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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. 64 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,

David Sun

CONTENTS

The Director of Audit's Report No. 64 contains the following chapters:

Cnapter	Subject			
1	Building Department's actions on unauthorised building wor			
2	Operation of the Government Flying Service			
3	Public cooked food markets managed by the Food and Environmental Hygiene Department			
4	Management of water supply and demand			
5	Hong Kong Sports Institute Limited			
6	Employees' compensation for injuries and fatalities			
7	Education Bureau Kowloon Tong Education Services Centre			
8	Rehabilitation services provided by the Correctional Services Department			

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

Development Bureau Buildings Department

Buildings Department's actions on unauthorised building works

Audit Commission Hong Kong 1 April 2015 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. 64 of the Director of Audit contains 8 Chapters which are available on our website at http://www.aud.gov.hk

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BUILDINGS DEPARTMENT'S ACTIONS ON UNAUTHORISED BUILDING WORKS

Contents

	Paragraph
EXECUTIVE SUMMARY	
PART 1: INTRODUCTION	1.1 - 1.10
Audit review	1.11 - 1.12
Acknowledgement	1.13
PART 2: IMPLEMENTATION OF GOVERNMENT POLICIES ON UNAUTHORISED BUILDING WORKS	2.1
Government policies on UBWs	2.2 - 2.22
Audit recommendations	2.23
Response from the Government	2.24
Minor Works Control System	2.25 - 2.32
Audit recommendations	2.33
Response from the Government	2.34
PART 3: HANDLING OF PUBLIC REPORTS	3.1
Handling of UBW public reports	3.2 - 3.21
Audit recommendations	3.22
Response from the Government	3.23

	Paragraph
PART 4: ACTIONS THROUGH LARGE-SCALE OPERATIONS	4.1
Background	4.2
LSOs on rooftop-podium-lane UBWs	4.3 - 4.15
Audit recommendations	4.16
Response from the Government	4.17
LSOs on sub-divided flats	4.18 - 4.30
Audit recommendation	4.31
Response from the Government	4.32
PART 5: FOLLOW-UP ACTIONS ON REMOVAL ORDERS	5.1
Administration of removal orders	5.2 - 5.19
Audit recommendations	5.20
Response from the Government	5.21
Prosecution actions on non-compliant removal orders	5.22 - 5.30
Audit recommendations	5.31
Response from the Government	5.32
Default works carried out by BD contractors	5.33 - 5.37
Audit recommendations	5.38
Response from the Government	5.39
Actions to recover costs of default works	5.40 - 5.45
Audit recommendations	5.46
Response from the Government	5.47

	Paragraph
PART 6: SYSTEM FOR SUPPORTING ENFORCEMENT ACTIONS	6.1
Building Condition Information System	6.2 - 6.16
Audit recommendations	6.17
Response from the Government	6.18
PART 7: WAY FORWARD	7.1
Policies and enforcement actions on UBWs	7.2
Major areas for improvement	7.3 - 7.5
Way forward	7.6 - 7.11
Audit recommendation	7.12
Response from the Government	7.13

Appendices		Page
A:	Buildings Department: Organisation chart (extract) (31 October 2014)	87
B :	Suspected UBWs identified in 2011 stock-taking exercise	88
C :	Time targets on handling public reports	89
D:	Acronyms and abbreviations	90



BUILDINGS DEPARTMENT'S ACTIONS ON UNAUTHORISED BUILDING WORKS

Executive Summary

- 1. With the exception of minor works carried out under the Buildings Department (BD)'s Minor Works Control System and exempted works, building works without the BD's approval and consent are unauthorised building works (UBWs). UBWs may pose structural and fire-safety risks to building users and members of the public. They may also cause hygiene problems and environmental nuisance. As of October 2014, 732 staff of three divisions and one section of the BD were responsible for UBW and building safety/maintenance work. The BD identifies UBWs mainly through related reports from the public and the media, and referrals from other Government departments (known as UBW public reports), and clearance operations conducted on target buildings or a group of buildings (known as large-scale operations LSOs).
- 2. Since 1975, with a view to removing risk to public safety and curbing UBWs within the resources available, the Government has adopted a policy under which enforcement actions would be taken on certain types of UBWs (known as "actionable UBWs") and those on the remaining UBWs would be deferred (known as "non-actionable UBWs"). For an actionable UBW, the BD may issue a removal order requiring the owner concerned to remove the UBW within a specified period (normally 60 days) and register the order at the Land Registry (LR). If the required rectification works have not been carried out within the specified period stated under the removal order, the BD may carry out or cause to be carried out the removal works, or instigate prosecution actions against the building owners. For a non-actionable UBW, the BD may issue a warning notice notifying the owner concerned to remove the UBW, and the notice shall be registered at the LR if the owner has not complied with it within the specified period.
- 3. From 2001 to 2014, the number of public reports had almost tripled from 13,817 to 41,146. In the light of the increasing public concerns over the UBW problem, the Audit Commission (Audit) has recently conducted a review of the BD's actions on UBWs.

Implementation of Government policies on unauthorised building works

- 4. Under the UBW policy adopted by the Government in 2001, there were seven types of actionable UBWs, namely (a) UBWs constituting obvious or imminent danger to life or property; (b) new UBWs; (c) UBWs erected in or on buildings, on rooftops and podiums, and in yards and lanes constituting a serious hazard or a serious environmental nuisance; (d) major individual UBWs; (e) UBWs erected in or on individual buildings having extensive UBWs; (f) UBWs identified in buildings or groups of buildings targeted for LSOs or maintenance programmes; and (g) unauthorised alterations to or works in environmentally friendly features of a building for which exemption from calculation of gross floor area has been granted (paras. 2.3 and 2.4).
- 5. With effect from April 2011, the seven types of actionable UBWs have been expanded to include all UBWs erected on rooftops and podiums, and in yards and lanes of buildings even where these UBWs do not pose a serious hazard or environmental nuisance (known as rooftop-podium-lane UBWs) (para. 2.6).
- 6. A total of 405,261 UBWs had been removed from 2001 to 2010 (on average 40,526 UBWs removed a year) and 69,298 UBWs from 2011 to 2014 (on average 17,325 UBWs removed a year). In a stock-taking exercise conducted by the BD from May 2011 to December 2012, BD consultants found some 2,290,000 suspected UBWs, comprising 1,870,000 household minor works, 120,000 signboards and 300,000 other UBWs (paras. 2.9 to 2.11).
- Number of actionable UBWs for planning enforcement actions not known. Notwithstanding that the Government has adopted a policy under which enforcement actions would be taken on actionable UBWs and such actions on non-actionable UBWs would be deferred, the BD has not taken action to ascertain the total number of actionable UBWs in existence, which might have adversely affected the BD's planning for enforcement actions on actionable UBWs. In this connection, the stock-taking exercise conducted in 2011 and 2012 did not categorise the 2,290,000 suspected UBWs found into actionable and non-actionable UBWs. Furthermore, the BD has not provided in its Controlling Officer's Reports a breakdown of the number of UBWs removed during a year into actionable and non-actionable ones, which might not be conducive to enhancing public

accountability and transparency of the BD's effectiveness in tackling the UBW problem (paras. 2.14 and 2.17).

8. *Illegal rooftop structures on 33 single-staircase buildings not yet removed.* Rooftop is the fire refuge area for residents, and illegal rooftop structures, especially those erected on single-staircase buildings, would obstruct the fire escape route and pose serious fire-safety risk to the occupants. In April 2001, the Development Bureau (DEVB) informed the Legislative Council (LegCo) that the BD would clear all 12,000 illegal rooftop structures on the 4,500 single-staircase buildings by 2007. However, Audit noted that, as of January 2015, illegal rooftop structures erected on 33 single-staircase buildings had not yet been removed (para. 2.22).

Handling of public reports

- 9. Long time taken in issuing removal orders on actionable UBWs. According to BD guidelines, BD officers should issue a removal order on a confirmed actionable UBW (other than a rooftop-podium-lane UBW) within 180 days after conducting an inspection. However, Audit examination revealed that, as of October 2014, the BD had not issued removal orders on UBWs relating to 4,522 public reports where BD inspections had been conducted for more than six months to five years (paras. 3.4 and 3.5).
- 10. Long time taken in issuing removal orders on rooftop-podium-lane UBWs. Audit examination revealed that, as of October 2014, of the 25,313 public reports on rooftop-podium-lane UBWs (see para. 5) received from April 2011 to October 2014, only 3,357 (13%) of such public reports had been dealt with (such as by issuing removal orders, placing related buildings in target building lists for conducting LSOs, or the UBWs had been voluntarily removed by the owners). Of the remaining 21,956 (25,313 less 3,357) public reports, as of October 2014, 17,862 (81%) reports had been awaiting enforcement actions for 10 months to 3.5 years (para. 3.12).
- 11. Long time taken in registering warning notices at LR. Under the Buildings Ordinance (Cap. 123), the BD shall cause a non-compliant warning notice to be registered at the LR. According to the BD, it would refer a non-compliant warning notice to the LR for registration within four months from the date of

issuance. However, Audit examination revealed that, as of October 2014, 147 non-compliant warning notices, which had been issued for more than 4 months to 9 years, had not been referred to the LR for registration. Audit also noted that, as of October 2014, 985 non-compliant warning notices referred back from the LR (such as notices having incorrect information) had not been forwarded again to the LR for registration (paras. 3.16 to 3.18).

Actions through large-scale operations

- 12. According to the DEVB, LSOs are more effective than handling individual public reports separately as more actionable UBWs would be cleared in one go. For each LSO on a type of UBWs, the BD specifies a number of target buildings for taking action (para. 4.2).
- 13. Significant slippages in completing LSOs on rooftop-podium-lane UBWs. From 2010 to 2014, the BD had conducted 6 LSOs on rooftop-podium-lane UBWs covering a total of 2,337 target buildings. Of the 6 LSOs, 1 was carried out by BD in-house officers and 5 by engaging 39 consultancies at a total cost of \$35.6 million. Notwithstanding that 4 of the 6 LSOs were targeted for completion from July 2011 to January 2014, as of October 2014, actions on all the buildings covered under 2 LSOs, and on more than half of the buildings covered under each of the remaining 2 LSOs, had not been completed (paras. 4.3 to 4.6).
- 14. Payments prematurely made to consultants before completion of work. According to BD consultancy agreement, upon satisfactory completion of work, the BD shall issue a completion letter and make the final payment. However, Audit examination revealed that the BD had made final payments to two consultancies before satisfactory completion of all work and issuance of completion letters (paras. 4.11 and 4.13).
- 15. Significant slippages in completing LSOs on sub-divided flats (SDFs). The Transport and Housing Bureau informed LegCo in December 2014 that the BD would continue to step up efforts to eradicate sub-divided units in industrial buildings and take enforcement actions against building and fire-safety irregularities of sub-divided units in residential and composite buildings. From 2011 to 2014, the BD had conducted 7 LSOs on SDFs covering a total of 1,092 target buildings. Of the 7 LSOs, 5 were conducted by BD in-house officers and 2 by engaging

10 consultancies at a total cost of \$12.4 million. Notwithstanding that 4 of the 7 LSOs were targeted for completion from January 2012 to June 2014, as of October 2014, actions on more than half of the buildings covered under each of the 4 LSOs (all conducted by BD in-house officers) had not been completed (paras. 4.20 to 4.22 and 4.27).

Follow-up actions on removal orders

- 16. Removal orders not yet registered at LR. According to the DEVB and the BD, registration of UBW information at the LR would enhance consumer protection on prospective property buyers, who will become aware of the existence of UBWs in the related premises through conducting a land search at the LR. In this connection, a legal professional association had expressed its views to the LR that some removal orders had not been sent to the LR for registration. In April 2014, the DEVB informed LegCo that the BD did not keep statistics on the number of removal orders registered at the LR. In February 2015, Audit sample check of 30 removal orders issued in May 2013 revealed that 4 had not been registered at the LR. Audit noted that the BD did not keep records in its computer system on the majority of removal orders registered at the LR. Audit also noted that, of the 2,654 removal orders having records in the BD's computer system, 80% had been sent to the LR for registration more than one month to 8 years after their issuance (paras. 5.3 to 5.6 and 5.10).
- 17. Targets on clearing removal orders not met. The BD had set targets of clearing all removal orders issued in 2004 by March 2008, in 2005 by March 2009, in 2006 by March 2010, in 2007 by March 2011, in 2008 by March 2013 and in 2009 by March 2014. However, as of December 2014, 1% to 25% of the removal orders issued each year from 2004 to 2009 had not been cleared (para. 5.14).

System for supporting enforcement actions

18. *Important information not provided by BD computer system*. In 2002, the BD implemented a Building Condition Information System (BCIS) for recording, processing and retrieving details of complaints, referrals, planned surveys, statutory orders, works orders and consultancy assignments. However, Audit noted that some important information had not been input into or could not be provided by the BCIS (paras. 6.2 and 6.7).

