for improvement in the above areas and has made a number of recommendations to address the issues.

General response from the Government

1.16 The Director of Health agrees with the audit recommendations. He appreciates Audit's efforts in conducting the audit review of SHS and putting forward recommendations which provide useful reference for improving the services. He has said that:

- (a) between 2020 and 2022, due to the impact of the COVID-19 epidemic, a significant proportion of SHS staff was deployed to assist in anti-epidemic duties. For example, in February 2020, 19 doctors, more than 180 nurses, and more than 50 supporting staff from SHS were deployed. Also, the provision of centre-based services and delivery of school programmes of SHS were seriously affected by the COVID-19 epidemic, including closure of health centres and class suspension in schools. For instance, all annual health assessment services at SHSCs and all school outreach services of AHP had been suspended intermittently for 17 months and 15 months respectively in the past 3 years. Some of the findings in this audit review, in particular the figures for 2019/20 to 2021/22, reflected the impact of the epidemic on service provision; and
- (b) there has been a serious problem of manpower shortage in recent years, in particular for doctors and nurses, in SHS as well as in the whole Department. As at 31 March 2022, the vacancy for doctors and nurses in

Introduction

SHS were 25% and 11% of the respective staff establishments, while the vacancy figures for doctors and nurses were 30% and 10% respectively as at 1 March 2023. DH will take into account the findings and recommendations of this audit review as well as manpower constraints to continue implementing measures to provide quality health services and programmes for students.

Acknowledgement

1.17 Audit would like to acknowledge with gratitude the full cooperation of the staff of DH during the course of the audit review.

PART 2: ANNUAL HEALTH ASSESSMENT

2.1 This PART examines the provision of the annual health assessment services under SHS, focusing on the following areas:

- (a) enrolment and appointment of annual health assessments (paras. 2.2 to 2.14);
- (b) attendance of annual health assessments (paras. 2.15 to 2.27);
- (c) health assessment activities (paras. 2.28 to 2.37); and
- (d) referrals and follow-ups (paras. 2.38 to 2.48).

Enrolment and appointment of annual health assessments

2.2 Primary and secondary school students may enrol in the annual health assessments on a voluntary basis in every school year. According to DH, an appointment for annual health assessment is scheduled for each enrolled student in a school year in one of the SHSCs according to the school's location.

Need to digitalise the enrolment process

2.3 ***Enrolment forms.*** At the beginning of a school year, DH sends invitation letters and enrolment forms for annual health assessment to all schools. The forms are also available for collection at SHSCs and for download on the SHS website. Parents/guardians are required to complete the enrolment forms in paper format and return them through schools at the beginning of a school year or directly to DH on or before the last working day in August of the school year (see para. 1.6). Different forms are used for primary and secondary school students. By completing the form, primary school students may enrol in DH's School Dental Care Service (SDCS) at the same time.

2.4 **Data input.** DH uses a computer system, namely, the System for Managing the Assessment of Student Health (SMASH), to record students' particulars (e.g. personal information, assessment results and health history) and manage appointments under SHS. Depending on the school locations of the enrolled students, the enrolment forms are sent to the responsible SHSCs for data input into SMASH (Note 14) or checking and updating records of SMASH (Note 15). Audit noted that:

- (a) according to DH, in general, two to four minutes were used to input data for a newly enrolled student (e.g. Primary 1 student), and one to five minutes were used to check and update SMASH records for a student who had enrolled in annual health assessments previously. Audit estimated that a total of 10,662 man-hours had been used to input data and check/update SMASH records for the 587,261 students enrolled in annual health assessments in 2021/22 (Note 16); and
- (b) an internal review conducted by DH in 2017 for improving SHS's efficiency recommended the digitalisation of annual health assessment enrolment process to save time costs and improve accuracy.

According to DH, it has been developing a new system which will provide, among other features, electronic enrolment service by the end of 2024 (see para. 4.18). Audit considers that DH needs to take measures to ensure that electronic enrolment service is provided as soon as practicable with a view to saving the data entry costs and improving efficiency.

Note 14: *For primary school students, staff of SHS and SDCS collaborate for the data input (staff of SHS is responsible for data input for Primary 1 students, and staff of SDCS is responsible for data input for Primary 2 to 6 students). For secondary school students, staff of SHS is responsible for the data input.*

Note 15: *For Primary 2 to 6 students, upon receiving the data from SDCS (see Note 14), staff of SHS will check and update the SMASH records with the data received. For students of other grades who had enrolled in annual health assessments previously, staff of SHS will check and update the SMASH records with the paper forms.*

Note 16: *In 2021/22, of the 587,261 students enrolled in annual health assessments, 52,436 were Primary 1 students and 534,825 were students other than Primary 1. Assuming 2 minutes were used for data input for each Primary 1 student, 1,748 man-hours (52,436 students $\times$ 2 minutes $\div$ 60 minutes) had been used. Assuming 1 minute was used for checking and updating SMASH record for each student other than Primary 1, 8,914 man-hours (534,825 students $\times$ 1 minute $\div$ 60 minutes) had been used. Hence, a total of 10,662 (1,748 + 8,914) man-hours had been used.*

*Need to maintain appropriate intervals
between annual health assessments*

2.5 According to SHS operation manual:

- (a) students from the same school and grade are scheduled to attend the annual health assessment together as far as possible;
- (b) in general, all schools are segregated into two groups of comparable size for appointment scheduling. Students of the first and the second school groups are given appointments in the first half (from November to April) and second half (from May to October) of a school year respectively; and
- (c) schools should remain in the same group as far as possible so that student appointments in two consecutive years are not too close (i.e. less than 180 days).

2.6 Audit analysed the interval between the date of appointment of annual health assessment in a year and the date of the last annual health assessment and found that for 2017/18 to 2021/22, the intervals between the appointments in the respective years and the last assessments of 177 to 730 students were 90 days or less (see Table 4).

Table 4**Intervals between appointments of annual health assessment in respective years
and last annual health assessments
(2017/18 to 2021/22)**

Interval	Number of students				
	2017/18	2018/19	2019/20	2020/21	2021/22
90 days or less	730	718	523	0	177
91 to 180 days	5,305	5,026	5,130	0	3,428
More than 180 days (Note 1)	627,395	633,267	370,710	72,492 (Note 2)	280,799
Total	633,430	639,011	376,363	72,492	284,404

Source: Audit analysis of DH records

Note 1: These figures included students enrolled in SHS for the first time and students not enrolled in SHS in consecutive school years.

Note 2: Due to the outbreak of the COVID-19 epidemic, SHSCs were closed between February and October 2020. Hence, the intervals between the appointments in 2020/21 and the last appointments were all more than 180 days (the shortest interval was 284 days).

2.7 According to DH, there might be circumstances where appointments for annual health assessments were arranged with an interval less than 180 days, for example:

- (a) when a student was promoted from Primary 6 to Secondary 1, and the primary and secondary schools concerned were in the second school group and the first school group respectively (see para. 2.5(b));
- (b) when a student was transferred from one school to another in the middle of the year; or
- (c) when the appointments for annual health assessments were rescheduled.

In Audit's view, the appointments of two consecutive annual health assessments of a student should not be too close. Otherwise, it might not make the most of the assessments in monitoring students' health at various stages of their development, and identifying students' needs for health advice and timely intervention (see para. 1.5). Audit considers that DH needs to take measures to ensure that an appropriate interval is maintained between annual health assessments for students as far as practicable.

Need to record reasons for cancelling appointments

2.8 According to DH, an appointment is provided to each enrolled student in a school year. Audit analysis of the number of students enrolled and the number of appointments provided in 2017/18 to 2021/22 found that some enrolled students were not provided with appointments (see Table 5).

Table 5

**Number of enrolled students not provided with appointments
(2017/18 to 2021/22)**

Year	Number of students		
	Enrolled (a)	Enrolled and provided with appointments (b)	Enrolled and not provided with appointments (c) = (a) – (b)
2017/18	633,705	633,430	275
2018/19	639,234	639,011	223
2019/20	632,842	376,363	256,479
2020/21	384,856	72,492	312,364
2021/22	587,261	284,404	302,857

Source: Audit analysis of DH records

2.9 Upon enquiry about the reasons for not providing appointments to some enrolled students, DH informed Audit in January 2023 that:

Annual health assessment

- (a) in 2017/18 and 2018/19, DH had provided an appointment to each enrolled student. However, some appointments had been cancelled and not rescheduled due to various reasons. For example, for rescheduling an appointment to a date beyond two months (Note 17), DH would cancel the original appointment and request the parent/guardian to contact DH within two months of the preferred date for making another appointment. Since some parents/guardians did not contact DH, no appointment was arranged; and
- (b) in 2019/20 to 2021/22, due to the outbreak of the COVID-19 epidemic, SHSCs were closed intermittently. A significant number of enrolled students was not provided with any appointments for annual health assessments or had cancelled their appointments. DH did not maintain statistics on the number of students not provided with an appointment due to the temporary closure of SHSCs and the number of students who cancelled their appointments for other reasons.

2.10 To ensure that more students can benefit from the annual health assessments, Audit considers that DH needs to record the reasons for cancelling the appointments of annual health assessments and take follow-up actions as appropriate (e.g. remind parents/guardians to make appointments in case the preferred date of appointment is beyond two months).

Need to review rescheduling arrangements

2.11 *Types of appointments relating to annual health assessments.* In addition to appointments for annual health assessments, the following appointments may also be provided to students:

- (a) *Follow-up appointments of annual health assessments.* Follow-up appointments of annual health assessments are arranged for students who have not completed all required health assessment activities in the annual health assessments due to various reasons (e.g. students who need to wear glasses but have not brought the glasses) or students with health conditions

Note 17: *According to DH, rescheduling of appointment could only be arranged within two months.*

that need short-term follow-up (e.g. blood pressure, growth and puberty issues); and

- (b) ***Rescheduling of appointments for annual health assessments.*** Upon parents'/guardians' requests, rescheduling of appointments for annual health assessments can be arranged in the same school year for students who have not attended the annual health assessments (i.e. non-attendance).