Way forward

- 19. Audit noted that, as of October 2014, there were 68,134 outstanding removal orders, of which 21% had been outstanding for more than 6 years to 10 years and 1% for more than 10 years to 30 years. Furthermore, the BD has yet to ascertain the number of actionable UBWs in existence on which removal orders have not been issued. Given that owners of a large number of UBWs have not taken UBW removal actions after registration of the removal orders at the LR, the title-encumbrance arrangement alone may not be sufficiently effective in inducing these owners to remove their UBWs (paras. 7.7 and 7.8).
- 20. According to the BD, prosecution actions are effective means to clear UBWs and it has set estimates of issuing 2,500 to 3,300 summonses a year on outstanding removal orders. Accordingly, for the outstanding removal orders, the BD would take a long time to issue summonses to all related owners (para. 7.10).

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 Buildings should:
 - (a) take actions to clear all illegal rooftop structures erected on single-staircase buildings as soon as possible (para. 2.23(c));
 - (b) strengthen actions with a view to ensuring that removal orders are issued within BD time targets (para. 3.22(a));
 - (c) formulate an action plan with timeframe for issuing removal orders on rooftop-podium-lane UBWs (para. 3.22(c));
 - (d) take measures to ensure that all non-compliant warning notices are promptly referred to the LR for registration, and take prompt follow-up action on warning notices referred back from the LR (para. 3.22(d) and (e));

- (e) strengthen actions with a view to ensuring that LSOs are completed by the target completion dates (para. 4.16(b));
- (f) take measures to prevent making the final payment to consultants before satisfactory completion of all work (para. 4.16(d));
- (g) conduct a review of the outstanding removal orders to identify those that have not been registered at the LR and take remedial actions as soon as possible (para. 5.20(a));
- (h) strengthen actions with a view to meeting BD time targets on clearing outstanding removal orders issued in each of the previous years (para. 5.20(e));
- (i) in implementing the BCIS revamping project, take measures to provide functions in the system for monitoring the progress of actions taken on LSOs and outstanding removal orders (para. 6.17(a)); and
- (j) explore other effective means to induce the owners to remove their UBWs after issuing removal orders to them (para. 7.12).

Response from the Government

22. The Secretary for Development and the Director of Buildings 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.

Buildings Ordinance

- 1.2 Under the Buildings Ordinance (Cap. 123), all building works, with the exception of minor works and exempted works (Note 1), require prior approval and consent of the Buildings Department (BD Note 2) before such works may commence. Building works (other than minor works and exempted works) without such approval and consent are unauthorised building works (UBWs) which are subject to enforcement actions by the BD. UBWs may pose structural and fire-safety risks to building users and members of the public. They may also cause hygiene problems and environmental nuisance.
- 1.3 When a UBW is identified, the BD may take the following enforcement actions:
 - (a) issuing a removal order requiring the owner of identified UBWs to remove such works within a specified period, and registering the removal order at the Land Registry (LR) (sections 24 and 24AA of the Buildings Ordinance);
- Note 1: Minor works are additions or alterations to buildings carried out under the Minor Works Control System implemented since December 2010 (see para. 2.25). Examples include erection of drying racks and supporting structures for air-conditioners. Exempted works are building works in a building not affecting the building structures such as removal of non-structural partition walls.
- Note 2: Under the Buildings Ordinance, the authority to approve a building plan and give consent to commence building works is vested in the Building Authority, who is the Director of Buildings. For simplicity, the Building Authority is referred to as the BD in this Audit Report.

- (b) carrying out or causing to be carried out the removal works or instigating prosecution action against building owners if the required rectification works have not been carried out within the specified period stated under a removal order (sections 24(3), 24AA(7) and 40 of the Buildings Ordinance);
- (c) issuing a warning notice notifying the owner of identified UBWs to remove such works within a specified period. The BD shall register the warning notice at the LR if the owner has not complied with the notice within the specified period (section 24C of the Buildings Ordinance); and
- (d) for UBWs constituting a public nuisance or an imminent danger to life or property, applying for a court order for expeditious demolition or rectification of the UBWs (section 24B of the Buildings Ordinance).

Government policies on UBWs

1.4 Since 1975, the Government has adopted a policy under which enforcement actions would be taken on certain types of UBWs and those on the remaining UBWs would be deferred. The BD has used the terms "actionable UBWs" and "non-actionable UBWs" to refer to the former and latter types of UBWs respectively. The aim was to remove risks to public safety and to curb UBWs within the resources available. Over the years, the BD has taken various initiatives to tackle the UBW problem.

Minor Works Control System

Regulation (Cap. 123N), building owners are allowed to carry out designated minor works by adopting simplified procedures without obtaining prior BD approval and consent. Under the BD's self-regulatory Minor Works Control System (MWCS), the above mentioned minor works (such as installing drying racks) can be carried out by registered contractors without prior approval of the BD. These contractors have to notify the BD and submit records and certification of completion of works to the BD. Under the MWCS, the BD has introduced validation schemes, namely Household Minor Works Validation Scheme (see para. 2.30) and Validation Scheme for Unauthorised Signboards (see para. 2.15), to facilitate the public to retain certain kinds of UBWs after their validation. The BD will not take enforcement action against the validated UBWs unless their safety conditions change.

Identification and classification of UBWs

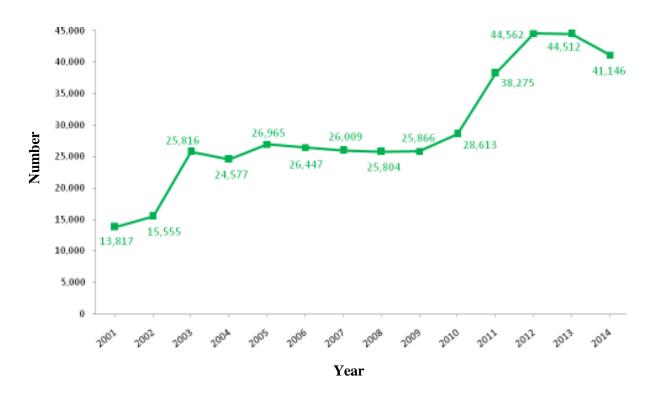
- 1.6 The BD identifies UBWs mainly from the following sources:
 - (a) reports on UBWs from the public and the media, and referrals from other Government departments (hereinafter referred to as UBW public reports); and
 - (b) clearance operations conducted on target buildings or a group of buildings (known as large-scale operations LSOs) covering certain types of UBWs (such as UBWs on rooftops and podiums) for each operation.
- 1.7 After identifying and confirming a UBW, the BD will classify it for taking the following actions:
 - (a) for an actionable UBW, issuing a removal order requiring the owner concerned to remove the UBW within a specified period (normally 60 days). The BD at times also issues an advisory letter advising an owner to remove his UBW; and
 - (b) for a non-actionable UBW, issuing a warning notice notifying the owner concerned to remove the UBW within a specified period (normally 60 days) or an advisory letter advising the pertinent owner/occupant (without specifying a time for rectification action) to remove the UBW.

UBW public reports

1.8 The BD identifies UBWs mainly through related reports from the public and the media, and referrals from other Government departments. The numbers of UBW public reports from 2001 to 2014 are shown in Figure 1.

Figure 1

UBW public reports
(2001 to 2014)



Source: BD Controlling Officer's Reports

BD's staff resources and recurrent expenditures

As of October 2014, the BD had 1,739 staff, comprising 1,456 civil servants and 283 non-civil service contract staff. Existing Buildings Divisions 1 and 2, with the support of the Mandatory Building Inspection Division and the Minor Works and Signboard Control Section under the Corporate Services Division (hereinafter referred to as the three divisions and one section) are responsible for handling UBW cases (see BD organisation chart at Appendix A) and implementing the building safety and maintenance enforcement programme on existing buildings.

As of October 2014, the three divisions and one section had 732 staff responsible for UBW and building safety/maintenance work (Note 3), comprising:

- (a) 565 professional and technical grade staff; and
- (b) 167 general and common grade staff.
- 1.10 According to the BD, it could not provide a breakdown of the staff resources solely responsible for UBW work because the 732 staff in the three divisions and one section (see para. 1.9) are responsible for multi-tasks, including:
 - (a) handling UBW reports, implementing a scheme for carrying out repair and maintenance works for old and dilapidated buildings, handling public reports on dangerous buildings and building defects, and issuing repair and investigation orders; and
 - (b) acting as building coordinators for providing a one-stop service to the public on UBWs and building dilapidation issues, as threats to building safety can be caused by a lack of proper repair and maintenance or the erection of UBWs, and a case involving UBWs often involves other kinds of building safety issues at the same time.

For 2013-14, the BD's annual recurrent expenditure was \$1,106 million.

Audit review

- 1.11 In 2003 and 2013, the Audit Commission (Audit) conducted two reviews related to UBWs, namely:
 - in 2003, a review of the BD's efforts to tackle the UBW problem, the results of which were included in Chapter 6 of the Director of Audit's Report No. 41 of October 2003; and
- Note 3: According to the BD, staff in: (a) the Fire Safety Section (under the Mandatory Building Inspection Division), (b) a special team responsible for handling water seepage problems causing environmental nuisance, and (c) the Slope Safety Section (both under the Existing Buildings Divisions), were not responsible for implementing the BD's building safety and maintenance enforcement programme, including actions on UBWs.

- (b) in 2013, as part of a review of the Government's efforts in enhancing fire safety of old buildings, UBWs found during fire-safety inspections were covered in the review and the results were included in PART 5 of Chapter 7 of the Director of Audit's Report No. 61 of October 2013.
- 1.12 As shown in Figure 1 (see para. 1.8), from 2001 to 2014, UBW public reports had almost tripled, and there were 41,146 such reports in 2014. In the light of the increasing public concerns over the UBW problem, Audit commenced conducting a review in May 2014 to examine the issue. The review focused on the BD's actions to tackle the UBW problem, covering the following areas:
 - (a) implementation of Government policies on unauthorised building works (PART 2);
 - (b) handling of public reports (PART 3);
 - (c) actions through large-scale operations (PART 4);
 - (d) follow-up actions on removal orders (PART 5);
 - (e) system for supporting enforcement actions (PART 6); and
 - (f) way forward (PART 7).

Audit has identified areas where improvements can be made by the Government in the above areas, and has made recommendations to address the issues.

Acknowledgement

1.13 Audit would like to acknowledge with gratitude the cooperation of the staff of the Development Bureau (DEVB — Note 4) and the BD during the course of the audit review.

Note 4: Before July 2002, the then Planning and Lands Bureau was responsible for the policy portfolio on buildings matters. In July 2002, the then Housing, Planning and Lands Bureau was set up and took over the policy portfolio on buildings matters. In July 2007, the DEVB was formed to take over the buildings policy portfolio. For simplicity, all previous policy bureaux responsible for the policy on buildings matters are referred to as the DEVB in this Audit Report.

PART 2: IMPLEMENTATION OF GOVERNMENT POLICIES ON UNAUTHORISED BUILDING WORKS

2.1 This PART examines BD actions on implementing Government policies on UBWs.

Government policies on UBWs

1975 UBW policy

2.2 In 1975, the Government announced that all buildings issued with an occupation permit after 31 July 1975 would be kept under surveillance and immediate action would be instituted when UBWs were found. In addition, the BD would take action on UBWs posing a hazard to life and limb and keep record of the other UBWs for possible future action.

1988 UBW policy

- In 1988, the Government adopted a policy on UBWs, superseding that of 1975, under which UBWs were divided into actionable UBWs for enforcement action and non-actionable UBWs for deferment of action. The aim was to remove risk to public safety and to curb UBWs within the resources available. Under the 1988 policy, actionable UBWs mainly comprised:
 - (a) UBWs constituting obvious or imminent danger to life or property; and
 - (b) new UBWs (see para. 2.19), irrespective of the date of completion of the buildings concerned.

2001 UBW policy

In 2001, in order to provide greater scope and flexibility for the BD to carry out enforcement actions on a large number of UBWs, the Government revised the enforcement policy, under which actionable UBWs, in addition to the two types stated in paragraph 2.3(a) and (b), were expanded to include the following works:

Implementation of Government policies on unauthorised building works

- (a) UBWs erected in or on buildings, on rooftops and podiums, in yards and lanes constituting a serious hazard or a serious environmental nuisance;
- (b) major individual UBWs;
- (c) UBWs erected in or on individual buildings having extensive UBWs;
- (d) UBWs identified in buildings or groups of buildings targeted for LSOs or maintenance programmes; and
- (e) unauthorised alterations to or works in environmentally friendly features of a building (e.g. balconies and podium gardens) for which exemption from calculation of gross floor area has been granted.

For non-actionable UBWs, the BD may issue warning notices (effective from December 2004) and shall register those non-compliant notices at the LR, or may issue advisory letters on which the BD would not take follow-up actions for the time being.

2001 BD targets on removing UBWs

- 2.5 In April 2001, the DEVB informed the Legislative Council (LegCo) that:
 - (a) the Government was committed to providing a safe and healthy built environment and an attractive outlook worthy of a dynamic world-class city;
 - (b) in 2001, there were 42,000 private buildings, 800,000 UBWs (including illegal rooftop structures Note 5) and 220,000 signboards;
 - (c) the BD would continue its LSOs to clear at one go all external UBWs on 900 and 1,000 buildings in 2001 and 2002 respectively;
- Note 5: The estimated 800,000 UBWs were projected from the number and types of UBWs identified in 24 sample buildings selected for conducting LSOs at that time (UBWs located inside the buildings were not covered because, according to the BD, UBWs erected on the exterior of buildings posed greater safety concern to the public).