2.12 ***Limitations in rescheduling appointments.*** Parents/guardians may reschedule appointments by calling individual SHSCs, calling the SHS central call centre (Note 18) or through a registered account for using the online service (i.e. Internet Service for the System for Managing the Assessment of Student Health — wSMASH). Audit noted the following limitations in the rescheduling arrangements:

- (a) ***Rescheduling means not applicable to all types of appointments.*** The means for rescheduling appointments vary. For example, appointments for annual health assessments could only be rescheduled by calling individual SHSCs directly or through wSMASH but not by calling the SHS central call centre. On the other hand, follow-up appointments of annual health assessments (see para. 2.11(a)) could be rescheduled only by calling individual SHSCs; and
- (b) ***Inadequacies of wSMASH.*** 24 daily quotas for each SHSC were set for rescheduling appointments through wSMASH regardless of the actual availability of appointments. If the quotas were used up, no rescheduling could be arranged.

According to the survey conducted by DH, being “unable to change to an ideal appointment time” was one of the major reasons for non-attendance of annual health assessments (see para. 2.19(b)(ii)). In light of the audit findings, Audit considers that DH needs to review the rescheduling arrangements with a view to facilitating parents/guardians in making appointments.

Note 18: *The SHS central call centre, which commenced operation in September 2019, is mainly for rescheduling appointments for non-attendance cases (see para. 2.11(b)).*

Audit recommendations

- 2.13 **Audit has *recommended* that the Director of Health should:**
- (a) **take measures to ensure that electronic enrolment service is provided as soon as practicable;**
 - (b) **take measures to ensure that an appropriate interval is maintained between annual health assessments for students as far as practicable;**
 - (c) **record the reasons for cancelling the appointments of annual health assessments and take follow-up actions as appropriate; and**
 - (d) **review the rescheduling arrangements with a view to facilitating parents/guardians in making appointments.**

Response from the Government

2.14 The Director of Health agrees with the audit recommendations and will follow up accordingly.

Attendance of annual health assessments

2.15 Appointment letters, with information on the SHSC allocated, and the appointment date and time of the annual health assessment, are sent to enrolled students about one month before the appointment date or before the commencement of summer holiday. Parents/guardians are encouraged to accompany the students to attend the annual health assessments.

Need to monitor attendance rates of some grades

2.16 ***Attendance rates.*** Audit analysis of the attendance rates of annual health assessments in 2017/18 to 2021/22 found that the overall attendance rates for the period ranged from 30% to 70%, of which the attendance rates of secondary school students were lower than those of primary school students (see Table 6).

Table 6

**Attendance rates of annual health assessments
(2017/18 to 2021/22)**

	2017/18	2018/19	2019/20	2020/21	2021/22
<i>Number of students with appointments</i>					
Primary school (a)	345,208	356,163	196,277	44,138	151,524
Secondary school (b)	288,222	282,848	180,086	28,354	132,880
Total (c) = (a) + (b)	633,430	639,011	376,363	72,492	284,404
<i>Number of students who attended the assessments</i>					
Primary school (d)	286,039	299,814	71,256	31,698	94,204
Secondary school (e)	141,311	147,023	42,995	19,072	62,317
Total (f) = (d) + (e)	427,350	446,837	114,251	50,770	156,521
<i>Attendance rate</i>					
Primary school (g) = (d) ÷ (a) × 100%	83%	84%	36%	72%	62%
Secondary school (h) = (e) ÷ (b) × 100%	49%	52%	24%	67%	47%
Overall (i) = (f) ÷ (c) × 100%	67%	70%	30%	70%	55%

Source: Audit analysis of DH records

Remarks: According to DH, SHSCs were closed intermittently in 2019/20, 2020/21 and 2021/22 due to the outbreak of the COVID-19 epidemic. In particular, in 2020/21, while the majority of SHSCs were closed most of the time, when they were open, annual health assessments were only provided to students of several grades (e.g. Primary 1, 2 and/or Secondary 1). Hence, the appointment and attendance figures in the period were significantly lower than those in other years.

Annual health assessment

2.17 *Lower attendance rates of students of higher grades.* Audit further analysed the attendance rates of students of different grades in 2021/22 and found that:

- (a) for primary school students, while the attendance rate of Primary 1 students was 79%, the attendance rates of Primary 2 to 6 students ranged from 52% to 59%; and
- (b) for secondary school students, the attendance rates were lower for higher grades (attendance rates of Secondary 1 to 6 students were 64%, 48%, 46%, 39%, 34% and 30% respectively).

2.18 According to DH, it has taken various measures to improve the attendance rates, including:

- (a) providing school bus service (see paras. 2.21 to 2.23);
- (b) sending mobile phone short message service (SMS) messages and e-mails to parents/guardians for reminding students to attend the annual health assessments (Note 19); and
- (c) sending mobile phone SMS messages to remind parents/guardians to reschedule appointments in cases of non-attendance of the annual health assessments (see para. 2.11(b)) (Note 20).

Despite the above measures, Audit noted that the attendance rates of students of some grades were still not high, in particular for students of higher grades (see Table 6 in para. 2.16 and para. 2.17). Audit considers that DH needs to monitor the attendance

Note 19: *Mobile phone SMS messages are sent to all parents/guardians and e-mails are sent to all wSMASH users to remind students to attend the annual health assessments.*

Note 20: *DH started to send mobile phone SMS messages on 4 September 2019. Due to the outbreak of the COVID-19 epidemic, DH suspended such practice between 29 January 2020 and 31 October 2022. In the period between 4 September 2019 and 28 January 2020, DH sent messages to parents/guardians of 53,498 students and rescheduled appointments for 8,380 (16%) of them.*

rates of annual health assessments and explore further measures to improve the attendance, in particular secondary school students.

Need to improve procedures in collecting feedback on SHS

2.19 To ascertain the reasons for non-attendance of annual health assessments, DH has taken the following measures:

- (a) ***Telephone surveys conducted in 2018 and 2019.*** DH conducted telephone surveys in December 2018 and December 2019 with parents/guardians of students who had not attended the annual health assessments in August 2018 and August 2019 respectively. In both years, 288 telephone surveys were conducted (Note 21). According to the survey results, the major reasons for non-attendance were as follows:
 - (i) for the December 2018 survey, the major reasons for non-attendance were “forgot the appointment time” (58%), “not in Hong Kong on the appointment date” (15%) and “no spare time” (8%); and
 - (ii) for the December 2019 survey, the major reasons for non-attendance were “forgot the appointment time” (53%), “not in Hong Kong on the appointment date” (19%) and “appointment time crashed with other activity” (10%); and
- (b) ***Online questionnaire.*** In February 2020, DH launched an online questionnaire on the SHS website to collect feedback on SHS, including the reasons for non-attendance. Audit examination of the records of the online questionnaires of February 2020 to October 2022 found that:
 - (i) 55, 21 and 11 questionnaires were completed in 2019/20 (about nine months from February 2020 to October 2020), 2020/21 and 2021/22 respectively; and

Note 21: *According to DH, the surveys were conducted on a sample basis, 24 samples were selected from each of the 12 SHSCs at that time (the West Kowloon Government Offices SHSC commenced operation in November 2019), therefore, 288 (12 × 24) telephone surveys were conducted each year.*

- (ii) the major reasons for non-attendance were “forgot the appointment time” (21 %), “unable to change to an ideal appointment time” (19 %), “appointment time crashed with other activity” (15 %), and “no appointment letter/lost appointment letter” (13 %).

2.20 Audit noted that the online questionnaire was just put on the SHS website and no invitation for completing the questionnaire was sent to parents/guardians. As a result, only 87 (55 + 21 + 11) questionnaires were completed in three years (see para. 2.19(b)(i)). Audit considers that DH needs to take measures to improve the procedures in collecting feedback on SHS (e.g. invite parents/guardians to complete the online questionnaires), in particular the reasons for non-attendance, with a view to further improving SHS.

Need to review provision of school bus service

2.21 To facilitate students attending the annual health assessments, DH has provided free school bus service for students and their parents/guardians from schools to SHSCs since 2006. In June each year, DH invites schools to enrol in the school bus service for the next school year. Schools need to return a reply slip to DH for enrolling in the school bus service (Note 22). DH will then request further details from individual schools (e.g. the grades enrolling in the service, and the number of students and parents/guardians involved) for arranging the school bus service on the appointment dates of annual health assessments.

Note 22: *DH engaged service providers to provide the school bus service every year by quotation. The payment to the service providers was based on the number of bus trips provided with fixed prices on single trip and round trips. Audit analysis of payment records revealed that:*

- (a) *in 2017/18 and 2018/19, 5,246 and 5,198 bus trips were provided respectively. The expenditure was about \$2.55 million per year; and*
- (b) *due to the outbreak of the COVID-19 epidemic, SHSCs were closed intermittently in 2019/20, 2020/21 and 2021/22, and 1,726, 0 and 1,125 bus trips were provided to schools respectively. The expenditures in 2019/20 and 2021/22 were \$0.87 million and \$0.47 million respectively.*

2.22 Upon enquiry, DH informed Audit in February 2023 that there was no readily available information on the schools and grades enrolled in the school bus service as well as the number of students and parents/guardians involved. Based on the bus trip records and attendance records of annual health assessments in 2018/19 (Note 23), Audit found that:

- (a) students of 1,190 schools enrolled in the annual health assessments, of which 263 (22 %) schools enrolled in the school bus service; and
- (b) the average attendance rate of the 263 schools enrolled in school bus service (83 %) was generally higher than that of the 927 (1,190 less 263) schools not enrolled in the service (63 %).

2.23 While the analysis in paragraph 2.22(b) showed that the attendance rates of annual health assessments were generally higher for schools enrolled in the school bus service, the enrolment rate in such service was not high (see para. 2.22(a)). In this connection, Audit considers that DH needs to compile management information (e.g. the number of schools and grades enrolled, the number of students and parents/guardians involved and feedback from schools) for reviewing the provision of school bus service including the effectiveness, and take follow-up actions as appropriate (e.g. further promoting or improving the service).

Need to consider compiling management information on number of students accompanied by parents/guardians in annual health assessments

2.24 Parents/guardians are encouraged to accompany students to attend annual health assessments (see para. 2.15) and they can also use the free school bus service provided by DH with the students (see para. 2.21). Upon enquiry, DH informed Audit in January 2023 that:

- (a) it did not maintain statistics on the number of students accompanied by parents/guardians in their annual health assessments;

Note 23: *Audit selected the records of 2018/19 to further examine the provision of school bus service without the impact of the COVID-19 epidemic.*

Annual health assessment

- (b) as parents/guardians of Primary 2, 4 and 6 students were required to complete health assessment questionnaires of the students (see Appendix A), the number of questionnaires completed could be taken as the number of students accompanied by parents/guardians. In 2017/18 to 2021/22, the percentage of Primary 2, 4 and 6 students attending annual health assessments with parents/guardians ranged from 69% to 93%; and
- (c) from November 2022, parents/guardians could fill in the questionnaires online through wSMASH. The number of questionnaires completed could not be taken as the number of students accompanied by parents/guardians in their annual health assessments since 2022/23.

2.25 Although DH will issue reports on students' assessment results to parents/guardians, direct and two-way communications between DH staff and parents/guardians facilitate the monitoring of the students' health conditions. Audit considers that DH needs to consider compiling management information on the number of students attending the annual health assessments with parents/guardians, and explore measures to encourage and facilitate parents'/guardians' attendance as appropriate.

Audit recommendations

2.26 **Audit has *recommended* that the Director of Health should:**

- (a) **monitor the attendance rates of annual health assessments and explore further measures to improve the attendance, in particular secondary school students;**
- (b) **take measures to improve the procedures in collecting feedback on SHS (e.g. invite parents/guardians to complete the online questionnaires), in particular the reasons for non-attendance, with a view to further improving SHS;**
- (c) **compile management information (e.g. the number of schools and grades enrolled, the number of students and parents/guardians involved and feedback from schools) for reviewing the provision of**

school bus service including the effectiveness, and take follow-up actions as appropriate; and

- (d) consider compiling management information on the number of students attending the annual health assessments with parents/guardians, and explore measures to encourage and facilitate parents'/guardians' attendance as appropriate.

Response from the Government

2.27 The Director of Health agrees with the audit recommendations and will follow up accordingly.

Health assessment activities

2.28 According to DH, annual health assessments help identify students with health problems at an early stage for timely advice and intervention. Different health assessment activities are provided for students to meet their needs at various stages of development when they attend the annual health assessments (see para. 1.5(a)).

Need to provide health assessment activities as scheduled

2.29 Some health assessment activities are scheduled for students of specific grades in the annual health assessments, for example, colour vision tests are only provided to Primary 6 students and hearing tests are only provided to Primary 1 and Secondary 2 students (see Appendix A). Audit examined the provision of colour vision tests and hearing tests in 2019/20 to 2021/22 and found that 325 students had attended the annual health assessments but were not provided with the tests (see Table 7).

Table 7

**Students who attended annual health assessments
not provided with colour vision tests or hearing tests
(2019/20 to 2021/22)**

Type of test not provided	Number of students			
	2019/20	2020/21	2021/22	Total
Colour vision test in Primary 6	72	1	70	143
Hearing test in Primary 1	11	47	60	118
Hearing test in Secondary 2	34	1	29	64
Total	117	49	159	325

Source: Audit analysis of DH records

2.30 Audit further examined records of 30 of the 325 students not provided with the colour vision tests or hearing tests as scheduled and noted that:

- (a) for 11 (37%) students, the reasons for not providing the tests were not recorded (Note 24); and
- (b) for the remaining 19 (63%) students, the reasons for not providing the tests varied, for example, the students concerned had known colour vision/hearing problems and/or were followed up by specialists or follow-up appointments (see para. 2.11(a)) had been arranged.

As some health assessment activities are only for students of specific grades (e.g. colour vision tests are only provided to Primary 6 students), Audit considers that DH needs to take measures to ensure that such health assessment activities are provided to students as scheduled and justifications are documented for not doing so.

Note 24: *According to DH, make-up tests had been provided to 7 of these 11 students during subsequent annual health assessments.*

***Need to provide health assessment activities timely
for students missing activities in the preceding year***

2.31 According to DH, a student who missed a health assessment activity in a specific year is provided with the missed activity at the student's annual health assessment in the year after (i.e. make-up test). For example, if a student missed the hearing test in Primary 1 (see para. 2.29), he/she will be provided with a make-up hearing test in Primary 2. Audit examination of the relevant records revealed that no make-up colour vision tests or hearing tests were provided to 938 students in 2020/21 and 2021/22 who had missed the colour vision tests or the hearing tests in the preceding year (see Table 8).

Table 8

**Students who missed colour vision tests or hearing tests
in preceding year not provided with make-up tests in respective years
(2020/21 and 2021/22)**

Type of make-up test not provided	Number of students		
	2020/21	2021/22	Total
Colour vision test in Secondary 1	275	360	635
Hearing test in Primary 2	81	49	130
Hearing test in Secondary 3	1	172	173
Total	357	581	938

Source: Audit analysis of DH records

Remarks: The number of students who were not provided with the make-up tests in a year also included students who had not enrolled in the annual health assessments in the preceding year.

2.32 Audit noted that there was no documentation on the justifications for not providing the make-up tests. As SHSCs were closed intermittently in 2019/20 to 2021/22 due to the outbreak of the COVID-19 epidemic and annual health assessments were only provided to several grades (e.g. Primary 1, 2 and/or Secondary 1) in some periods, it was not uncommon for some students missing the health assessment activities scheduled for a specific grade. Audit considers that DH needs to take measures to ensure that make-up health assessment activities are provided timely to

students who have missed the activities in the preceding year and justifications are documented for not doing so.

Need to review arrangements for health assessment questionnaires

2.33 According to DH, the health assessment questionnaire is a screening tool which helps assess the lifestyle, physical and psychosocial health of students. The results of the health assessment questionnaires are combined with information collected during individual health counselling for giving appropriate health advice to students. Students of Primary 4 and 6, and Secondary 2, 4 and 6 are required to complete the health assessment questionnaires when they attend the annual health assessments (see Appendix A).

2.34 According to DH, to allow flexibility, individual SHSCs could decide the arrangements on the distribution of questionnaires. Audit noted that:

- (a) staff of the SHSCs might distribute the questionnaires upon students' registration or right before students attending the individual health counselling;
- (b) students might make use of the waiting time in between different health assessment activities to complete the questionnaires. There were 88 questions in the questionnaires for Primary 4 and 6 students, and 30 and 143 questions (including 1 open-ended question) in the questionnaires for Secondary 2, and Secondary 4 and 6 students respectively;
- (c) in December 2015, DH revised the health assessment questionnaires for improving the effectiveness of the questionnaires in assessing students' behaviours; and
- (d) in a DH meeting held in November 2021, concerns had been raised about the difficulties for students to complete the questionnaires within a short period of time. It was agreed that further review would be conducted as deemed necessary. As of February 2023, the review had not been conducted.

2.35 Given the large number of questions involved, students may not be given sufficient time to complete the health assessment questionnaires, in particular for younger students (see para. 2.34(b)). Audit considers that DH needs to review the arrangements for the health assessment questionnaires, including the number of questions and the time available for students to complete the questionnaires.

Audit recommendations

2.36 **Audit has *recommended* that the Director of Health should:**

- (a) **take measures to ensure that health assessment activities for students of specific grades are provided as scheduled and justifications are documented for not doing so;**
- (b) **take measures to ensure that make-up health assessment activities are provided timely to students who have missed the activities in the preceding year and justifications are documented for not doing so; and**
- (c) **review the arrangements for the health assessment questionnaires, including the number of questions and the time available for students to complete the questionnaires.**

Response from the Government

2.37 The Director of Health agrees with the audit recommendations and will follow up accordingly.

Referrals and follow-ups

2.38 Students with certain health problems identified during annual health assessments are referred for further assessments. Further assessments provided under SHS include audiological assessments, dietetic assessments, further spinal assessments, optometric assessments and psychological assessments (see para. 1.5(b)). For further assessments other than those provided under SHS and/or treatments, students are referred to clinics of DH or HA, or other institutions for follow-up (see para. 1.5(c)).

Need to follow up non-attendance cases

2.39 ***Attendance rates of further assessments provided under SHS.*** Audit analysis of the attendance rates of the further assessments provided under SHS in 2017/18 to 2021/22 revealed that the overall attendance rates of the assessments ranged from 42% to 79% and the 5-year average attendance rates of the assessments ranged from 48% to 84% (see Table 9).

Table 9

**Attendance rates of further assessments provided under SHS
(2017/18 to 2021/22)**

Further assessment	2017/18	2018/19	2019/20	2020/21	2021/22	5-year average
Audiological assessment	80%	83%	51%	90%	83%	78%
Dietetic assessment	50%	49%	32%	70%	54%	48%
Further spinal assessment	88%	91%	61%	84%	87%	84%
Optometric assessment	66%	62%	29%	75%	72%	59%
Psychological assessment	79%	81%	34%	84%	79%	68%
Overall	71%	72%	42%	79%	74%	67%

Source: Audit analysis of DH records

2.40 ***Non-attendance of dietetic assessments in consecutive years.*** Among the further assessments provided under SHS, the 5-year average attendance rate of dietetic assessments (48%) was the lowest (see Table 9 in para. 2.39). Audit's further examination of the attendance records of dietetic assessments provided in 2017/18 to 2021/22 found that:

- (a) 2,872 to 14,773 students were referred for dietetic assessments after their annual health assessments each year; and

- (b) 126 and 5 students referred for dietetic assessments had not attended the assessments for 3 and 4 consecutive years respectively.

2.41 Audit noted that students who had been referred for further assessments in a year would be followed up in their next annual health assessment regardless of whether they had attended the appointments for further assessments or not. As students' health problems might worsen over the years if they are not followed up timely, Audit considers that DH needs to take prompt follow-up actions (i.e. before the next annual health assessment) on non-attendance cases of further assessments (e.g. sending reminders to parents/guardians to reschedule appointments — see para. 2.18(c)).

Need to closely monitor waiting time for further assessments

2.42 Audit examination of the waiting time for further assessments provided under SHS in 2017/18 to 2021/22 revealed that there was no waiting time for further spinal assessments. The average waiting time for audiological assessments, dietetic assessments, optometric assessments and psychological assessments ranged from 1 to 30 weeks during the period (see Table 10).

Table 10

**Average waiting time for audiological, dietetic, optometric
and psychological assessments (Note)
(2017/18 to 2021/22)**

Further assessment	Average waiting time (Week)				
	2017/18	2018/19	2019/20	2020/21	2021/22
Audiological assessment	5	4	4	1	2
Dietetic assessment	16	13	5	5	7
Optometric assessment	24	30	17	13	4
Psychological assessment	26	24	7	1	2

Source: Audit analysis of DH records

Note: There was no waiting time for further spinal assessments in 2017/18 to 2021/22.