Implementation of Government policies on unauthorised building works

- (d) the BD would remove 150,000 to 300,000 UBWs in five to seven years (namely from 2001 to 2005 and to 2007); and
- (e) the BD would clear all 12,000 illegal rooftop structures (Note 6) on the 4,500 single-staircase buildings within seven years (namely by 2007). The Housing Department had agreed to rehouse affected occupants according to their eligibility.

2011 Government enhanced policy on UBWs

- 2.6 In October 2010, the Government announced a new multi-pronged approach to enhance building safety including tackling the problem of UBWs, namely:
 - (a) enacting new legislation to enable the BD to apply for court warrants for gaining access to individual premises for taking enforcement actions, introducing a surcharge on default works and putting common building works associated with sub-division of flats under the control of the MWCS;
 - (b) extending the scope of actionable UBWs and conducting a stock-taking exercise on the exterior of buildings to facilitate enforcement;
 - (c) providing support and assistance to UBW owners; and
 - (d) conducting publicity and public education on UBWs.

The DEVB informed LegCo that, in response to community views that the Government needed to take a tougher stance against non-compliant owners to create a stronger deterrent effect, with effect from April 2011, the seven types of actionable UBWs (see paras. 2.3 and 2.4) would be extended to include all UBWs erected on rooftops, podiums, as well as yards and lanes of buildings even where these UBWs did not pose a serious hazard or environmental nuisance (hereinafter referred to as rooftop-podium-lane UBWs).

Note 6: The 12,000 illegal rooftop structures erected on single-staircase buildings had been identified by the Fire Services Department in its survey.

BD resources for handling UBWs

- 2.7 In March 2011, February 2012, April 2013 and April 2014, in response to LegCo questions about the number of BD staff responsible for carrying out action on UBWs in recent years, the BD said that:
 - the enforcement action on UBWs was carried out by the existing resources of professional and technical staff of the two Existing Buildings Divisions, supported by staff of the Mandatory Building Inspection Division and the Minor Works and Signboard Control Section of the BD (both established in July 2011) as part of their overall duties to implement the BD's building safety and maintenance enforcement programme (totalling 477 professional and technical staff in March 2011, 488 staff in February 2012, 530 staff in April 2013 and 576 staff in April 2014); and
 - (b) the BD was not able to provide a breakdown of the manpower or expenditure involved solely for the enforcement action on UBWs.
- 2.8 From 2001-02 to 2014-15, the Government allocated additional funding to the BD mostly for employing additional staff (mainly non-civil service contract staff) and engaging consultants to take UBW enforcement actions and implement measures to enhance building safety (see Table 1).

Table 1

Additional funding for UBW enforcement actions and enhancing building safety (2001-02 to 2014-15)

Period	Funding allocated (million)	Purpose
2001-02 to 2006-07	\$839	Taking enforcement actions on UBWs erected on external walls of buildings and illegal rooftop structures on single-staircase buildings (see para. 2.5(c) to (e)).
2006-07 to 2011-12	\$830	Implementing measures to enhance building safety and carrying out UBW-related tasks, including: • removing illegal rooftop structures on the remaining 1,310 single-staircase buildings in two years (i.e. 2007-08 and 2008-09); and • removing 180,000 UBWs in 5 years (i.e. by 2010-11).
2011-12 to 2014-15	\$1,261	Taking UBW removal measures, including conducting LSOs, implementing the MWCS (see para. 1.5) and conducting the 2011 stock-taking exercise (see para. 2.10), and other building safety measures, such as implementing the Mandatory Building Inspection Scheme (Note).

Source: BD records

Note: Under the Scheme (implemented in June 2012), the BD would serve statutory notices on the owners and owners' corporations of some selected target buildings aged 30 years or above, requiring them to carry out the prescribed inspections within six months and the prescribed repair works within 12 months. According to the BD, it was unable to divide the funding between that for implementing UBW removal

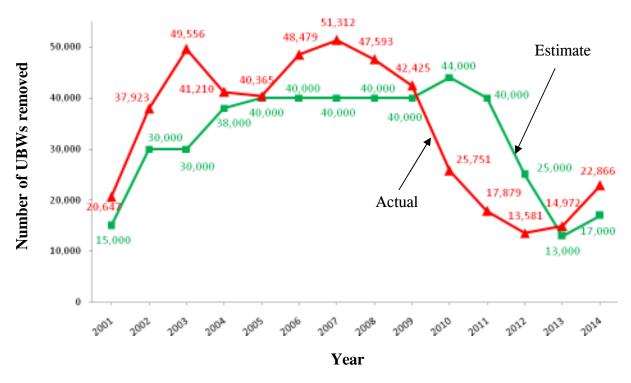
measures and that for building safety measures.

UBWs removed

In June 2011, the DEVB informed LegCo Panel on Development that, by the end of March 2011, nearly 12,000 buildings had been covered in the various enforcement programmes, with over 400,000 UBWs identified and demolished and most of the high-risk UBWs had been removed. Furthermore, as shown in the Controlling Officer's Reports (CORs) of the BD, a total of 474,559 UBWs had been removed from 2001 to 2014 (see Figure 2), comprising 405,261 UBWs from 2001 to 2010 (on average 40,526 a year) and 69,298 UBWs from 2011 to 2014 (on average 17,325 a year).

Figure 2

Removal of UBWs (2001 to 2014)



Source: BD CORs

Remarks: The total numbers of UBWs removed from 2001 to 2010 and from 2011 to 2014 were 405,261 (20,647+37,923+49,556+41,210+40,365+48,479+51,312+47,593+42,425+25,751) and 69,298 (17,879+13,581+14,972+22,866) respectively. Therefore, the total number of UBWs removed from 2001 to 2014 was 474,559.

Implementation of Government policies on unauthorised building works

According to the BD, the decreases in the number of removal of UBWs since 2010 were mainly because:

- (a) after removal of over 400,000 UBWs from 2001 to 2010, the number of non-civil service contract staff employed for the task had been reduced;
- (b) enforcement actions on the remaining UBWs were relatively difficult to be taken; and
- (c) some staff resources had been directed to inspect: (i) dilapidated buildings subsequent to the collapse of a building at Ma Tau Wai Road in January 2010; (ii) cantilevered slab canopies after the Kin Kwan Street canopy collapse incident in June 2011; and (iii) sub-divided flats (SDFs) after the Fa Yuen Street fire incident in November 2011.

2011 stock-taking exercise

In May 2011, the BD commissioned 15 consultants under 35 consultancy agreements at an estimated total cost of \$27.4 million to conduct a territory-wide stock-taking exercise on the number of different types of suspected UBWs (including signboards) erected on the exterior of the 41,000 private buildings in Hong Kong, and conduct visual inspections of the identified suspected UBWs. During inspections, if suspected UBWs were identified as having imminent danger, the consultants should report to the BD for it to take immediate follow-up actions. In June 2011, in response to LegCo questions, the BD said that the stock-taking exercise would enable the BD to set up a comprehensive database for making appropriate arrangements for prioritising its enforcement actions and conducting various LSOs.

Implementation of Government policies on unauthorised building works

2.11 Upon completion of the site surveys in December 2012, BD consultants found some 2,290,000 suspected UBWs, which comprised:

- (a) 1,870,000 household minor works (82% Note 7);
- (b) 120,000 signboards (5%); and
- (c) 300,000 other UBWs (13% such as UBWs on rooftops see Appendix B).

The consultants provided the BD with information of the 2,290,000 suspected UBWs including photographic records. In July 2014, after analysing the data, the BD submitted the survey results to the DEVB. According to the BD, the photographic records were useful materials for BD staff in their daily operation such as desktop screening of some reported UBWs instead of conducting site inspections, and the findings had also provided approximate numbers of different types of suspected UBWs.

2.12 In February and March 2015, the BD informed Audit that:

daily operation and for it to formulate the future UBW enforcement strategy. Due to resource consideration and tight timeframe, the exercise did not have an objective or intention to accurately identify the number of actionable UBWs for taking enforcement actions, but was a snapshot exercise to provide rough estimates of the existing UBWs erected on the exterior of buildings after the 10-year enforcement programme from 2001 to March 2011, and to categorise buildings prone to have high-risk UBWs for the BD's planning for resources to tackle the problems;

Note 7: *The 1,870,000 household minor works comprised:*

- (a) 1,260,000 supporting structures for air-conditioning units and water cooling towers;
- (b) 230,000 small canopies; and
- (c) 380,000 drying racks.

- (b) due to resource consideration and tight timeframe, consultants of the 2011 stock-taking exercise did not record the dimensions of UBWs found, conduct detailed assessments, or cover UBWs located inside the buildings. The consultants were also not required to check the legality of the suspected UBWs found against the approved plans, minor works submissions and other BD records. In the absence of verification of the legal status and detailed assessments (such as the case history and dimensions) of the suspected UBWs found, the BD could not establish whether they were UBWs or actionable UBWs warranting the issue of removal orders; and
- (c) the removal of the remaining UBWs after the 10-year enforcement programme was a complicated task which might involve court warrants for access, rehousing and owners not visualising the associated risk. Subsequent to the collapse of a building at Ma Tau Wai Road in 2010 and the fire incident at Fa Yuen Street in 2011, the BD had put more emphasis on building repairs and SDFs during the conduct of LSOs, and accordingly had reduced the number of target buildings for carrying out enforcement actions on UBWs.

Some UBWs not identified in the 2011 stock-taking exercise

Audit noted that some buildings having UBWs had not been identified in the 2011 stock-taking exercise. For example, the 2011 stock-taking exercise found a total of 16,000 buildings erected with rooftop-podium-lane UBWs. However, Audit examination revealed that 2,800 related buildings as shown in BD records (mostly discovered from public reports) were not identified in the stock-taking exercise. In February 2015, the BD informed Audit that the discrepancy of 2,800 buildings might be attributable to BD consultants not being able to visit some sites due to inaccessibility and site constraints of some buildings, the construction of some rooftop-podium-lane UBWs after completion of the survey and data matching problems.

Number of actionable UBWs for planning enforcement actions not known

2.14 Since 1975, the Government has adopted a policy under which enforcement actions would be taken on actionable UBWs and such actions on

Implementation of Government policies on unauthorised building works

non-actionable UBWs would be deferred. Notwithstanding this Government policy, from 1975 to present, the BD has not taken action to ascertain the total number of actionable UBWs in existence. In this connection, the 2011 stock-taking exercise found a total of 2,290,000 suspected UBWs.

2.15 Of the 2,290,000 suspected UBWs found, the BD has conducted a sampling analysis and estimated that some 96% of the 1,870,000 suspected unauthorised household minor works could be validated under the Household Minor Works Validation Scheme (see para. 2.30). Regarding the 120,000 suspected unauthorised signboards, in September 2013, the BD commenced implementing a Validation Scheme for Unauthorised Signboards under which signboards complying with the technical specifications could be retained subject to carrying out a safety check every five years. The BD estimated that some 72% (86,400) of the 120,000 suspected unauthorised signboards could be validated under the Scheme. According to the BD, for the 300,000 other suspected UBWs, many of them may be unauthorised amenity features which may be validated under future validation schemes under the MWCS.

2.16 In March 2015, the DEVB and the BD informed Audit that:

- (a) the BD would continue to adopt a multi-pronged approach to tackle the UBW problem. However, as the problem was very complicated involving millions of UBWs, it was not pragmatic to ascertain the total number of territory-wide actionable UBWs and deal with them one by one through issuing removal orders. In any event, whether a UBW was actionable depended on the prevailing UBW policy, which might be revised from time to time to meet the needs of the circumstances; and
- (b) while the total number of UBWs removed each year was published in the BD's COR and on its website, they did not consider it necessary to show a breakdown of the number of UBWs removed each year into actionable and non-actionable UBWs for the following reasons:
 - (i) the number of actionable and non-actionable UBWs would unlikely be of public concern;
 - (ii) the breakdown was not a good indicator for assessing the effectiveness of the BD's enforcement action; and

- (iii) highlighting a building owner's voluntary removal of non-actionable UBWs might remind the public that some UBWs need not be removed and might have a negative effect of discouraging voluntary removal of UBWs.
- 2.17 In Audit's view, in order to facilitate planning and setting targets for enforcement actions on actionable UBWs erected on the exterior of private buildings, the BD should consider taking actions to ascertain the number of actionable UBWs not having been issued with removal orders. Thereafter, taking into account resources available, the BD needs to formulate an action plan with timeframe to issue removal orders on actionable UBWs, including household minor works, signboards and other UBWs which are not eligible for validation under related schemes (see para. 2.15). In this connection, in 2001, the BD had set a target of removing 150,000 to 300,000 UBWs in five to seven years (see para. 2.5(d)). However, the BD has not set similar targets since 2011. In addition, the BD has not provided in its CORs a breakdown of the number of UBWs removed during a year into actionable and non-actionable ones. In order to enhance public accountability and transparency of the BD's effectiveness in tackling the UBW problem, the BD should consider publishing in CORs and on its website the annual number of actionable and non-actionable UBWs removed.

New UBWs not clearly defined

- 2.18 Since 1975, in order to contain the growth of the number of UBWs, new UBWs have been accorded high priority for taking enforcement actions (see paras. 2.2 and 2.3(b)). In January 2001, the DEVB informed the then LegCo Panel on Planning, Lands and Works (functions taken over by the LegCo Panel on Development since October 2007) that, in order to give a clear message to the public that the Government would not tolerate perpetuation of the UBW problem, new UBWs of any sort should be cleared as soon as they were identified.
- 2.19 According to BD guidelines issued in March 2014, new UBWs are:
 - (a) UBWs found under construction at the time of inspection, i.e. works-in-progress;
 - (b) UBWs reconstructed after removal actions under previous enforcement action as revealed from BD records;

Implementation of Government policies on unauthorised building works

- (c) UBWs found not existing in or shown in BD photo records (e.g. photos taken in the 2011 stock-taking exercise); or
- (d) UBWs within BD staff's reasonable belief to have been completed within 12 months.
- 2.20 In Audit's view, the criteria in paragraph 2.19(c) and (d) are not very clear for enforcement purposes. With a view to providing clearer guidance to BD staff, the BD needs to conduct a review of BD guidelines on the definition of new UBWs.

Low response rate of Validation Scheme for Unauthorised Signboards

According to the BD, an estimate of 86,400 suspected unauthorised signboards could be validated under the Scheme (see para. 2.15). However, from commencement in September 2013 of the Validation Scheme for Unauthorised Signboards to January 2015, the BD had only received 190 related applications and only 35 signboards had been validated under the Scheme (Note 8). Therefore, the BD needs to strengthen action to publicise the Scheme.

Illegal rooftop structures on 33 single-staircase buildings not yet removed

In April 2001, the DEVB informed LegCo that the BD would clear all 12,000 illegal rooftop structures on the 4,500 single-staircase buildings by 2007 (see para. 2.5(e)). From 2001 to 2014, a total of some 13,000 illegal rooftop structures on 5,700 single-staircase buildings had been cleared. However, as of January 2015, illegal rooftop structures on 33 single-staircase buildings had not been removed. According to the DEVB, rooftop is the fire refuge area for residents, and illegal rooftop structures, especially those erected on single-staircase buildings, would obstruct the fire escape route and pose serious fire risk to the occupants. In February 2015, the BD informed Audit that the remaining illegal rooftop structures on 33 single-staircase buildings were sensitive cases and some of them were subject to court appeals, prosecution or planned closure actions, and some

Note 8: Regarding the remaining 155 applications, as of January 2015, 98 applications were in progress, 55 had been rejected and 2 had been withdrawn.

involved emotional owners/occupants. In Audit's view, with a view to minimising public safety risks, the BD needs to take actions to clear such structures as soon as possible.

Audit recommendations

- 2.23 Audit has recommended that the Director of Buildings should:
 - (a) conduct a review of BD guidelines on the definition of new UBWs with a view to providing clearer guidance to BD staff in carrying out UBW enforcement actions;
 - (b) strengthen action to publicise the Validation Scheme for Unauthorised Signboards; and
 - (c) take actions to clear all illegal rooftop structures erected on single-staircase buildings as soon as possible.

Response from the Government

- 2.24 The Secretary for Development and the Director of Buildings agree with the audit recommendations. They have said that:
 - (a) regarding paragraph 2.23(b), the BD will continue to publicise the Validation Scheme for Unauthorised Signboards through various channels including Announcements in the Public Interest, press releases, booklets, and guidelines and briefings provided to the industry and the general public. The BD will also convey a message to the applicants of food business licences that the BD will take progressive enforcement action against unauthorised signboards and they should remove or replace their unauthorised signboards; and
 - (b) regarding paragraph 2.23(c), the BD has regularly updated the progress of follow-up actions on the remaining single-staircase buildings erected with illegal rooftop structures, and the Progress Monitoring Committee chaired by the Director of Buildings has monitored the progress on a case-by-case basis.

Minor Works Control System

2.25 Before December 2010, under the Buildings Ordinance, all building works, including those which were minor in nature (unless exempted under the Ordinance), required the BD's prior approval and consent before commencement of works. According to the BD, the costs and time involved in taking actions to meet requirements under the Ordinance were disproportionate to the scale of minor works and, as a result, many owners did not comply with the requirements in carrying out minor works, rendering a large number of such unauthorised works. In December 2010, in order to facilitate members of the public to carry out minor works lawfully by adopting simplified procedures, the MWCS was implemented.

Procedures for carrying out new minor works

- 2.26 Under the MWCS, as of December 2014, 126 items of minor works were classified into the following three classes according to their nature, scale, complexity and safety risk:
 - (a) Class I (44 items) comprising relatively more complicated minor works, such as internal staircases connecting two floors;
 - (b) Class II (40 items) comprising works of comparatively lower complexity and risk to safety, such as the erection of metal garden gates; and
 - (c) Class III (42 items) comprising common household minor works, such as supporting frames for air conditioners.

- 2.27 Under the MWCS, a building owner needs to employ a prescribed registered contractor (Note 9) to carry out designated minor works. For Class I minor works, he needs to employ a prescribed building professional (Note 10) to supervise the conduct of the works. For Classes I and II minor works, at least 7 days before works commencement, a notification is needed to be submitted to the BD specifying details of the works with site photographs. For all three classes of minor works, within 14 days after works completion, a completion certificate is needed to be submitted to the BD together with details of works completed and related photographs. The BD has uploaded onto its website a list of prescribed registered contractors specifying the classes or items of works that could be carried out by each contractor. As of December 2014, there were a total of 18,729 prescribed registered contractors.
- 2.28 According to the BD, designated minor works that are not carried out in accordance with the procedures under the MWCS are UBWs, the owners concerned may be subject to prosecution, and the prescribed building professionals and prescribed registered contractors concerned may be subject to disciplinary action or prosecution.

BD procedures for handling minor-works submissions

- 2.29 According to BD guidelines, upon receiving a minor-works submission, the BD would:
 - (a) conduct an initial screening of the submitted documents to ensure their completeness, record the information in BD computer system and issue an acknowledgement letter;
 - (b) verify the validity and capacity of the prescribed building professional and/or prescribed registered contractor against the BD's registration records;
- **Note 9:** A prescribed registered contractor is a registered general building contractor, a registered specialist contractor of the respective registered category of specialised works, or a registered minor works contractor of the respective registered classes, types or items of works.
- **Note 10:** A prescribed building professional is an authorised person, a registered structural engineer, a registered geotechnical engineer or a registered inspector.

Implementation of Government policies on unauthorised building works

- (c) conduct a desktop audit on selected submissions to ensure compliance with BD requirements and the Building (Minor Works) Regulation;
- (d) conduct a site audit on selected submissions to ensure compliance with BD requirements and the Building (Minor Works) Regulation; and
- (e) for irregularities found during the desktop and site audits, issue advisory letters and warning letters to the prescribed building professional and/or prescribed registered contractor concerned.

Household Minor Works Validation Scheme

2.30 From December 2010, under the Household Minor Works Validation Scheme, owners of four types of already-installed household minor works (namely supporting structures for air-conditioning units and water cooling towers, supporting frames for air-conditioning units, small canopies and drying racks) may apply to the BD for retaining the minor works after being certified by a prescribed building professional (except a registered geotechnical engineer) or a prescribed registered contractor (except a registered specialist contractor). The BD would not take enforcement actions against the validated minor works unless they are found posing safety risks.

Inadequate action taken on non-compliant registered contractors

2.31 The MWCS is a self-regulatory system under which prescribed building professionals and prescribed registered contractors are responsible for carrying out minor works. In order to detect any irregularities of non-compliance with the Buildings Ordinance, the BD conducts desktop audits and site audits on selected cases. Audit noted that, from 2011 to 2013, of the 2,342 cases with site audits completed, the BD had identified a total of 34 cases involving non-compliance with the requirements of the Buildings Ordinance. However, the BD had not issued warning letters to the related prescribed building professionals and prescribed registered contractors or taken any prosecution action against them. For 2014, of the 774 cases audited, the BD identified a total of 100 cases (13%) involving

irregularities and the BD issued 13 warning letters to the related parties and referred 4 cases to BD Legal Services Section for prosecution action. In Audit's view, with a view to ensuring the effective operation of the self-regulatory MWCS, the BD needs to strengthen action on related prescribed building professionals and prescribed registered contractors upon identification of non-compliance with the requirements of the Buildings Ordinance in carrying out minor works.

Low response rate of Household Minor Works Validation Scheme

According to the BD, some 96% (or 1,795,200) of the 1,870,000 household minor works identified in the 2011 stock-taking exercise could be validated under the Household Minor Works Validation Scheme (see para. 2.15). The BD set targets of validating 1,000 of these minor works in 2011 and 100 each in 2012 to 2014 (i.e. a total of 1,300 household minor works from 2011 to 2014). However, from commencement of the Household Minor Works Validation Scheme in December 2010 to December 2014, the BD had only received 83 related applications of which 29 applications involving 76 (6% of 1,300) household minor works had been validated under the Scheme (Note 11). In Audit's view, the BD needs to strengthen action to publicise the Scheme.

Audit recommendations

- 2.33 Audit has recommended that, in administering the MWCS, the Director of Buildings should:
 - (a) strengthen action on related prescribed building professionals and prescribed registered contractors upon identification of non-compliance with requirements of the Buildings Ordinance in carrying out minor works; and
 - (b) strengthen action to publicise the Household Minor Works Validation Scheme.

Note 11: Regarding the remaining 54 applications, as of December 2014, 43 applications had been rejected, 8 were in progress and 3 had been withdrawn.

Response from the Government

- 2.34 The Secretary for Development and the Director of Buildings agree with the audit recommendations. They have said that, regarding paragraph 2.33(b):
 - (a) the BD will continue to explore measures to promote the MWCS, including the Household Minor Works Validation Scheme; and
 - (b) as part of the enhancement measures on publicity, the BD launched in 2014 a mobile application on the MWCS covering validation schemes. The BD is also studying the option of including more amenity features under the Household Minor Works Validation Scheme.

PART 3: HANDLING OF PUBLIC REPORTS

3.1 This PART examines BD actions on identifying UBWs through public reports and issuing removal orders on identified UBWs.

Handling of UBW public reports

- 3.2 One of the sources of identifying UBWs is public reports (see para. 1.6(a)). The number of UBW public reports had increased from 13,817 in 2001 to 41,146 in 2014 (having tripled in 13 years see Figure 1 in para. 1.8). Upon receiving a UBW public report, the BD would take the following actions:
 - (a) screening whether the alleged UBW has been included in BD records and deciding whether an inspection is required;
 - (b) carrying out an inspection to classify the alleged UBW into actionable or non-actionable for carrying out appropriate actions:
 - (i) for an actionable UBW, issuing an advisory letter (with no specified date for action Note 12) to the owner/occupant advising removal of the UBW. Thereafter, issuing a removal order requiring the pertinent owner to remove such works within a specified period (normally 60 days), and registering the order at the LR. For a non-compliant case, the BD may take prosecution action and arrange default works;

Note 12: According to the BD, for actionable UBWs where the owners would unlikely take voluntary removal actions, it would issue removal orders without issuing advisory letters to the owners.

Handling of public reports

- (ii) for a specific non-actionable UBW (Note 13), issuing a warning notice to the pertinent owner notifying removal of the UBW within a specified period (normally 60 days), and registering the non-complaint notice at the LR; and
- (iii) for other non-actionable UBWs, issuing an advisory letter (Note 14) to the owner/occupant advising removal of the UBW. Thereafter, the BD would not take further follow-up actions; and
- (c) notifying the informant that, for an actionable UBW, a statutory order would be issued or, for a non-actionable one, no immediate enforcement actions would be taken.

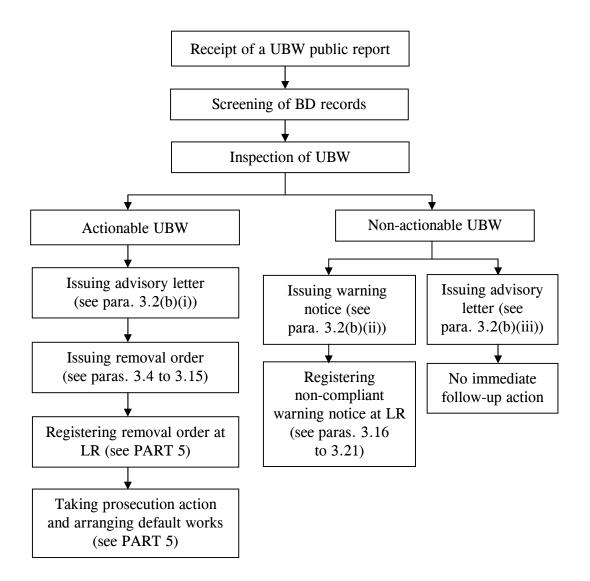
The BD has set time targets on taking different actions in handling UBW public reports (see Figure 3 and Appendix C).