2.43 As shown in Table 10 in paragraph 2.42, in 2017/18 and 2018/19, the waiting time for the four further assessments provided under SHS ranged from 4 to 30 weeks, and the waiting time had generally been shortened from 2019/20. According to DH, while SHSCs have been closed intermittently since early 2020 due to the outbreak of the COVID-19 epidemic, further assessments under SHS were still provided during most of the time and as a result, the waiting time had been shortened. With the resumption of annual health assessments, the number of referrals for further assessments is expected to increase. Audit considers that DH needs to closely monitor the waiting time for the further assessments provided under SHS and take follow-up actions as appropriate (e.g. deployment of resources to meet the demand).

Need to improve follow-up of referrals to medical institutions

2.44 Students in need of further assessments (other than those provided under SHS) and/or treatments are referred to clinics of DH or HA, or other institutions for follow-up (see para. 1.5(c)). For referrals from SHS, according to SHS operation manual:

- (a) DH will provide the student concerned with a referral letter with clinical information and a reply slip with a return envelope;
- (b) the referred specialist/institution is expected to complete the reply slip with details of actions taken/planned actions (e.g. diagnosis and management plan) and return the slip to DH (by using the return envelope or other means (e.g. fax)); and
- (c) upon receipt of the reply slip, DH will record the conditions in the clinical records of the student concerned and follow up the case in the next annual health assessment.

2.45 Audit noted that DH did not have readily available information on the return rates of the reply slips of 2017/18 to 2021/22. Upon enquiry, DH informed Audit in March 2023 that:

- (a) for referrals to non-medical institutions (e.g. schools for advice from teachers or student guidance officers for academic problems — see Note 3 to para. 1.5), if the institutions concerned did not return the reply slips, DH had called the institutions to follow up the cases;

- (b) for referrals to psychiatrists of HA, since March 2021, DH has ceased to request for the reply slips (see para. 2.44(b)) and taken other measures (Note 25) as follows:
 - (i) between March 2021 and January 2023, it had sent lists of referrals to HA regularly requesting for update of the students' status and the dates of psychiatry appointments; and
 - (ii) for cases without HA psychiatry appointments reported on the lists (see (i) above), it had called the parents/guardians of the students concerned to remind them to arrange appointments with the psychiatrists and followed up the students' conditions; and
- (c) for referrals to medical institutions (other than those to psychiatrists of HA), no follow-up actions had been taken for cases without receiving the reply slips.

In Audit's view, DH needs to explore measures to follow up referrals to medical institutions (other than those to psychiatrists of HA) if the reply slips for the referred cases were not returned.

2.46 *Need to make use of new information technology system to follow up cases referred to medical institutions.* DH has been implementing a departmental-wide information technology enhancement plan. Under the plan, the Clinical Information Management System (CIMS) of DH will be enhanced and SMASH will be replaced by the enhanced system. According to DH, the enhanced CIMS will be interfaced with the Electronic Health Record Sharing System (eHRSS — Note 26) of the Health Bureau for record sharing with eHRSS with patients' consent. As of February 2023, the new system was scheduled for implementation in SHS by the end of 2024. With the new system, DH would be able to access the clinical records of students referred to other medical institutions through eHRSS with students or their parents'/guardians'

Note 25: *According to DH, with increasing awareness and emphasis on the mental well-being of students, SHS is committed to enhance the service for psychosocial health of students.*

Note 26: *eHRSS is an information infrastructure which enables registered healthcare providers to view and share the electronic health records of registered patients with the patients' consent.*

consent. Audit considers that in the long run, DH needs to explore the feasibility of using the new system to follow up cases referred from SHS to medical institutions when the enhanced CIMS is interfaced with eHRSS.

Audit recommendations

2.47 Audit has *recommended* that the Director of Health should:

- (a) take prompt follow-up actions on non-attendance cases of further assessments;**
- (b) closely monitor the waiting time for the further assessments provided under SHS and take follow-up actions as appropriate;**
- (c) explore measures to follow up referrals to medical institutions (other than those to psychiatrists of HA) if the reply slips for the referred cases were not returned; and**
- (d) in the long run, explore the feasibility of using the new system to follow up cases referred from SHS to medical institutions when the enhanced CIMS is interfaced with eHRSS.**

Response from the Government

2.48 The Director of Health agrees with the audit recommendations and will follow up accordingly. He has said that in the long run, enrolment of students into eHRSS will be built into the enrolment process for SHS and all health data captured (including issues identified requiring follow-up) should be uploaded to the students' personal eHRSS records for reference by all other healthcare providers including family doctors.

PART 3: ADOLESCENT HEALTH PROGRAMME

3.1 This PART examines the implementation of AHP, focusing on the following areas:

- (a) enrolment and participation (paras. 3.2 to 3.10);
- (b) programme delivery (paras. 3.11 to 3.22); and
- (c) on-site facilitator services provided by non-governmental organisations (NGOs) (paras. 3.23 to 3.30).

Enrolment and participation

3.2 **Background.** According to DH, AHP aims to empower adolescents to face the challenges of growing up. It is a school-based outreach programme for secondary school students, their parents and teachers (see para. 1.9). AHP comprises:

- (a) ***BLST for Secondary 1 to 3 students.*** DH offers a series of topics for schools to select for each grade. Schools are recommended to select a minimum of 6 out of 10, 6 out of 9 and 5 out of 9 topics for students of Secondary 1, 2 and 3 respectively. A participating school indicates on the enrolment form the grades to enrol and the topics selected, and DH will arrange one programme session for each topic selected; and
- (b) ***TP for secondary school students of all grades, and their parents and teachers.*** DH offers a series of topics for students, and their parents and/or teachers (Note 27). A participating school indicates on the enrolment form the topics selected and the target participants (i.e. grades of students, parents and/or teachers), and DH will arrange one programme session for each topic selected.

Note 27: *For TP, 33, 8 and 3 topics are available for students, parents only, and parents and teachers respectively.*

Adolescent Health Programme

Table 11 shows the numbers of programme sessions conducted for BLST/TP and the student attendance of the programmes in 2017/18 to 2021/22.

Table 11

**Numbers of programme sessions conducted for BLST/TP
and student attendance
(2017/18 to 2021/22)**

Year	Number of programme sessions		Number of student attendance	
	BLST	TP	BLST	TP
2017/18	1,588	509	139,766	46,688
2018/19	1,591	510	137,564	45,594
2019/20	622	243	59,586	20,915
2020/21	184	90	16,968	8,477
2021/22	327	203	29,631	19,617

Source: DH records

Remarks: According to DH, in 2019/20, 2020/21 and 2021/22, the outreach services of AHP were severely affected by the COVID-19 epidemic due to the intermittent suspension of face-to-face classes/temporary closure of schools, the half-day school arrangement, and the deployment of DH staff to assist in anti-epidemic duties. In particular, in 2020/21, the outreach services were suspended for about six months. Hence, the numbers of programme sessions conducted and the student attendance were significantly lower than those in other years.

3.3 AHP offices. The AHP coordination office is responsible for the overall planning and implementation of AHP. Four AHP regional offices, namely the Hong Kong AHP Office, the Kowloon AHP Office, the New Territories East AHP Office, and the New Territories West AHP Office, are responsible for the planning and implementation of the programme in secondary schools on Hong Kong Island, and in Kowloon, the New Territories East and the New Territories West respectively.

Need to review basis of inviting schools to participate in AHP

3.4 In May each year, DH sends letters and information about AHP (Note 28) to secondary schools inviting them to enrol in the programme in the coming school year. Audit noted that in 2017/18 to 2021/22:

- (a) on average, DH invited 314 (62%) of 506 secondary schools to enrol in AHP each year. Of these 314 schools, 305 (97%) enrolled in the programme (see Table 12); and

Table 12

**Numbers of schools invited and enrolled in AHP
(2017/18 to 2021/22)**

Year	Total number of schools (a)	Invited		Enrolled	
		Number of schools (b)	Percentage to total number of schools (c) = $\frac{(b)}{(a)} \times 100\%$	Number of schools (d)	Percentage to number of schools invited (e) = $\frac{(d)}{(b)} \times 100\%$
2017/18	506	315	62%	310	98%
2018/19	506	319	63%	307	96%
2019/20	504	313	62%	310	99%
2020/21	506	312	62%	300	96%
2021/22	508	313	62%	300	96%
Average	506	314	62%	305	97%

Source: Audit analysis of DH records

Note 28: Information sent to schools included invitation letters from SHS and the Education Bureau, AHP leaflets, programme outlines and available topics, enrolment forms, and information on the scheduling arrangement.

Adolescent Health Programme

- (b) in the 5-year period:
- (i) 334 schools had enrolled in AHP at least once. Of these schools, 268 (80%) had enrolled every year (see Table 13); and
 - (ii) of the 506 secondary schools on average (see Table 12 in (a) above), 172 (506 less 334) (34%) schools had not enrolled in AHP for at least five years.

Table 13

**Frequency of enrolment in AHP in 5-year period
from 2017/18 to 2021/22**

Frequency of enrolment	Number of schools enrolled
1	17 (5%)
2	9 (3%)
3	8 (2%)
4	32 (10%)
5	268 (80%)
Total	334 (100%)

Source: Audit analysis of DH records

3.5 Upon enquiry, DH informed Audit in December 2022 and February 2023 that:

- (a) under the current practice, each year DH would send invitation letters to schools that had previously enrolled in AHP to enrol in the programme for the coming school year;
- (b) interested schools without the invitation letters could approach DH for enrolment;

- (c) subject to the availability of manpower and resources, DH would also call other schools to engage their interest in enrolling in the programme; and
- (d) with the current manpower capacity, DH maintained the AHP service level at about 300 schools each year.

3.6 For 2017/18 to 2021/22, DH did not invite all secondary schools to enrol in AHP. Audit noted that while in the period 2017/18 to 2021/22, on average 305 (97%) of 314 schools invited had enrolled in AHP (see Table 12 in para. 3.4(a)), 172 (34%) of 506 secondary schools in Hong Kong had not enrolled in AHP for at least five years (see para. 3.4(b)(ii)). Since DH only invited schools that had previously enrolled in AHP to enrol in the programme for the coming school year, these 172 schools might not receive any invitation for participating in AHP. Audit considers that DH needs to review the basis of inviting schools to participate in AHP and take measures to ensure that AHP is provided to schools as appropriate.