Note 13: According to the BD, a warning notice would be issued on certain UBWs such as an existing unauthorised cockloft built on the ground floor or an existing unauthorised internal staircase erected in a building not constituting obvious hazard or imminent danger to life or property. When section 24C of the Buildings Ordinance became effective from 31 December 2004, warning notices were primarily issued on unauthorised structures erected on rooftops and podiums, and in yards and lanes until the change of the related Government policy in April 2011 (see para. 2.6).

Note 14: According to the BD, it may not issue advisory letters on some non-actionable UBWs, such as common amenity features.

Figure 3

BD's actions in handling UBW public reports



Source: Audit analysis of BD records

3.3 Table 2 shows the number of removal orders, warning notices and advisory letters issued by the BD from 2004 to 2014. An order, a notice or a letter may cover one or more than one UBW. Generally, the number of removal orders, warning notices and advisory letters had decreased significantly in recent years.

Table 2

Number of removal orders, warning notices and advisory letters issued (2004 to 2014)

Year	Removal order		Warning notice		Advisory letter
2004	29,201		_	(Note 1)	9,443
2005	25,582		2,227		11,077
2006	34,095		8,650		7,965
2007	36,339		9,015		6,598
2008	34,548 26	61,907	8,700		5,408
2009	32,989		7,672		5,653
2010	28,409		3,987		4,565
2011	11,601 (N	ote 2)	124	(Note 3)	3,275
2012	13,475		356		5,205
2013	15,668		286		3,561
2014	11,816		332		2,972
Total	273,723		41,349		65,722

Source: BD records

Note 1: Warning notices were first issued in 2005 after the introduction of section 24C of the Buildings Ordinance on 31 December 2004.

Note 2: According to the BD, the significant decrease in the number of removal orders issued from 2011 was mainly because the number of non-civil service contract staff had decreased since 2010 and more staff resources had been directed to inspect dilapidated buildings (see para. 2.9).

Note 3: According to the BD, the significant decrease in the number of warning notices issued from 2011 was because rooftop-podium-lane UBWs would be issued with removal orders instead of warning notices since April 2011.

Long time taken in issuing removal orders on actionable UBWs

- According to BD guidelines, before May 2014, if a UBW is found to be actionable, BD officers should issue a removal order on a confirmed actionable UBW (other than a rooftop-podium-lane UBW see para. 3.11) within 105 days (30+30+45 days see) items 6 to 8 in Appendix C) after conducting an inspection (extended to 180 days (30+60+90 days) since May 2014).
- 3.5 As of October 2014, Audit noted that confirmed actionable UBWs (other than rooftop-podium-lane UBWs) revealed from 4,522 public reports had not been issued with removal orders more than six months (see para. 3.4) after conducting inspections, as follows:

Period from conducting inspection to October 2014	Number of public reports that related UBWs had not been issued with removal orders after conducting inspection
More than 6 months to 1 year	1,248 (28%)
More than 1 year to 2 years	2,159 (48%)
More than 2 years to 3 years	1,005 (22%)
More than 3 years to 5 years	110 (2%)
Total	4,522 (100%)

3.6 Furthermore, the BD accords topmost priority to actionable UBWs associated with structural or higher fire-safety concern (Note 15) for clearance. Moreover, for the purpose of containing the growth of UBWs, the BD would take immediate enforcement actions on new UBWs (see para. 2.19), including UBWs under construction.

Note 15: According to the BD, UBWs associated with higher fire-safety concern included:

- (a) additions and alterations to an exit route;
- (b) SDFs; and
- (c) UBWs blocking-up of a principal means of escape.

- 3.7 Audit examination revealed that, as of October 2014, of the UBWs identified from the 4,522 public reports awaiting issuance of removal orders (see para. 3.5):
 - (a) 703 reports (16%) related to UBWs associated with structural or higher fire-safety concern (Note 16); and
 - (b) 1,285 reports (28%) related to UBWs under construction (Note 17).
- In addition, in the first 10 months of 2014, the BD issued removal orders relating to 718 public reports on confirmed actionable UBWs (other than rooftop-podium-lane UBWs). Audit examination revealed that, of the 718 public reports, removal orders relating to 321 reports (45%) had only been issued more than six months after conducting inspections, which were at variance with BD guidelines of 180 days (see para. 3.4). Of the 321 public reports, removal orders relating to these reports had only been issued more than 6 months to 9 years after conducting inspections:

Period from conducting inspection to issuing removal order	Number of public reports
More than 6 months to 1 year	191 (59%)
More than 1 year to 2 years	111 (35%)
More than 2 years to 3 years	14 (4%)
More than 3 years to 9 years (see Case 1)	5 (2%)
Total	321 (100%)

Note 16: Of the 703 reports related to UBWs associated with structural or higher fire-safety concern, 176 reports also related to UBWs under construction.

Note 17: Of the 1,285 reports related to UBWs under construction, 176 reports also related to UBWs associated with structural or higher fire-safety concern.

Case 1

Long time taken in issuing a removal order on actionable UBWs

- 1. In August 2006, the BD received a public report on UBWs under construction (a cockloft with glass panels) erected on the ground floor of a commercial/residential building in Kwai Chung. In the same month, the BD's consultant carried out inspection but was unable to gain access to the interior of the building. However, there were signs that works on interior decoration on the ground floor were in progress, with full-height glass panels and a shop-front projection being erected at the external wall of a cockloft.
- 2. According to BD inspection report of February 2008, the following new UBWs were found: (a) external-wall glass panels of a cockloft; (b) a canopy of over 0.6 metre extended from the cockloft; (c) a cockloft with a staircase on the ground floor; and (d) a shop-front encroachment of 0.55 metre on public pavement. The BD classified these works as actionable UBWs. In March 2008, before issuing a removal order, the BD issued an advisory letter advising the owner to remove the UBWs.
- 3. In March 2010 and April 2014, BD inspections found that the UBWs had not been removed. As stated in the inspection report of April 2014, since the time lapse of over five years, the BD might not have sufficient justification to take action on the grounds of the works being "new works". In May 2014, the BD issued an advisory letter to the owner advising removal of the unauthorised canopy (see para. 2(b)).
- 4. In June 2014, the BD issued a warning notice notifying the owner to remove the unauthorised cockloft and staircase (see para. 2(c)), on the basis that this UBW was a non-actionable one because the BD considered it not a new UBW after review.
- 5. In September 2014, the BD issued a removal order requiring the owner to remove the unauthorised canopy (see para. 2(b)).
- 6. After review, the BD had decided not to take any action on: (a) the glass panels (see para. 2(a)), because the panel sizes were smaller than that for an actionable UBW and were considered not a new UBW; and (b) the shop-front encroachment (see para. 2(d)) on the grounds that enforcement actions should be taken by the Lands Department.

Case 1 (Cont'd)

Audit comments

7. The BD only issued a removal order on the confirmed UBW (see para. 2(b)) in September 2014, eight years after the first inspection in August 2006, and removal orders were not issued on some UBWs on the grounds that they were no longer new UBWs. Furthermore, as of January 2015, the BD had not informed the Lands Department of the shop-front encroachment.

BD response

- 8. In March 2015, the BD informed Audit that:
 - (a) the BD had encountered problems in gaining access to the related premises, thus leading to a prolonged period of investigation;
 - (b) in the course of follow-up action, the subject file was mislaid and could only be found in early 2014;
 - (c) the external-wall glass panels of the cockloft (see para. 2(a)) was considered not actionable UBWs as the panel size of each glass did not exceed the dimension limits stipulated in BD guidelines;
 - (d) a case review in February 2015 revealed that the previous action had not complied with BD guidelines and had inappropriately ruled that the cockloft and associated staircase (see para. 2(c)) were not new UBWs. Hence, the BD issued a removal order against the cockloft and associated staircase in March 2015; and
 - (e) the shop-front encroachment (see para. 2(d)) was a raised ground platform. At the time when the public report was received in 2006, BD guidelines did not require the referral of UBWs on public pavement to the Lands Department (the requirement was included in BD guidelines issued in 2009). In the light of the revised BD guidelines, the BD informed the Lands Department of the raised ground platform on public pavement in February 2015.

Source: BD records

- 3.9 In March 2015, the BD informed Audit that BD guidelines on time targets for handling UBW public reports (see para. 3.4) only provided an indicative timeframe for handling simple and straight-forward cases, and the actual timeframe would vary according to workload situation and complexity of individual cases.
- 3.10 In Audit's view, the long time taken in issuing removal orders after conducting inspections will cause delays in rectification actions and may pose public safety risks. Furthermore, delays in issuing removal orders will lead to a longer time taken to register the orders at the LR, and prospective property buyers may be deprived of the knowledge of the existence of the UBWs. Therefore, the BD needs to strengthen actions with a view to ensuring that removal orders are issued within BD time targets, particularly the UBWs associated with structural or higher fire-safety concern and UBWs under construction.

Long time taken in issuing removal orders on rooftop-podium-lane UBWs

- 3.11 In view of the large number of public reports relating to rooftop-podium-lane UBWs, the BD has adopted a priority system for handling these UBWs since April 2011. Under the system, in response to related public reports, BD officers should rank the cases according to public safety risks and dates of receipt of public reports for taking enforcement actions. The BD would issue removal orders on these UBWs after conducting inspections. For this type of UBWs, the BD had also set the following targets and arrangements:
 - (a) from June to August 2011, issuing 280 removal orders a month;
 - (b) from September 2011 to March 2014, issuing 420 removal orders a month; and
 - (c) from April 2014, except for new UBWs or UBWs constituting obvious and imminent danger to life and property, UBW public reports of this type would primarily be handled by means of conducting LSOs.

Audit noted that, as of October 2014, of the 25,313 public reports on rooftop-podium-lane UBWs received from April 2011 to October 2014, only 3,357 (13%) of such public reports had been dealt with (such as by issuing removal orders, placing the related buildings in target building lists for conducting LSOs, or the UBWs had been voluntarily removed by the owners), with the remaining 21,956 (87%) reports awaiting BD actions. Of the 21,956 public reports, as of October 2014, 17,862 reports had been received and awaiting enforcement actions for 10 months to 3.5 years, as follows:

Period from receipt of public report to October 2014	Number of public reports awaiting BD actions on related UBWs
10 to 22 months (from January to December 2013)	6,722 (38%)
More than 22 months to 34 months (from January to December 2012)	6,242 (35%)
More than 34 months to 43 months (from April (see para. 2.6) to December 2011)	4,898 (27%)
Total	17,862 (100%)

- 3.13 Furthermore, as of October 2014, 25,887 warning notices (Note 18) had been issued on rooftop-podium-lane UBWs before April 2011 but had not been complied with, and removal orders had not been issued for related UBWs.
- Audit noted that, in 2014, the BD selected 200 buildings for conducting LSOs focusing on rooftop-podium-lane UBWs. However, at this pace, the BD would take a long time to clear the rooftop-podium-lane UBWs erected in about 16,000 buildings as identified in the 2011 stock-taking exercise (see Appendix B).

Note 18: The related UBWs of 7,612 of the 25,887 warning notices issued had again been reported by the public and included in the 21,956 public reports on rooftop-podium-lane UBWs received from April 2011 to October 2014 awaiting BD actions (see para. 3.12).

3.15 In October 2010, the DEVB informed LegCo that, under the 2011 enforcement policy, the BD would actively respond to public reports and issue removal orders requiring owners to conduct rectification works immediately if actionable UBWs were found after inspections. In Audit's view, the BD's slow progress in processing public reports and issuing removal orders on rooftop-podium-lane UBWs is unsatisfactory and is at variance with the Government policy. Therefore, the BD needs to formulate an action plan with timeframe for issuing related removal orders.

Long time taken in registering warning notices at LR

- 3.16 In April 2003, when making a proposal for amending the Buildings Ordinance to empower the BD to issue warning notices, the DEVB informed LegCo that registration of warning notices at the LR would enhance consumer protection to prospective property buyers, who would become aware of the existence of UBWs in premises through a land search at the LR. According to section 24C of the Buildings Ordinance (effective from 31 December 2004), the BD shall cause a non-compliant warning notice to be registered at the LR.
- 3.17 The BD normally allows two months for the pertinent owner to carry out removal works after issuing a warning notice. Thereafter, the BD would conduct an inspection within two months and refer the notice to the LR for registration if rectification works have not been taken. Therefore, a non-compliant warning notice should be referred to the LR for registration within four months from the date of issuance. However, Audit noted that, as of October 2014, 147 non-compliant warning notices (Note 19) which had been issued for more than 4 months to 9 years had not been referred to the LR for registration, as follows:

Note 19: According to the BD, the 147 non-compliant warning notices accounted for 0.6% of the 25,887 non-compliant warning notices (see para. 3.13) issued on rooftop-podium-lane UBWs before April 2011 where removal orders had not been issued for related UBWs.

Period from issuance of warning notice to October 2014	Number of warning notices not yet referred to LR for registration
More than 4 months to 1 year	63 (43%)
More than 1 year to 3 years	27 (19%)
More than 3 years to 5 years	24 (16%)
More than 5 years to 7 years	9 (6%)
More than 7 years to 9 years	24 (16%)
Total	147 (100%)

Regarding warning notices forwarded by the BD for registration, the LR would inform the BD whether each of the notices is successful in registration. The BD would take follow-up action if the warning notices were referred back from the LR (such as notices having incorrect information). Audit noted that, as of October 2014, 985 non-compliant warning notices (Note 20) referred back from the LR had not been forwarded again to the LR for registration. The 985 non-compliant warning notices had been issued for more than 4 months to 10 years, as follows:

Period from issuance of warning notice to October 2014	Number of warning notices not yet forwarded again to LR for registration
More than 4 months to 1 year	38 (4%)
More than 1 year to 3 years	64 (7%)
More than 3 years to 5 years	290 (29%)
More than 5 years to 7 years	401 (41%)
More than 7 years to 10 years (see Case 2)	192 (19%)
Total	985 (100%)

Note 20: According to the BD, the 985 non-compliant warning notices accounted for 3.8% of the 25,887 non-compliant warning notices (see para. 3.13) issued on rooftop-podium-lane UBWs before April 2011 where removal orders had not been issued for related UBWs.

Case 2

Long time taken to register a warning notice at LR

- 1. In March 2005, the BD received a UBW public report on an unauthorised flat roof structure erected on the first floor of a commercial/residential building in Tai Po. In April 2005, after inspecting the structure, the BD issued an advisory letter to the owner advising him to remove the UBW. In June 2005, the BD issued a warning notice (with ownership particulars obtained from the LR) specifying that if the UBW was not demolished by August 2005, the BD would cause the notice to be registered at the LR.
- 2. In February 2007 and January 2008, BD inspections found that the unauthorised flat roof structures had not been removed. In February 2008, the BD forwarded the warning notice to the LR for registration.
- 3. In March 2008, due to a typographical error in the owner's name in the warning notice, the LR informed the BD that the warning notice could not be registered. Up to October 2014, the BD had not forwarded a correct warning notice to the LR for registration.

Audit comments

4. The warning notice was only referred to the LR for registration in February 2008, 32 months after issuing the notice in June 2005. Furthermore, as of October 2014, more than nine years after its issuance, owing to a typographical error in the owner's name, the notice had not been registered at the LR.

BD response

5. In March 2015, the BD informed Audit that, after clarifying the name of the owner, it had sent back the warning notice to the LR for registration in February 2015.

Source: BD records

- 3.19 Audit noted that, as of October 2014, 1,132 non-compliant warning notices had not been registered at the LR (comprising 147 notices not having been referred to the LR and 985 notices having been referred back from the LR for follow-up action), of which 884 notices (78%) related to rooftop-podium-lane UBWs.
- 3.20 In February and March 2015, the BD informed Audit that:
 - (a) as rooftop-podium-lane UBWs should be issued with removal orders instead of warning notices under the 2011 enhanced policy on UBWs, UBWs previously issued with warning notices which had not been complied with and registered at the LR would be issued with removal orders in future; and
 - (b) as rooftop-podium-lane UBWs were subject to enforcement action in a progressive manner, further follow-up actions on registration of the related warning notices at the LR, which would involve the issuance of superseding warning notices, might not be warranted.
- Audit noted that, under the Buildings Ordinance, the BD is required to register non-compliant warning notices at the LR. In Audit's view, under the Buildings Ordinance, all warning notices, including those relating to rooftop-podium-lane UBWs, should be registered at the LR. Audit considers that, in addition to enhancing consumer protection, registering non-compliant warning notices at the LR would create a deterrent effect on the pertinent owners. Therefore, the BD needs to take measures to ensure that all non-compliant warning notices are promptly referred to the LR for registration. The BD also needs to take prompt follow-up action on warning notices referred back from the LR.

Audit recommendations

- 3.22 Audit has recommended that the Director of Buildings should:
 - (a) strengthen actions with a view to ensuring that removal orders are issued within BD time targets, particularly UBWs associated with structural or higher fire-safety concern and UBWs under construction;

- (b) inform the Lands Department of the UBW found in Case 1 for it to take enforcement action;
- (c) formulate an action plan with timeframe for issuing removal orders on rooftop-podium-lane UBWs;
- (d) take measures to ensure that all non-compliant warning notices are promptly referred to the LR for registration; and
- (e) take prompt follow-up action on warning notices referred back from the LR.

Response from the Government

- 3.23 The Secretary for Development and the Director of Buildings agree with the audit recommendations. They have said that:
 - regarding paragraph 3.22(b), the BD informed the Lands Department in February 2015 of the raised ground platform (see Case 1 in para. 3.8);
 - (b) regarding paragraph 3.22(c), given the large number of related public reports, rooftop-podium-lane UBWs will primarily be handled by means of LSOs. The number of target buildings covered under LSOs will be worked out on an annual basis taking into account resource and workload considerations. Moreover, enforcement is only one of the means to tackle the problem of UBWs. The BD will continue to adopt a multi-pronged approach to enhance building safety; and
 - (c) regarding paragraph 3.22(e), for UBWs other than rooftop-podium-lane UBWs issued with warning notices referred back from the LR, the BD will review and take appropriate follow-up action.

PART 4: ACTIONS THROUGH LARGE-SCALE OPERATIONS

4.1 This PART examines BD actions on rooftop-podium-lane UBWs (see paras. 4.3 to 4.17) and SDFs (see paras. 4.18 to 4.32) through conducting LSOs.

Background

4.2 In June 2011, the DEVB informed LegCo Panel on Development that LSOs were more effective than handling individual public reports separately as more actionable UBWs would be cleared in one go. The BD conducts LSOs focusing on specific types of UBWs (such as rooftop-podium-lane UBWs and SDFs). For each LSO on a type of UBWs, the BD specifies a number of target buildings for the purpose. LSOs are conducted both by BD in-house officers and BD consultants (Note 21).

LSOs on rooftop-podium-lane UBWs

- 4.3 From 2010 to 2014, the BD had conducted LSOs on rooftop-podium-lane UBWs covering a total of 2,337 target buildings, as follows:
 - (a) 401 buildings in 2010, comprising:
 - (i) 101 buildings by BD in-house officers (LSO 1); and
 - (ii) 300 buildings under 6 consultancies (LSO 2);
 - (b) 782 buildings in 2011 (under 14 consultancies LSO 3);
 - (c) 354 buildings in 2012 (under 6 consultancies LSO 4);
 - (d) 600 buildings in 2013 (under 8 consultancies LSO 5); and

Note 21: The BD selected consultants for LSOs by openly inviting consultants to participate in pre-qualification exercises, followed by inviting pre-qualified consultants to submit tenders for assessment.

- (e) 200 buildings in 2014 (under 5 consultancies LSO 6 (Note 22)).
- 4.4 The total cost of the 39 consultancies amounted to \$35.6 million. The main duties of the consultants included:

(a) Survey stage

• sending letters to the owners/occupants advising the selection of their building for an LSO, conducting a survey of the building to identify UBWs, and submitting a survey report to the BD.

(b) Order-serving stage

• checking ownership details, preparing removal orders for the BD's signature, and sending the orders to the owners.

(c) Compliance-inspection stage

- conducting the 1st compliance inspection after the specified date for action under the order, submitting the 1st compliance inspection report to the BD, and preparing a compliance letter (if the order has been complied with) or a warning letter (if the order has not been complied with) for the BD's signature.
- conducting the 2nd compliance inspection, submitting an inspection report to the BD, and preparing a compliance or warning letter and statement (for taking prosecution actions against defaulted owners) within eight weeks after the endorsement of the 1st compliance inspection report.

(d) Final stage

completing all outstanding work as required under the agreement.
 Upon satisfactory completion of all work, the BD shall issue a completion letter.

Note 22: The five consultancy agreements under LSO 6 (at a total cost of \$7 million) covered a total of 270 target buildings, of which 200 buildings were selected for the combined clearance of rooftop-podium-lane UBWs and SDFs, and the remaining 70 buildings were selected for clearance of UBWs in SDFs.

Significant slippages in completing LSOs

- 4.5 For the 101 buildings covered under LSO 1 (commenced in 2010) conducted by BD in-house officers (see para. 4.3(a)(i)), the BD had set a target of completing the LSO (Note 23) by March 2012. However, Audit examination revealed that, up to October 2014, actions on only 42 buildings had been completed and actions on the remaining 59 buildings were yet to be completed.
- 4.6 For LSOs 2 to 4 (commenced from 2010 to 2012) conducted under consultancies (see para. 4.3(a)(ii) to (c)), after conducting surveys, mainly due to buildings having already been covered in other LSOs, 2, 3 and 5 buildings under LSO 2, LSO 3 and LSO 4 respectively were removed from the operations, leaving 298 (300 less 2), 779 (782 less 3) and 349 (354 less 5) buildings in LSO 2, LSO 3 and LSO 4 respectively. Audit noted that, as of October 2014, actions on 200 buildings (67% of 298 buildings) under LSO 2 and on all the 779 buildings under LSO 3 and 349 buildings under LSO 4 had not been completed (see Table 3).

Note 23: For LSO 1 conducted by BD in-house officers, actions were considered having been completed when the related UBWs had been removed or referred to the BD's Legal Services Section for follow-up action.

Table 3

Progress of outsourced LSOs on rooftop-podium-lane UBWs (October 2014)

	LSO (year commenced)				
Particulars	LSO 2 (2010)	LSO 3 (2011)	LSO 4 (2012)	LSO 5 (2013)	Total
Consultancy awarded					
Number of consultancies	6	14	6	8	34
Number of original target buildings	300	782	354	600	2,036
Number of target buildings after survey (see para. 4.6)	298	779	349	600	2,026
Target completion date (Note)	July 2011 to February 2012	February 2012 to March 2013	February 2013 to January 2014	December 2014	
Action progress as of October	2014 (see p	oara. 4.4 (a)	to (d))		
		Number	of target b	uildings	
Final stage completed	98	0	0	0	98
Action up to 2nd compliance-inspection stage	121	189	56	0	366
Action up to 1st compliance-inspection stage	63	160	118	0	341
Action up to order-serving stage	16	95	56	0	167
Action up to survey stage	0	321	119	496	936
Action in survey stage	0	14	0	104	118
Total	298	779	349	600	2,026
Number of consultancies issue	d with:				
Warning letter (Number of letters)	4 (7)	4 (9)	1 (1)	0 (0)	9 (17)
Adverse performance report (Number of reports)	1 (1)	1 (3)	0 (0)	0 (0)	2 (4)

Source: BD records

Note: The target dates were included in work programmes submitted by consultants,

which was a consultancy requirement.

4.7 According to the BD, as of October 2014, of the total 26 consultancy agreements under LSOs 2 to 4, only two agreements covering 98 buildings had been completed (with final payments made in February 2014 and March 2014 respectively). These two consultancies also had programme slippages. According to BD guidelines, the progress of every consultancy should be closely monitored with a view to ensuring timely completion of tasks. However, as shown in Table 3, there were significant delays in completing the consultancies. Audit analysis revealed that, comparing with the target completion dates, as of October 2014, completion of the 24 (26 less 2) consultancies had been delayed by 9 months to 3 years, as follows:

Period from target completion date to October 2014	Number of consultancies
9 months to 1 year	3 (13%)
More than 1 year to 2 years	14 (58%)
More than 2 years to 3 years	7 (29%)
Total	24 (100%)

4.8 In Audit's view, the significant programme slippages and long time taken to clear UBWs under LSOs have adversely affected the effectiveness of BD action in tackling the UBW problem. The BD needs to strengthen actions with a view to ensuring that the LSOs having programme slippages are completed as soon as possible, and future LSOs are completed by the target completion dates.

Inadequate monitoring of consultant performance

4.9 According to BD guidelines, the BD may issue a warning letter to a consultant having unsatisfactory performance. During the contract period, the BD would issue quarterly performance reports to a consultant and a final performance report upon completion of an agreement. The BD may issue an adverse performance report to a consultant who has been issued with a warning letter.

A consultant who has been issued two and three consecutive adverse performance reports under the same consultancy shall be suspended from bidding the BD's consultancy work of the same category for at least 3 and 12 months respectively. However, notwithstanding the significant slippages in completing consultancies, Audit noted that the BD had only issued few warning letters and adverse performance reports to the consultants of LSOs. As of October 2014, of the 26 consultancies having programme slippages under LSOs 2 to 4 (commenced from 2010 to 2012):

- only 9 consultancies had been issued with a total of 17 warning letters, of which 2 (Consultancy A under LSO 2 and Consultancy B under LSO 3) had been issued with 1 and 3 adverse performance reports respectively; and
- (b) the BD had not issued any warning letter or adverse performance report on the other 17 consultancies.
- 4.10 In Audit's view, the BD needs to strengthen actions on monitoring consultants' performance, and issue warning letters and adverse performance reports to consultants on warranted cases, such as consultancies having significant programme slippages.

Payments prematurely made to consultants before completion of work

4.11 According to BD consultancy agreement, upon satisfactory completion of work, the BD shall issue a completion letter to a consultant signifying the conclusion of the agreement and make the final payment. However, Audit noted that final payments had been made to two consultancies before issue of the completion letters (see Table 4).