Need to review programme provided to parents and teachers

3.7 TP for parents and teachers aims to enhance their knowledge on adolescents' psychosocial health and equip them with the appropriate skills to assist their children/students throughout the adolescence (see para. 1.9(b)). Schools may select topics under TP for parents and/or teachers to participate (see para. 3.2(b)). Audit examined the records of TP of 2017/18 to 2021/22 and noted that the participation of parents and teachers was on the low side (see Table 14).

Table 14

**Parents'/teachers' participation in TP
(2017/18 to 2021/22)**

Year	School enrolled in TP only (Note) (No.)	School selected topics for parents and/or teachers (No.)	Programme session provided		Parent participated (No.)	Teacher participated (No.)
			For parents (No.)	For teachers (No.)		
2017/18	193	8	8	0	220	0
2018/19	190	7	7	0	245	0
2019/20	200	6	6	0	194	0
2020/21	193	1	1	0	52	0
2021/22	217	3	2	1	85	32

Source: Audit analysis of DH records

Note: According to DH, it only maintained statistics on the number of schools enrolled in BLST or BLST with TP, and TP only. Hence, the schools enrolled in TP only were included in this analysis.

3.8 In view of the low parents'/teachers' participation in TP, Audit considers that DH needs to conduct a review of the programme, including ascertaining the reasons for the low participation, and take measures to improve the programme.

Audit recommendations

3.9 **Audit has recommended that the Director of Health should:**

- (a) **review the basis of inviting schools to participate in AHP and take measures to ensure that AHP is provided to schools as appropriate; and**

- (b) **conduct a review of the programme provided to parents and teachers under TP, including ascertaining the reasons for the low participation, and take measures to improve the programme.**

Response from the Government

3.10 The Director of Health agrees with the audit recommendations and will follow up accordingly.

Programme delivery

3.11 Enrolled schools select appropriate topics under BLST and/or TP for their participants. One programme session is arranged for each topic enrolled. DH will work with the enrolled schools to fit the programme sessions into the schools' schedules. Programmes are delivered by DH according to the agreed schedules. DH prepares bi-monthly reports on the commencement of programmes under BLST and TP for monitoring purpose. Audit analysed the bi-monthly reports of 2017/18 to 2021/22 and noted that in 2019/20 to 2021/22, scheduled programmes for some grades in some schools had not commenced (i.e. no programmes had been delivered in the whole school year) (see Table 15).

Table 15

**Commencement of programmes in schools by grades under BLST and TP
(2017/18 to 2021/22)**

Grade	Number of schools with programmes commenced / Number of schools enrolled				
	2017/18	2018/19	2019/20	2020/21	2021/22
BLST					
Secondary 1	107 / 107 (100%)	109 / 109 (100%)	94 / 101 (93%)	47 / 85 (55%)	57 / 66 (86%)
Secondary 2	79 / 79 (100%)	74 / 74 (100%)	67 / 68 (99%)	8 / 18 (44%)	11 / 12 (92%)
Secondary 3	37 / 37 (100%)	37 / 37 (100%)	26 / 31 (84%)	3 / 6 (50%)	5 / 5 (100%)
TP					
Secondary 1	99 / 99 (100%)	105 / 105 (100%)	59 / 109 (54%)	27 / 75 (36%)	54 / 84 (64%)
Secondary 2	72 / 72 (100%)	80 / 80 (100%)	36 / 80 (45%)	11 / 32 (34%)	31 / 44 (70%)
Secondary 3	87 / 87 (100%)	82 / 82 (100%)	43 / 86 (50%)	10 / 38 (26%)	23 / 35 (66%)
Secondary 4	85 / 85 (100%)	75 / 75 (100%)	26 / 76 (34%)	20 / 48 (42%)	33 / 50 (66%)
Secondary 5	62 / 62 (100%)	57 / 57 (100%)	24 / 56 (43%)	10 / 27 (37%)	29 / 35 (83%)
Secondary 6	16 / 16 (100%)	12 / 12 (100%)	11 / 14 (79%)	2 / 10 (20%)	10 / 15 (67%)

Legend:  Scheduled programmes of some schools not commenced

Source: Audit analysis of DH records

***Need to keep under review the need to adjust AHP
in light of impacts brought by COVID-19 epidemic***

3.12 As shown in Table 15 in paragraph 3.11, the numbers of enrolled schools and schools with programmes commenced in 2019/20 to 2021/22 were generally lower than those in 2017/18 and 2018/19. According to DH, in 2019/20 to 2021/22, the outreach services of AHP were severely affected by the outbreak of the COVID-19 epidemic due to the intermittent suspension of face-to-face classes/temporary closure

of schools, the half-day school arrangement, and the deployment of DH staff to assist in anti-epidemic duties. On the other hand, Audit noted that in the midst of the epidemic, due to class suspension and the lack of regular social activities, students' emotions could be easily affected. In Audit's view, with the resumption of full-day schooling for all secondary schools with effect from February 2023, DH should keep under review the need to suitably adjust AHP (e.g. programme content and schedule) taking into account the impacts brought by the COVID-19 epidemic.

Need to compile more management information on programme delivery

3.13 Audit noted that the bi-monthly reports (see para. 3.11) prepared by DH for monitoring focused on the commencement of programmes (i.e. the commencement of a topic selected by school under the programme) and the information kept in its database recorded the topics taken by schools. DH had not maintained readily available statistics on the number of topics selected by schools and the progress of delivering individual topics. Hence, the number of schools with the programmes commenced but without completing all the topics selected could not readily be ascertained. According to DH, the progress of delivering of programmes under BLST/TP in individual schools was monitored and followed up by responsible staff in AHP regional offices (see para. 3.3). The reasons for programmes not yet commenced during the year and programmes not delivered by the end of a year were reported to the senior management. While noting DH's explanations, to facilitate the monitoring and evaluation of AHP, DH needs to compile more management information on the progress of programme delivery including that on undelivered programmes.

Need to keep under review resumption of booster programme

3.14 Since 2015/16, DH has launched a pilot booster programme for students who have completed BLST for Secondary 1 to 3 and will promote to Secondary 4 in the next school year. The programme consists of interactive and adventure-type activities in a day camp setting and is provided during the summer holiday. According to DH, the objectives of the booster programme are to:

- (a) strengthen the resilience of students in junior secondary promoting to senior secondary;

- (b) strengthen the ability of students to build support networks through interactive activities and outdoor challenges; and
- (c) develop positive attitude of students to overcome challenges brought along during their development and stress brought by examinations.

3.15 In 2017/18 and 2018/19, 873 and 363 students of 12 and 5 schools had completed the programme respectively. According to DH, due to the impact of the COVID-19 epidemic, the programme has been suspended since 2019/20. Upon enquiry, DH informed Audit in December 2022 that the resumption of the booster programme would depend on the development of the COVID-19 epidemic, availability of supporting services from NGOs, DH's service capacity and students' needs. In view of the benefits of the programme (see para. 3.14) and the drop in the participation, Audit considers that DH needs to keep under review the resumption of the booster programme.

Need to provide programme materials/deliver programmes in languages other than Chinese/Cantonese as appropriate

3.16 Audit noted that all programme materials of AHP were in traditional Chinese and all programmes were delivered in Cantonese, except for sex education under TP, which could also be delivered in English (introduced since 2009 after a review) upon request. In 2017/18 to 2021/22, a total of 23 programmes on sex education under TP were delivered in English. According to DH:

- (a) there were no requests for other English programmes under AHP or programme materials from schools; and
- (b) for schools with students of varying Chinese language abilities, DH provides supplementary notes on the core messages in English and delivers the programme supplemented by English to enhance students' understanding of the programme content.

3.17 In October 2014, with reference to the review conducted in 2009 (see para. 3.16), DH further reviewed the need of providing English programmes for ethnic minority students. It was subsequently considered that English and/or simpler Chinese programmes could be an option to meet the needs of ethnic minority students

in the long run when resources were available. In this connection, Audit noted that from 2013/14 to 2021/22, the number of students in international secondary schools had increased by 2,473 (15%) from 16,088 in 2013/14 to 18,561 in 2021/22, and the number of non-Chinese speaking students in local secondary schools had increased by 2,648 (35%) from 7,576 in 2013/14 to 10,224 in 2021/22. To facilitate students with varying Chinese language abilities accessing AHP, DH needs to provide the programme materials/deliver the programmes in languages other than Chinese/Cantonese as appropriate.

Need to review practice of sharing online teaching resources

3.18 DH shares teaching resources, including programme manuals, presentation notes and worksheets for students of programmes under BLST through the AHP website. According to DH, sharing of teaching resources with schools enables:

- (a) the transfer of skills and knowledge from DH to school personnel, including teachers and school social workers, which facilitates schools to integrate the content of the programmes into the curriculum;
- (b) teachers to understand the programmes before delivery to enhance communication between teachers and DH staff for smooth programme delivery; and
- (c) access to teaching resources outside office hours.

3.19 Each year, DH provides an activation code to each enrolled school to activate an account for accessing the online teaching resources. Audit analysed the use of these online teaching resources in 2017/18 to 2021/22 (see Table 16) and found that:

- (a) the account activation rates increased from 37% in 2018/19 to 63% in 2021/22;
- (b) the number of logins and the number of schools involved decreased by 689 (78%) from 884 in 2017/18 to 195 in 2021/22, and by 76 (79%) from 96 in 2017/18 to 20 in 2021/22 respectively; and

Adolescent Health Programme

- (c) the number of items downloaded and the number of schools involved decreased by 1,618 (65%) from 2,473 in 2017/18 to 855 in 2021/22, and by 62 (76%) from 82 in 2017/18 to 20 in 2021/22 respectively.

Audit considers that DH needs to review the practice of sharing online teaching resources with schools including ascertaining the reasons for the decreasing usage, and take measures to address the issues.

Table 16

**Use of online teaching resources for BLST
(2017/18 to 2021/22)**

Year	Number of activation codes provided to schools	Number of activation codes used by schools	Login		Download	
			Number of times	Number of schools involved	Number of items	Number of schools involved
2017/18	118	N.A. (Note)	884	96	2,473	82
2018/19	119	44 (37%)	362	44 (100%)	1,416	42 (95%)
2019/20	112	50 (45%)	157	26 (52%)	814	26 (52%)
2020/21	114	54 (47%)	136	25 (46%)	876	21 (39%)
2021/22	92	58 (63%)	195	20 (34%)	855	20 (34%)

Source: Audit analysis of DH records

Note: According to DH, in 2017/18, schools were provided with the accounts for using the online teaching resources directly. From 2018/19, as a security enhancement measure, activation codes were required to activate the accounts.