Table 4

Premature payments made for two consultancies (February to December 2014)

	Final	Event	
Consultancy	payment date	Date	Particulars
A	6 March 2014	27 February 2014	BD certified final payment
		15 April 2014	Consultant submitted one of the 2nd compliance inspection reports
		2 September 2014	BD issued a completion letter
		15 December 2014	BD endorsed the 2nd compliance inspection report
С	13 February	7 February 2014	BD certified final payment
	2014	Up to 31 December 2014	BD had not issued a completion letter

Source: BD records

4.12 In February and March 2015, the BD informed Audit that:

(a) for Consultancy A, after taking into account the consultant's commitment, difficulty in gaining access for inspection (Note 24) and his promise to

Note 24: *According to the BD:*

- (a) the owner of the concerned target building lodged an appeal against the removal order issued in August 2011, which had caused an unforeseen delay for the consultant to carry out the compliance inspection scheduled for early 2012. The consultant attempted to carry out the first compliance inspection in June 2012 but he was refused entry to the premises;
- (b) the appeal was dismissed by the Appeal Tribunal in November 2012 and the enforcement action could be resumed; and
- (c) since early 2013, the consultant had attempted to contact and liaise with the owner/occupants for carrying out the compliance inspection but could not gain access to the building. In February 2014, the consultant advised the BD twice of the outstanding compliance inspections under the consultancy.

carry out compliance inspection of the concerned target building in March 2014 if he could gain access to the building, the BD considered the service under the consultancy had been satisfactorily completed. Therefore, the BD certified the final payment on 27 February 2014. Subsequently, the consultant carried out compliance inspection and submitted the outstanding compliance report in April 2014. Due to mislaying of the file, the BD issued the completion letter for Consultancy A in September 2014; and

- (b) for Consultancy C, although a completion letter had not been issued when the final payment was made in February 2014, the consultancy was considered having been satisfactorily completed because all related inspection reports had been endorsed by the BD at that time. The completion letter was issued in March 2015.
- 4.13 In Audit's view, the BD needs to take measures to prevent making the final payment to a consultant before satisfactory completion of all work and the issuance of a completion letter.

BD criteria only required one or two UBWs for each target building

4.14 From 2003 to 2010, one of the criteria for selecting target buildings for conducting LSOs on UBWs installed on external walls was that each target building should have more than 10 actionable UBWs. In this connection, the DEVB informed LegCo Panel on Development in June 2011 that LSOs were more effective than the handling of individual public reports as more actionable UBWs would be cleared in one go (see para. 4.2). However, for LSOs 1 to 5 conducted on rooftop-podium-lane UBWs from 2010 to 2013, the selection criterion was that each target building should have at least one actionable UBW (i.e. rooftop-podium-lane UBW). For LSO 6 in 2014, each target building selected should have at least two actionable UBWs (Note 25). In February and March 2015, the BD informed Audit

Note 25: For the 200 buildings selected for combined clearance of rooftop-podium-lane UBWs and SDFs, one of the selection criteria was that each target building should have at least one rooftop-podium-lane UBW and one SDF (i.e. two actionable UBWs). For the 70 buildings selected for clearance of UBWs in SDFs, each target building selected should have at least one SDF.

that according to BD guidelines, while the selection criterion was that each target building should have at least one or two actionable UBWs, this was only the minimum requirement and did not mean that a building with one or two actionable UBWs would be selected automatically. In fact, on average, 16 UBWs were identified in each target building in recent LSOs.

4.15 According to the BD's Building Condition Information System (BCIS — see PART 6), as of October 2014, a total of 19,101 removal orders had been issued covering 30,968 actionable UBWs identified under LSOs 2 to 4 (commenced from 2010 to 2012). However, Audit noted that the BD had not produced management reports on the number of removal orders issued and actionable UBWs identified in each target building. In Audit's view, in order to assess the effectiveness of the BD's selection of target buildings for carrying out LSOs, the BD needs to produce related management reports.

Audit recommendations

- 4.16 Audit has recommended that the Director of Buildings should:
 - (a) strengthen actions with a view to ensuring that LSOs 1 to 5 are completed as soon as possible;
 - (b) strengthen actions with a view to ensuring that LSOs are completed by the target completion dates;
 - (c) strengthen actions on monitoring consultants' performance, and issue warning letters and adverse performance reports to consultants on warranted cases, such as consultancies having significant programme slippages;
 - (d) take measures to prevent making the final payment to consultants before satisfactory completion of all work and the issuance of a completion letter;
 - (e) review the effectiveness of BD selection criteria which state that a target building having even one or two actionable UBWs may be selected for conducting an LSO; and

(f) produce management reports on the number of removal orders issued and actionable UBWs identified in each target building under an LSO.

Response from the Government

- 4.17 The Secretary for Development and the Director of Buildings agree with the audit recommendations. They have said that:
 - (a) regarding paragraph 4.16(a) to (c), the BD has taken the following measures:
 - (i) pursuant to a review on consultancy performance in 2012, the BD has embarked on a number of enhancement measures, including improving the process of assessing consultants' performance, rationalisation of the size and contract period of consultancies and timely use of warning letters. The detailed measures were finalised and promulgated after consultation with staff;
 - (ii) in October 2013, the BD revamped its internal guidelines on Performance of the Outsourced Consultants to provide clearer division of responsibility between different levels of BD staff on monitoring of the consultants' performance;
 - (iii) in early 2014, the BD set up a "Warning Letter Register" to keep track of warning letters issued to its consultants and facilitate the consideration of issuing adverse performance reports. To assist in closer monitoring of the deployment of staff resources by consultants, the BD also set up in early 2014 a "Man-hour Database" on the approved key staff of consultants which is updated on a monthly basis. The database facilitates the BD's consideration of consultants' tender submissions and proposed changes of key staff during the consultancy services; and

- (iv) the BCIS has been customised recently to facilitate progress monitoring of various stages (such as survey, order-serving and compliance-inspection stages) according to the target completion date for each target building under LSOs; and
- (b) regarding paragraph 4.16(e), the BD will devise a specific set of selection criteria for each LSO, taking into account the objective of the LSO, target hazards to be dealt with, manpower situation and the latest departmental policies on building safety. The BD will refine the wording of the selection criteria in its guidelines to avoid misunderstanding.

LSOs on sub-divided flats

- An SDF refers to a flat (as shown on the approved building plan) having been sub-divided into two or more smaller self-contained units (sub-divided units) for sale or for rental. Each of these smaller units usually contains its own toilet, and some even have their own cooking places. Sub-dividing a flat often involves demolishing partition walls and erecting new ones, altering or expanding the water supply and drainage system within the unit, raising the floor slab to embed the added or diverted pipes, and providing additional doors and ventilation openings. Some SDFs are not illegal as the relevant works may have been approved by the BD or carried out under the MWCS. However, building works in contravention of the Buildings Ordinance are UBWs and subject to BD enforcement actions.
- 4.19 In July 2010, the DEVB informed LegCo Panel on Development that SDFs would give rise to the following problems:
 - (a) overloading the building due to additional structures, and causing structural danger to the building concerned;
 - (b) water seepage constituting health hazards and environmental nuisance or, more seriously, leading to gradual deterioration of the building structure; and
 - (c) obstruction to means of escape or means of access for fire fighting and rescue, causing danger in the event of a fire or an accident.

- 4.20 In December 2014, the Transport and Housing Bureau informed LegCo that:
 - (a) according to a survey commissioned by the Census and Statistics Department on households living in sub-divided units, it was estimated that there were 86,400 residential sub-divided units in Hong Kong. In view of various concerns expressed by the community, the Government would not introduce any licensing or landlord registration system for residential sub-divided units; and
 - (b) the building and fire safety of those living in sub-divided units should under no circumstances be compromised. The BD would continue to step up efforts to eradicate sub-divided units in industrial buildings and take enforcement action against building and fire-safety irregularities of sub-divided units in residential and composite buildings.
- 4.21 From 2011 to 2014, the BD had conducted seven LSOs on SDFs covering a total of 34,605 flats located in 1,092 target buildings (see Table 5):

Table 5
LSOs on SDFs (2011 to 2014)

LSO	Date commenced	Type of building (Note 1)	Number of target buildings	Number of flats covered	Original target completion date	Conducted by/under
7	April 2011	Residential and composite	116	4,091	January 2012	BD in-house officers
8	December 2011	Residential and composite	338	6,762	September 2012	BD in-house officers
9	April 2012	Industrial	30	2,226	March 2013	BD in-house officers
10	June 2013	Industrial	30	3,581	June 2014	BD in-house officers
11	September 2013	Residential and composite	270	6,159	December 2014 (Note 2)	5 BD consultancies
6 (see Note 22 to para. 4.3(e))	November 2014	Residential and composite	270	9,980	May 2016 (Note 2)	5 BD consultancies
12	December 2014	Industrial	38	1,806	April 2016	BD in-house officers
		Total	1,092	34,605		

Source: BD records

Note 1: A composite building is one used partly for commercial and partly for residential purposes.

Note 2: In March 2015, the BD informed Audit that the target completion dates for LSOs 11 and 6 had been revised to July 2015 and September 2016 respectively.

4.22 The main duties of BD in-house officers and consultants included taking action at the survey stage, order-serving stage, compliance-inspection stage and final stage (see para. 4.4). The total cost of the 10 BD consultancies under LSOs 6 (totalled \$7 million) and 11 (totalled \$5.4 million) amounted to \$12.4 million.

Actual number and percentage of SDFs found under LSOs not published

4.23 Table 6 shows the number of flats found under LSOs 7 to 11 (LSOs 6 and 12 had not yet commenced) having been sub-divided as of October 2014.

Table 6
SDFs found in LSOs
(October 2014)

		Actua	al SDFs found
LSO	Number of flats covered (a)	Number (b)	Percentage $(c) = (b) \div (a) \times 100\%$
7	4,091	823	20%
8	6,762	1,547	23%
9	2,226	264 (Note 1)	12%
10	3,581	133 (Note 2)	4%
11	6,159	1,225	20%
Overall	22,819	3,992	17%

Source: Audit analysis of BD records

Note 1: Of the 264 SDFs, 34 were found having been sub-divided for residential purposes.

Note 2: Of the 133 SDFs, 4 were found having been sub-divided for residential purposes.

4.24 According to the BD, for industrial buildings covered under the LSOs on SDFs, it would only take enforcement actions on those having been used for residential purposes. Audit noted that the BD had not published the actual number and percentage of SDFs found under LSOs on SDFs.

- 4.25 In February and March 2015, the BD informed Audit that:
 - (a) based on LSOs conducted in recent years, about 20% to 30% of flats in residential and composite buildings were found having been sub-divided. The lower percentage of industrial buildings having SDFs was expected due to the Government's efforts in publicity and enforcement in recent years delivering a clear message of the illegitimacy of such use; and
 - (b) regarding the publication of information of percentage of SDFs found in buildings, the DEVB and the BD considered that:
 - (i) the information would unlikely be of public concern; and
 - (ii) provision of a percentage in a simple format might mislead the public on generalising the concentration of SDFs in buildings in Hong Kong, which varied in different buildings and districts.
- 4.26 In view of public concern over the building and fire safety of sub-divided units (see para. 4.20), Audit considers that there are merits for the BD to publish on its website the actual number and percentage of SDFs found vis-a-vis the total number of flats covered under LSOs on SDFs.

Significant slippages in completing LSOs on SDFs

4.27 As of October 2014, target completion dates of LSOs 7 to 10 had already lapsed (see Table 5 in para. 4.21). However, Audit noted that actions on the following target buildings had not been completed:

	Number of target buildings			
LSO	Total	Actions not completed (as of October 2014)		
7	116	65	(56%)	
8	338	253	(75%)	
9	30	23	(77%)	
10	30	16	(53%)	
Overall	514	357	(69%)	

- 4.28 Regarding LSO 11, as of October 2014, BD consultants had encountered access problems in entering 1,073 SDFs (88% of 1,225 SDFs identified during preliminary inspections at the common areas of target buildings) for conducting detailed inspections under the LSO.
- 4.29 In February 2015, the BD informed Audit that it was not uncommon for BD officers and consultants to encounter access problems and more time was required to gain access to SDFs for conducting inspections.
- 4.30 In Audit's view, the BD needs to strengthen actions with a view to ensuring that LSOs on SDFs having programme slippages are completed as soon as possible, and future LSOs are completed according to target completion dates (see para. 4.16(b)).

Audit recommendation

4.31 Audit has *recommended* that the Director of Buildings should strengthen actions with a view to ensuring that LSOs 7 to 11 are completed as soon as possible.

Response from the Government

4.32 The Secretary for Development and the Director of Buildings agree with the audit recommendation. They have said that the BD will review the programmes of LSOs 7 to 11 and explore measures for timely completion of the LSOs.

PART 5: FOLLOW-UP ACTIONS ON REMOVAL ORDERS

- 5.1 This PART examines the BD's follow-up actions after issuing removal orders to pertinent property owners, focusing on the following areas:
 - (a) administration of removal orders (paras. 5.2 to 5.21);
 - (b) prosecution actions on non-compliant removal orders (paras. 5.22 to 5.32);
 - (c) default works carried out by BD contractors (paras. 5.33 to 5.39); and
 - (d) actions to recover costs of default works (paras. 5.40 to 5.47).