Need to compile management information on feedback from participants

3.20 DH has devised an evaluation plan on collection of feedback for BLST and TP. According to the plan:

- (a) for schools participating in BLST only, each student should complete an overall evaluation form in the last BLST session of a year;
- (b) for schools participating in TP only, in general, each participant (i.e. student, parent and/or teacher) should complete a programme-specific evaluation form after each session. For programme sessions involving over 500 audiences, 20% of participants should complete the evaluation form (except for programme sessions provided by clinical psychologists, an evaluation form should be completed by each participant);
- (c) for schools participating in both BLST and TP, students will not be requested to complete any evaluation forms for TP (except for programme sessions provided by clinical psychologists, an evaluation form should be completed by each participant); and
- (d) teachers participating in a programme session under BLST/TP as observers should also complete a programme-specific evaluation form after each session. DH will conduct a debriefing meeting with teachers after each session.

According to DH, for each school, it has prepared summaries on the feedback collected from the abovementioned evaluation forms which were kept in individual school files. However, Audit noted that no overall summaries showing the feedback from participants had been prepared. Audit considers that DH needs to compile management information on feedback from participants regarding AHP to facilitate the evaluation of the programme and for continuous improvement.

Audit recommendations

3.21 **Audit has *recommended* that the Director of Health should:**

- (a) **keep under review the need to suitably adjust AHP (e.g. programme content and schedule) taking into account the impacts brought by the COVID-19 epidemic;**
- (b) **compile more management information on the progress of programme delivery of AHP including that on undelivered programmes;**

- (c) keep under review the resumption of the booster programme;
- (d) provide the programme materials/deliver programmes under AHP in languages other than Chinese/Cantonese as appropriate;
- (e) review the practice of sharing online teaching resources with schools including ascertaining the reasons for the decreasing usage, and take measures to address the issues; and
- (f) compile management information on feedback from participants regarding AHP to facilitate the evaluation of the programme and for continuous improvement.

Response from the Government

3.22 The Director of Health agrees with the audit recommendations and will follow up accordingly.

On-site facilitator services provided by non-governmental organisations

3.23 DH engages NGOs to deliver AHP collaboratively (Note 29). According to DH, the collaboration allows DH to learn from and work with social workers experienced in youth services. Each programme session under BLST/TP is delivered by two DH staff from an AHP regional office (e.g. nurses, dietitians and clinical psychologists), or one staff from an AHP regional office and a registered social worker of NGO as facilitator.

Note 29: *For 2019/20 and 2020/21, DH engaged 4 and 3 NGOs for BLST and TP respectively each year, and for 2021/22, DH engaged 3 and 2 NGOs for BLST and TP respectively. Under the contracts, NGOs are paid according to the number of programme sessions provided. In 2021/22, a total of 266 sessions were provided and the expenditure was about \$0.37 million.*

Need to step up monitoring of performance of NGOs

3.24 **Provision of facilitators.** According to the contracts signed between DH and NGOs, NGOs should provide facilitators upon request. According to DH, it usually requests an NGO to arrange a facilitator for a programme session about 3 weeks in advance. If there are changes in schools' schedules, NGOs are requested to arrange facilitators within a week. Audit examined such requests and the provision of facilitators by NGOs in 2019/20 to 2021/22 and found that NGOs could not provide the facilitators on a number of occasions (see Table 17).

Table 17

**Provision of facilitators by NGOs
(2019/20 to 2021/22)**

Programme	Number of facilitators					
	Requested	Provided	Requested	Provided	Requested	Provided
	2019/20		2020/21		2021/22	
BLST	465	401 (86%)	113	104 (92%)	211	211 (100%)
TP	96	78 (81%)	40	36 (90%)	57	55 (96%)
Overall	561	479 (85%)	153	140 (92%)	268	266 (99%)

Source: Audit analysis of DH records

3.25 According to NGOs, for the period 2019/20 and 2020/21, there were problems of staff shortage from time to time, hence, they were not able to provide facilitators requested by DH on some occasions. According to DH, when no NGO facilitators were provided, it had redeployed its staff to replace the NGO facilitators (i.e. conducting the session with two DH staff). While noting NGOs'/DH's explanations, Audit considers that DH needs to step up monitoring of NGOs' performance to ensure that facilitators are provided upon request as far as possible.

3.26 **Supervisory observations.** According to the contracts signed between DH and NGOs, NGOs should conduct observations on facilitators' performance at the early stage, for example around one month after a facilitator has commenced

Adolescent Health Programme

conducting the programme under AHP (i.e. supervisory observations). Audit examined records of supervisory observations conducted in 2019/20 to 2021/22 and found that (see Table 18):

- (a) no supervisory observations were conducted for most facilitators engaged in each year; and
- (b) for the remaining facilitators, about half of the supervisory observations were conducted more than one month (up to 10 months) after they had commenced providing services, contrary to the contract requirement.

Audit considers that DH needs to step up monitoring of NGOs' performance to ensure that supervisory observations on facilitators' performance are conducted as appropriate.

Table 18

**Supervisory observations of NGO facilitators
(2019/20 to 2021/22)**

Status	Number of facilitators		
	2019/20	2020/21	2021/22
No supervisory observation conducted	28 (85%)	23 (88%)	16 (64%)
Supervisory observation conducted within 1 month of service	2 (6%)	3 (12%)	4 (16%)
Supervisory observation conducted after 1 month of service	3 (9%)	0 (0%)	5 (20%)
Total	33 (100%)	26 (100%)	25 (100%)

Source: Audit analysis of DH records

Need to review contract requirement on training observations

3.27 ***Training observations.*** According to the contracts signed between DH and NGOs, a new facilitator could only provide services under AHP after observing AHP programme sessions for a month (i.e. training observations). Audit examined records of the training observations and found that 3 of the 5 new facilitators, and 5 of the 8 new facilitators had not attended the training observations for one month before providing the services in 2019/20 and 2021/22 respectively. According to DH, in practice, new facilitators were required to attend training observations at least once before providing the services, instead of attending training observations for a month. In this connection, Audit considers that DH needs to review the contract requirement on training observations for new facilitators upon the award of a new contract as appropriate.

Need to provide clear instructions on training requirements for facilitators

3.28 In accordance with the contract requirement, DH requests NGOs to submit summaries on the in-house training and monitoring programme provided to their facilitators every three months using a designated form. Audit noted that:

- (a) no requirement on facilitators' training (e.g. the type of training programmes and the number of training sessions to be provided in a year) was specified in the designated form; and
- (b) according to the summaries on facilitators' training submitted by NGOs for 2019/20 to 2021/22:
 - (i) various training activities had been provided, including general large-group training on conducting AHP, individual/small-group training on conducting AHP, experience sharing session and peers' class observation; and
 - (ii) the number of training sessions provided by NGOs for each of the activities mentioned in (i) above varied from 0 to 12 amongst NGOs every year.

To ensure that adequate training is provided to facilitators of the NGOs, Audit considers that DH needs to provide NGOs with clear instructions on the training requirements (e.g. the type of training programmes and the number of training sessions to be provided in a year).

Audit recommendations

3.29 Audit has *recommended* that the Director of Health should:

- (a) step up monitoring of NGOs' performance to ensure that facilitators are provided upon request as far as possible and supervisory observations on facilitators' performance are conducted as appropriate;**
- (b) review the contract requirement on training observations for new facilitators upon the award of a new contract as appropriate; and**
- (c) provide NGOs with clear instructions on the training requirements (e.g. the type of training programmes and the number of training sessions to be provided in a year).**

Response from the Government

3.30 The Director of Health agrees with the audit recommendations and will follow up accordingly.

PART 4: OTHER RELATED ISSUES

4.1 This PART examines other issues relating to the provision of SHS, focusing on the following areas:

- (a) HPSP (paras. 4.2 to 4.6);
- (b) provision of health promotion activities (paras. 4.7 to 4.11);
- (c) resumption of services of the West Kowloon Government Offices SHSC and SAC (paras. 4.12 to 4.15); and
- (d) use of wSMASH (paras. 4.16 to 4.21).

Health Promoting School Programme

4.2 ***Pilot HPSP.*** In March 2019, DH engaged 30 schools to participate in a two-year pilot HPSP from 2019/20 to 2020/21. Under the programme, DH assists participating schools to identify specific health priorities and develop tailor-made school-based health promotion action plans (see para. 1.12). Between May and July 2019, DH visited the participating schools to introduce HPSP, including the requirements and schedule of the pilot programme. It also conducted various seminars and workshops to help school personnel, parents and students understand the concept of the “health-promoting-school” framework. Due to the outbreak of the COVID-19 epidemic, the pilot HPSP was extended to 2022/23.

Areas for improvement in implementation of pilot HPSP

4.3 In implementing the pilot HPSP, DH and the participating schools collaborated and exchanged various information in order to work towards the goal of building a healthy campus. Audit noted the following issues:

- (a) ***Health profile reports not timely provided to schools.*** According to DH, health profile reports provided the schools with an overview of the health problems (e.g. overweight) and health-related behaviours (e.g. time spent

on the Internet and electronic devices) of students of the participating schools, and served as a reference to assist schools in identifying specific health priorities and developing the school-based health promotion action plans. As advised by the Working Group on Health Promoting School (see para. 1.11), school-specific health profile reports would be provided to the participating schools every year. Audit noted that DH had provided the 2017/18 health profile reports (based on health data collected from the annual health assessments of students in 2017/18) to all 30 participating schools between May and July 2019. Upon enquiry, DH informed Audit in January 2023 that due to the outbreak of the COVID-19 epidemic, there were service disruptions for annual health assessments and suspension of face-to-face classes of schools, DH did not have sufficient data and resources to prepare the health profile reports of 2018/19 to 2020/21. Hence, the reports had not been provided since 2020. With the resumption of services at SHSCs and face-to-face classes of schools, DH would provide the 2021/22 health profile reports to schools between March and April 2023;

- (b) ***Self-assessment checklists not submitted by some schools.*** DH designed a checklist to facilitate the participating schools to conduct self-assessments when the programme was launched in 2019 (i.e. baseline self-assessment) and by the end of each school year (i.e. yearly self-assessment). Schools were advised to submit the self-assessment checklists to DH to evaluate the readiness of schools as health-promoting schools and the implementation progress of HPSP. Audit noted that as of January 2023, of the 30 participating schools:
- (i) 4 (13%) schools had not submitted the baseline self-assessment checklists and all yearly self-assessment checklists for 2019/20 to 2021/22; and
 - (ii) 29 (97%), 24 (80%) and 27 (90%) schools had not submitted the yearly self-assessment checklists for 2019/20, 2020/21 and 2021/22 respectively; and
- (c) ***Recommendations provided to schools not always in written format.*** Based on the self-assessment checklists submitted by schools, DH will provide recommendations to each participating school to assist the schools to set the health priorities and implement the action plans. According to

DH, it may provide the recommendations verbally or in written format. Audit noted that:

- (i) for the school that had submitted the yearly self-assessment checklist for 2019/20 (see (b)(ii) above), DH had provided the recommendations verbally;
- (ii) for the 6 schools that had submitted the yearly self-assessment checklists for 2020/21 (see (b)(ii) above), DH had provided recommendations to 3 schools in writing and 3 schools verbally; and
- (iii) for the 3 schools that had submitted the yearly self-assessment checklists for 2021/22 (see (b)(ii) above), DH had provided the recommendations in writing.

Upon enquiry, DH informed Audit in March 2023 that it was planning to revamp HPSP. Hence, the content and approach of the programme might be different from the current mode. With the resumption of annual health assessments and face-to-face classes of schools, Audit considers that DH needs to take measures to ensure that health profile reports are provided to schools and self-assessment checklists are submitted by schools in a timely manner as appropriate in future. To better facilitate schools in setting the health priorities and implement the action plans, DH also needs to consider providing all relating recommendations in written format.

***Need to follow up findings of consultancy study
on feasibility of extending HPSP to other schools***

4.4 In October 2019, DH commissioned a consultant to conduct a study on the feasibility of further promoting and implementing HPSP in local schools (Note 30). According to the agreement signed between DH and the consultant, the study would be completed by June 2021. Due to the outbreak of the COVID-19 epidemic, the study was extended to December 2022. The study report was issued on 31 January 2023. While it was concluded that HPSP could be further promoted and implemented in local schools, a number of recommendations were made for improving the programme (e.g. setting out the HPSP policy to be implemented in all schools, and setting up of an inter-sectoral advisory body to guide the implementation

Note 30: *The consultancy fee was about \$1 million.*

of the HPSP policy). Audit considers that DH needs to follow up the findings of the study report on the feasibility of extending HPSP to other schools as soon as practicable, taking into account the results of the pilot HPSP.

Audit recommendations

4.5 Audit has *recommended* that the Director of Health should:

- (a) **take measures to ensure that health profile reports are provided to schools and self-assessment checklists are submitted by schools in a timely manner as appropriate in future;**
- (b) **to better facilitate schools in setting the health priorities and implement the action plans, consider providing all relating recommendations in written format; and**
- (c) **follow up the findings of the study report on the feasibility of extending HPSP to other schools as soon as practicable, taking into account the results of the pilot HPSP.**

Response from the Government

4.6 The Director of Health agrees with the audit recommendations and will follow up accordingly.

Provision of health promotion activities

4.7 DH conducted various health promotion activities on a regular basis, including production of health education materials (e.g. pamphlets and booklets distributed during students' visits at SHSCs, and videos put on the SHS website), and conducting various health talks and workshops.

Need to review provision of health talks and workshops

4.8 According to DH, the following health talks and workshops are provided:

- (a) ***General health talks.*** General health talks are provided to students and parents/guardians when they visit SHSCs for the annual health assessments. DH has prepared 39 general health talk topics (e.g. “healthy lifestyle”, “stress faced by teenagers” and “mental health in adolescents”). It will select an appropriate topic according to the needs of audiences attending the annual health assessments at the time (e.g. grades and stage of development of students) for conducting the talk;
- (b) ***Special health talks.*** Special health talks are provided by nurses and allied health staff (i.e. audiologists, clinical psychologists, dietitians and optometrists). Students identified with the related needs during their annual health assessments will be advised to attend special health talks held on scheduled dates at SHSCs. According to DH, any students interested in the special health talks held on the dates of their visits to SHSCs can also join the talks;
- (c) ***Outreach health talks.*** Outreach health talks on “Diet and Health” are provided to 100 primary schools and 50 secondary schools with a high percentage of students attending the annual health assessments and a high detection rate for overweight to disseminate the messages on the importance of healthy eating and active participation of physical activities; and
- (d) ***“Junior Health Pioneer” workshops.*** The “Junior Health Pioneer” workshop is designed for Primary 3 students. The workshop aims at increasing students’ knowledge on the harmful effects of addictive behaviours (e.g. smoking, drinking, drug abuse and excessive use of electronic devices) and the ways to refuse and control them.

4.9 ***Areas for improvement in provision of health talks and workshops.*** Audit noted the following issues:

- (a) ***Need to review provision of special health talks.*** The target numbers of special health talks to be provided by nurses for general problems, dietitians for growth problems, clinical psychologists for psychological problems,

optometrists for visual problems, and audiologists for hearing problems in 2017/18 were 144, 12, 6, 6 and 2 respectively (Note 31). According to DH:

- (i) due to redeployment of resources, from 2018/19, the target numbers of special health talks to be provided per year by nurses, clinical psychologists, dietitians and optometrists have been reduced to 84, 4, 4 and 4 respectively. The target number of special health talks to be provided by audiologists has remained at 2 (Note 32);
- (ii) due to the outbreak of the COVID-19, the provision of special health talks by the allied health staff has been suspended since November 2019, and the provision of special health talks by nurses has been suspended since January 2020; and
- (iii) in 2017/18, 2018/19 and 2019/20, 287, 100 and 17 special health talks were conducted for 1,791 (i.e. 6 participants per talk), 961 (i.e. 10 participants per talk) and 138 (i.e. 8 participants per talk) participants respectively.

Audit noted that from 2017/18 to 2018/19, the number of students with health problems identified (Note 33) in vision, growth and psychological health slightly increased by 2.2% (from 151,256 to 154,547), 6.7% (from 132,996 to 141,869) and 3.4% (from 13,600 to 14,066) respectively. In addition, according to an analysis conducted in September 2021 by DH on the health status of children and adolescents in Hong Kong amid the COVID-19 epidemic, the detection rates of overweight and obesity (for Primary 1 and 2, and Secondary 1 students) and visual problems (for

Note 31: *The target numbers of special health talks provided were all met in 2017/18.*

Note 32: *The target numbers of special health talks provided were all met in 2018/19.*

Note 33: *One or more health problems might be identified for students attending the annual health assessments, 355,647 and 371,362 health problems were identified for 427,350 and 446,837 students attended the annual health assessments in 2017/18 and 2018/19 respectively.*

Primary 1 students) had increased (Note 34). In light of the latest development, Audit considers that DH needs to review the provision of special health talks, taking into account the needs of students, attendance rates and participants' feedback on the services (see (c) below);

(b) ***Need to review provision of outreach health talks.*** Audit examination of the number of outreach health talks provided in 2017/18 to 2019/20 (Note 35) revealed the following issues:

- (i) although DH had a target of providing outreach health talks to 100 primary schools, the talks were only provided to 38 (38%), 34 (34%) and 32 (32%) primary schools in 2017/18, 2018/19 and 2019/20 respectively. According to DH, about 60% of the invited schools rejected the invitations and about 2% of schools cancelled the talks scheduled due to various reasons (e.g. outbreak of influenza) each year; and
- (ii) similarly, DH had a target of providing outreach health talks to 50 secondary schools. However, it only contacted 41 and 38 secondary schools in 2017/18 and 2018/19 for providing the talks respectively and did not contact any schools in 2019/20. Of the schools contacted, the talks were only provided to 9 schools each year (22% of the 41 schools in 2017/18 and 24% of the 38 schools in 2018/19). According to DH, the remaining schools (78% of the 41 schools in 2017/18 and 76% of the 38 schools in 2018/19) rejected the invitations.

Note 34: *According to the analysis:*

- (a) *for Primary 1 and 2 students, and Secondary 1 students attending the annual health assessments, the detection rates of overweight and obesity increased from 12.9% in 2018/19 to 20.2% in 2020/21, and increased from 20.9% to 24.1% in the period respectively; and*
- (b) *for Primary 1 and Secondary 1 students attending the annual health assessments, the percentage of students wearing glasses increased from 11% in 2018/19 to 14% in 2020/21, and decreased from 55% to 53% in the period respectively.*

Note 35: *Due to the outbreak of the COVID-19 epidemic, outreach health talks for primary schools and secondary schools have been suspended since January 2020.*

DH had failed to meet the targets set on outreach health talks to schools and the rejection rates for such service were high. In this connection, Audit considers that DH needs to review the provision of outreach health talks, taking into account the attendance rates, participants' feedback on the services (see (c) below) and the reasons for rejecting the services; and

- (c) *Need to obtain feedback from participants of all health talks and workshops.* Audit noted that while participants of special health talks were requested to provide feedback on the talks by completing feedback questionnaires (Note 36), DH had not requested participants of other health talks and workshops to provide feedback. Audit considers that DH needs to collect feedback from participants of all health talks and workshops to evaluate the level of satisfaction and identify room for improvement.

Audit recommendations

4.10 **Audit has recommended that the Director of Health should:**

- (a) **review the provision of special health talks, taking into account the needs of students, attendance rates and participants' feedback on the services;**
- (b) **review the provision of outreach health talks, taking into account the attendance rates, participants' feedback on the services and the reasons for rejecting the services; and**
- (c) **collect feedback from participants of all health talks and workshops to evaluate the level of satisfaction and identify room for improvement.**

Response from the Government

4.11 The Director of Health agrees with the audit recommendations and will follow up accordingly.

Note 36: *According to the results of the feedback questionnaires collected in 2018 and 2019, feedback from participants of the special health talks were generally satisfactory.*

Resumption of services of the West Kowloon Government Offices Student Health Service Centre and Special Assessment Centre

4.12 The West Kowloon Government Offices SHSC and SAC commenced operation in November 2019. According to DH, the SHSC and SAC were developed to strengthen service provision in Kowloon. Due to the outbreak of the COVID-19 epidemic, in late January 2020, services of the SHSC and SAC were suspended. Between March 2020 and May 2022, the West Kowloon Government Offices SHSC and SAC were converted temporarily into a DH call centre/office for handling matters relating to COVID-19 (e.g. answering public enquires and contact tracing for COVID-19 confirmed cases). In June 2022, the DH call centre/office ceased operation. According to DH, the premises concerned would be put on standby until October 2023.

4.13 Meanwhile, cases of annual health assessments and further assessments of the West Kowloon Government Offices SHSC and SAC have been transferred to other SHSCs and another SAC (Note 37). Audit noted that:

- (a) DH planned to resume services at the West Kowloon Government Offices SHSC and SAC in November 2023. Fitting-out works were required before resumption of services (see Photographs 1(a) and (b) for the conditions of the centres as of January 2023) and DH planned to commence the works in June/July 2023; and

Note 37: *With the suspension of services in the West Kowloon Government Offices SHSC and SAC, students from West Kowloon have to go to the SHSCs in Lam Tin, Kowloon Bay, Kowloon City or Tsz Wan Shan for annual health assessments (see Table 1 in para. 1.5(a)), and to the Lam Tin SAC for further assessments (see Table 2 in para. 1.5(b)).*

Photographs 1(a) and (b)

Conditions of the West Kowloon Government Offices SHSC and SAC (January 2023)

(a)



(b)



Source: DH records

- (b) during the period of closure of the SHSC and SAC, staff had been deployed to assist in anti-epidemic duties of DH or to other SHSCs and SACs. According to DH, administrative and supporting staff would return to the SHSC and SAC in September 2023 for the final preparation work for service resumption, and other medical staff (i.e. doctors, nurses and allied health staff) would return to the centres in October 2023.

To ensure the resumption of services at the West Kowloon Government Offices SHSC and SAC in November 2023, DH needs to closely monitor the progress of the fitting-out works.

Audit recommendation

4.14 Audit has *recommended* that the Director of Health should closely monitor the progress of the fitting-out works to ensure the resumption of services at the West Kowloon Government Offices SHSC and SAC in November 2023.

Response from the Government

4.15 The Director of Health agrees with the audit recommendation. He has said that:

- (a) the fitting-out works of the West Kowloon Government Offices SHSC and SAC commenced on 20 March 2023; and
- (b) DH will work closely with the relevant works department and closely monitor the progress of the fitting-out works to ensure that the centres can resume services in November 2023.

Use of the Internet Service for the System for Managing the Assessment of Student Health

4.16 wSMASH was developed by DH to facilitate parents/guardians to make enquiries and reschedule appointments (see para. 2.12), view findings of annual health assessments and recommendations, and fill in the health assessment questionnaires of students (see para. 2.24(c)). E-mails are sent to wSMASH users to remind them of the annual health assessment appointments (see para. 2.18(b)).

4.17 ***Low usage of wSMASH.*** Audit examined the usage of wSMASH and noted that:

- (a) as of October 2022, there were 129,414 active wSMASH user accounts (Note 38), representing about 22% of 575,580 average number of students enrolled in annual health assessments per year from 2017/18 to 2021/22;
- (b) the number of active wSMASH user accounts decreased by 57,484 (31%) from 186,898 as of October 2018 to 129,414 as of October 2022;
- (c) the number of newly registered wSMASH user accounts decreased by 6,839 (45%) from 15,165 in 2017/18 to 8,326 in 2021/22; and

Note 38: *According to DH, a wSMASH user account is considered inactive if the student concerned has not enrolled in annual health assessments for three consecutive years after registering the account.*

Other related issues

- (d) between November and December 2022, of the 14,341 Primary 2, 4 and 6 students attending the annual health assessments, parents/guardians of only 191 (1.3%) students filled in the health assessment questionnaires about the students through wSMASH (see para. 2.24(c)).

4.18 ***Replacement of wSMASH.*** According to DH, SMASH (including wSMASH) will be replaced by the enhanced CIMS under the departmental-wide information technology enhancement plan (see para. 2.46). Among other features, the enhanced system will provide more online services, such as electronic enrolment and one-stop portal for appointment scheduling. As of February 2023, the new system was scheduled for implementation by the end of 2024.

4.19 Audit considers that DH needs to take into account the audit findings and recommendations (e.g. electronic enrolment in paragraph 2.4 and rescheduling arrangements in paragraph 2.12) in this Audit Report in developing and promoting the online services under the new system for replacing wSMASH, and take measures to ensure that the new system is timely implemented.

Audit recommendation

4.20 Audit has *recommended* that the Director of Health should take into account the audit findings and recommendations in this Audit Report in developing and promoting the online services under the new system for replacing wSMASH, and take measures to ensure that the new system is timely implemented.

Response from the Government

4.21 The Director of Health agrees with the audit recommendation and will follow up accordingly.

**Major health assessment activities provided
in Student Health Service Centres
(July 2022)**

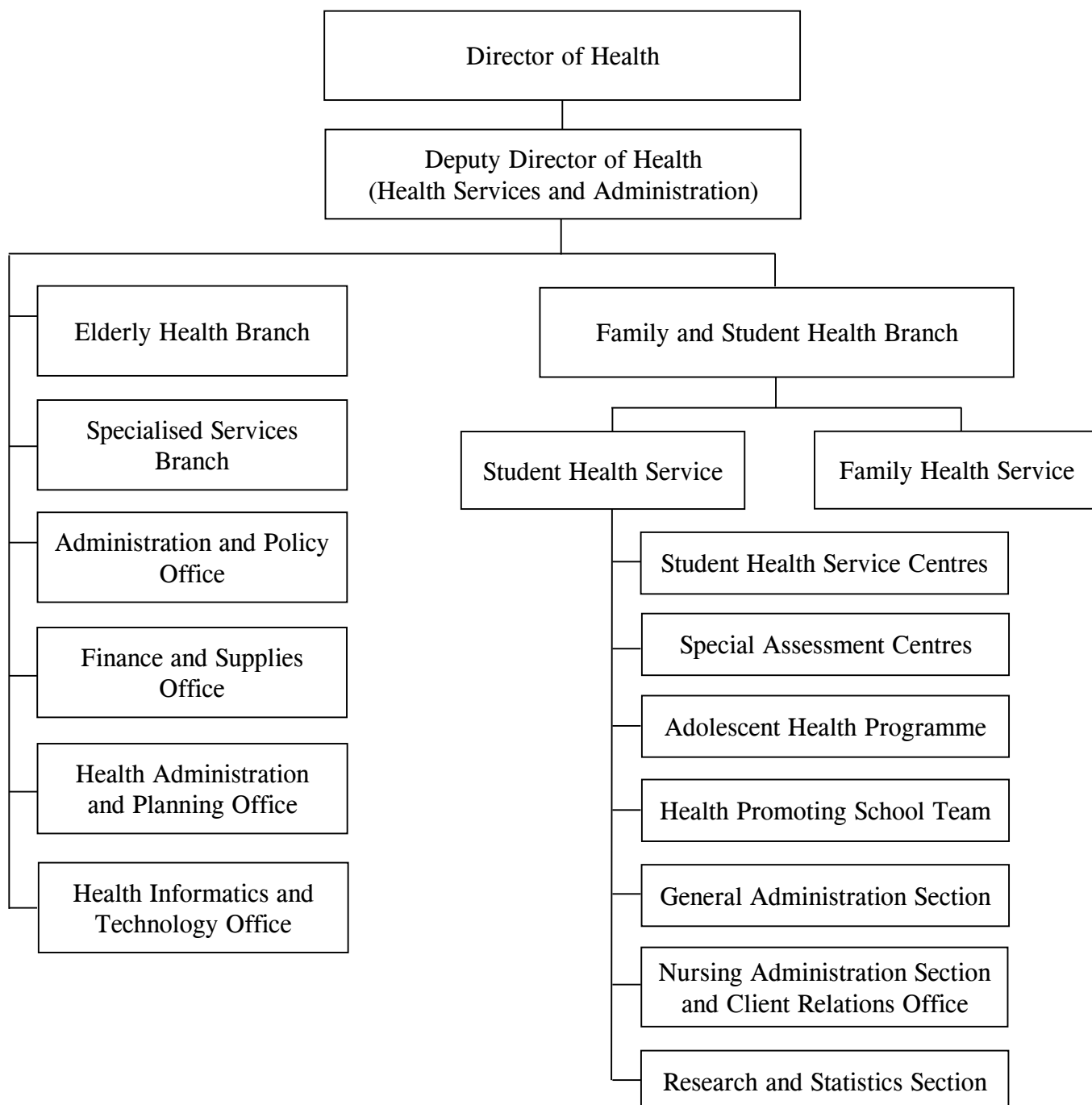
Health assessment activity (Note 1)	Grade
Body weight and height measurement	All grades
Blood pressure measurement	Primary 5, and Secondary 1, 3 and 5
Visual acuity test	All grades
Stereopsis test	Primary 1
Colour vision test	Primary 6
Hearing test	Primary 1 and Secondary 2 (Note 2)
Checking of immunisation status	Secondary 1 to 6
History taking	All grades
Physical examination	Primary 1 and 5, and Secondary 1, 3 and 5 (Note 2)
Spinal assessment	Primary 5, and Secondary 1 and 3 (Note 2)
Health assessment questionnaire (student)	Primary 4 and 6, and Secondary 2, 4 and 6
Health assessment questionnaire (parent/guardian)	Primary 2, 4 and 6
Individual health counselling	All grades
Group health talk	All grades
Child Health Record updating	All grades

Source: DH records

Note 1: According to DH, the health assessment activities may be adjusted from time to time.

Note 2: The health assessment activity may be provided to students of other grades as appropriate.

**Department of Health:
Organisation chart (extract)
(31 October 2022)**



Source: DH records

Remarks: Only the branches/offices responsible for the service area of the Health Services and Administration are shown.

Acronyms and abbreviations

AHP	Adolescent Health Programme
Audit	Audit Commission
BLST	Basic Life Skills Training
CIMS	Clinical Information Management System
DH	Department of Health
eHRSS	Electronic Health Record Sharing System
HA	Hospital Authority
HPSP	Health Promoting School Programme
NGO	Non-governmental organisation
SAC	Special Assessment Centre
SDCS	School Dental Care Service
SHS	Student Health Service
SHSC	Student Health Service Centre
SMASH	System for Managing the Assessment of Student Health
SMS	Short message service
TP	Topical Programme
wSMASH	Internet Service for the System for Managing the Assessment of Student Health