Administration of removal orders

Upon identification of an actionable UBW, the BD will issue a removal order requiring the pertinent owner to remove the UBWs by a specified date (normally within 60 days), and may register the order at the LR. Under the Buildings Ordinance, a person who fails to comply with the requirements under a removal order without reasonable excuse may be subject to prosecution. The person is liable, on conviction, to a maximum fine of \$200,000 and to imprisonment for one year, and to a daily maximum fine of \$20,000 for each day during which the failure to comply with a removal order has continued. Under the Buildings Ordinance, an owner served with a removal order may appeal to the Appeal Tribunal (Note 26) within 21 days of the issue of the order. Under the circumstance, actions on the order would be suspended awaiting the Tribunal's ruling.

Note 26: An Appeal Tribunal, appointed by the Chief Executive of the Hong Kong Special Administrative Region for each appeal case, is formed comprising a chairman (who is qualified for appointment as a District Judge) and not less than two members to hear and determine an appeal against a decision made by the BD in the exercise of a discretion under the Buildings Ordinance.

Some removal orders not having been registered at the LR

- In May 2004, the DEVB informed LegCo that, upon the service of a removal order on an owner, the BD would at the same time send a copy of the order to the LR for registration. According to the DEVB and the BD, registration of UBW information at the LR would enhance consumer protection on prospective property buyers, who will become aware of the existence of UBWs in the related premises through conducting a land search at the LR.
- 5.4 In this connection, in September 2010, the LR informed the BD of the following views of a legal professional association that:
 - (a) some removal orders had not been sent to the LR for registration; and
 - (b) when legal professionals made enquiries to the BD on whether certain removal orders had been registered at the LR, the BD would only give a standard reply referring the enquirers to conduct a land search at the LR.

At a meeting held in December 2010, the legal professional association informed the BD that some orders had only been sent to the LR for registration more than one year after the dates of issuing the orders. The association also requested the BD to send all removal orders to the LR for registration as soon as possible, because delays in registration of removal orders had caused great inconvenience to the legal profession in handling property transactions.

In April 2014, the DEVB informed LegCo Finance Committee (FC) that the BD did not keep statistics on the number of removal orders registered at the LR. From 2004 to 2013, the BD issued a total of 261,907 removal orders (see Table 2 in para. 3.3). Audit examination revealed that, as of October 2014, the BD's BCIS only recorded the dates of sending 2,654 orders (1% of 261,907 orders) to the LR for registration. Therefore, there was little assurance that all the removal orders had been sent to and registered at the LR.

5.6 In February 2015, Audit selected 30 of the 907 removal orders issued in May 2013 of which the dates of referral to the LR had not been recorded in the BCIS, and conducted search at the LR to ascertain whether they had been registered. The results are as follows:

	Number of removal orders	
Issued in May 2013 selected by Audit for checking in February 2015	30 (100%)	
<u>Less:</u> Found having been registered at LR	25 (83%)	
Order being complied with by owner in August 2014	1 (4%)	
Found not having been registered at LR	4 (13%)	

- 5.7 Regarding the four removal orders not having been registered at the LR:
 - one of the orders (removal order A) had been withdrawn because the order had been served on a person who was not the owner of the concerned property. In October 2013, the LR provided the ownership particulars to the BD. However, up to January 2015, the BD had not issued a new removal order to the owner;
 - (b) for other two orders (removal orders B and C), the BD noted in August and October 2013 that the respective ownership of the concerned properties had changed. However, up to January 2015, the BD had not issued new removal orders to the new owners; and
 - (c) for the remaining order (removal order D), there was no change in ownership of the concerned property from May 2013 to January 2015.
- 5.8 In February and March 2015, the BD informed Audit that:
 - (a) unlike warning notice (see para. 3.21), registration of removal orders at the LR was not a statutory requirement under the Buildings Ordinance. Notwithstanding this, since 2011, it had been the BD's standard procedure

- to send all removal orders to the LR for registration. Before 2011, all removal orders would be registered after conducting the 1st compliance inspection; and
- (b) there was no readily available means to identify those removal orders that had not been registered at the LR, and the checking could only be done when follow-up actions were to be taken for individual orders. Given the large number of removal orders issued by the BD every year, it would not be an effective use of the staff resources to input the dates of referral and registration of removal orders at the LR into the BCIS retrospectively.
- In Audit's view, the BD needs to conduct a review of those outstanding removal orders (i.e. the related UBWs not having been completely removed) that have not been registered at the LR and take remedial actions as soon as possible. The BD also needs to take measures to ensure that the dates of referral and registration of removal orders at the LR are promptly input into the BCIS in future. The four removal orders (not having been registered at LR) in paragraph 5.7 also highlighted that the BD had not followed up orders that could not be or had not been registered. Therefore, the BD needs to take more proactive and timely actions on the issue. The BD also needs to take actions regarding the four removal orders (not having been registered at LR) identified by Audit (see para. 5.7) as soon as possible.

Long time taken to register removal orders at LR

Regarding the 2,654 removal orders having records in the BCIS of being sent to the LR for registration, Audit examination revealed that 80% of them had been sent to the LR more than one month after the issue of the pertinent orders, as follows:

Period from issuance of removal order to sending to LR for registration	Number of removal orders		
1 month or less	529 (20%)		
More than 1 month to 1 year	1,276 (48%)		
More than 1 year to 3 years	807 (30%)		
More than 3 years to 8 years	42 (2%)		
Total	2,654 (100%)		

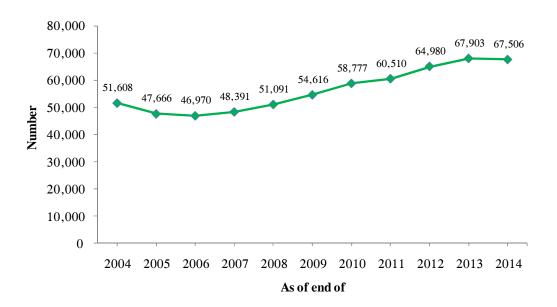
5.11 In Audit's view, in order to enhance consumer protection and strengthen deterrent effects on UBW owners, the BD needs to refer removal orders to the LR for registration timeously.

Targets on clearing removal orders not met

5.12 The number of outstanding removal orders has risen since 2006 (see Figure 4).

Figure 4

Number of outstanding removal orders (2004 to 2014)



Source: BD records

- 5.13 According to the BD, a removal order is considered to be "cleared" when:
 - (a) the related UBW has been completely removed;
 - (b) prosecution action has been initiated by the BD;
 - (c) default works are being carried out by BD contractors; or

- (d) the order is superseded or withdrawn (Note 27).
- Since 2004, in the first quarter of each year, the BD has set targets on the number of removal orders to be cleared by March of the following year. According to the BD, it sets clearance targets having regard to its resource and workload and, in general, long-outstanding orders are accorded higher priority for clearance. Audit examination revealed that the BD did not meet its targets on clearing all the removal orders issued from 2004 to 2009 (see Table 7).

Table 7
Clearance of removal orders (2004 to 2009)

Removal orders issued		Target date to	Actual clearance percentage as of		
Year	Number	achieve 100% clearance	Date in column (c)	December 2014	
(a)	(b)	(c)	(d)	(e)	
2004	29,201	March 2008	94%	99%	
2005	25,582	March 2009	92%	97%	
2006	34,095	March 2010	94%	97%	
2007	36,339	March 2011	85%	89%	
2008	34,548	March 2013 (Note)	75%	80%	
2009	32,989	March 2014 (Note)	71%	75%	

Source: Audit analysis of BD records

Note: In March 2014, the BD lowered the clearance targets on removal orders issued in 2008 and 2009 to achieving 80% and 75% clearance respectively by March 2015.

Note 27: According to BD guidelines:

- (a) a removal order may be superseded by a new order if there is a change in ownership or an error in the original order is found; and
- (b) a removal order may be withdrawn if a UBW has been modified to the extent that it does not pose any danger to the public and is non-actionable.

5.15 Up to December 2014, only 89%, 80% and 75% of the removal orders issued in 2007, 2008 and 2009 respectively had been cleared, and the BD had not set target dates to achieve 100% clearance of removal orders issued from 2010 to 2014. In Audit's view, the BD needs to strengthen actions with a view to meeting its time targets on clearing outstanding removal orders issued in each of the previous years.

No monitoring of long-outstanding UBWs and UBWs associated with safety concern

5.16 As of October 2014, some of the 68,134 outstanding removal orders had been issued for a long time, as follows:

Period from issuance of removal order to October 2014	Number of outstanding removal orders	
More than 6 years to 10 years	14,514 (21%)	
More than 10 years to 30 years	753 (1%)	
Total	15,267 (22%)	

5.17 Furthermore, of the 68,134 outstanding removal orders, 7,227 orders (11%) related to UBWs associated with structural or higher fire-safety concern (which were accorded topmost priority for clearance by the BD — see para. 3.6), and most of them had been issued for a long time, as follows:

Period from issuance of removal order to October 2014	Number of outstanding removal orders	
2 years or less	2,045 (28%)	
More than 2 years to 6 years	3,342 (46%)	
More than 6 years to 10 years	1,767 (25%)	
More than 10 years to 18 years	73 (1%)	
Total	7,227 (100%)	

- 5.18 According to the DEVB and the BD:
 - (a) for external UBWs associated with structural concern, their safety condition may deteriorate with the passage of time due to wear and tear and lack of proper maintenance, which may pose public safety risks; and
 - (b) the risk level of UBWs associated with fire-safety concern would not change over time.
- 5.19 In Audit's view, the BD needs to take actions to periodically conduct safety inspections of external UBWs associated with structural concern, and take prompt action on UBWs posing public safety risks.

Audit recommendations

- 5.20 Audit has recommended that the Director of Buildings should:
 - (a) conduct a review of the outstanding removal orders to identify those that have not been registered at the LR and take remedial actions as soon as possible;
 - (b) take measures to ensure that the dates of referral and registration of removal orders at the LR are promptly input into the BCIS in future;
 - (c) take actions regarding the four removal orders (that had not been registered at the LR) identified by Audit as soon as possible;
 - (d) take measures to refer removal orders to the LR for registration timeously;
 - (e) strengthen actions with a view to meeting BD time targets on clearing outstanding removal orders issued in each of the previous years; and
 - (f) take actions to periodically conduct safety inspections of external UBWs associated with structural concern, and take prompt action on UBWs posing public safety risks.

Response from the Government

- 5.21 The Secretary for Development and the Director of Buildings agree with the audit recommendations. They have said that:
 - (a) regarding paragraph 5.20(b), as part of the BCIS revamping project (see para. 6.6), the BD will explore with the LR the feasibility for the LR to provide computer data to the BD on registration of removal orders for automatic uploading onto the BCIS in future; and
 - (b) regarding the four removal orders (that had not been registered at the LR) identified by Audit (see paras. 5.7 and 5.20(c)):
 - (i) for removal order A, the service of a new order depends on the outcome of the ongoing appeals relating to other six removal orders, since the UBW involved in removal order A is an integral structure of the UBWs involved in the six orders;
 - (ii) for removal orders B and C, new orders were issued to the new owners on 6 March and 27 February 2015 respectively, and were sent to the LR for registration on the dates of issue; and
 - (iii) removal order D was sent to the LR for registration on 27 February 2015.

Prosecution actions on non-compliant removal orders

5.22 Under delegated authority from the Department of Justice, some officers of the BD Legal Services Section (under the Corporate Services Division) may act as prosecutors in prosecution cases relating to non-compliance with removal orders issued by the BD. For warranted cases referred from the BD's divisions, the Legal Services Section will arrange for issue of summonses on the related building owners.

5.23 In the past five years from 2010 to 2014, 8,370 owners had been convicted of non-compliance with removal orders, as follows:

Year	Number of convicted owners	
2010	1,611	
2011	1,844	
2012	1,328	
2013	1,955	
2014	1,632	
Total	8,370	

The related penalties included fines ranging from no fine to \$100,000, as follows:

Fine	Number of cases
Nil	88 (1%)
\$100 to \$500	597 (7%)
\$501 to \$1,000	1,393 (17%)
\$1,001 to \$2,000	2,043 (24%)
\$2,001 to \$5,000	2,584 (31%)
\$5,001 to \$10,000	1,024 (12%)
\$10,001 to \$100,000	641 (8%)
Total	8,370 (100%)

Follow-up actions on removal orders

- The court also imposed imprisonment in 4 cases, as follows:
 - (a) 3 cases for imprisonment for two, four and six months respectively, all with suspended sentence; and
 - (b) 1 case for imprisonment for one month.

On average, court hearings on related summonses were finalised within 3.5 months from the dates of issuing the summonses.

Summonses not issued on cases meeting BD prosecution criteria

- 5.25 According to BD guidelines, prosecution actions should be taken on non-compliant UBW cases meeting one of the following nine criteria:
 - (a) a UBW associated with a residential SDF in an industrial building, or an SDF in a residential or composite building causing complete blockage of means of escape;
 - (b) a UBW being identified under an LSO and posing serious hazard to life and limb (e.g. serious blockage of means of escape and removal of a staircase);
 - (c) a UBW the owner of which has committed the same offence two or more times;
 - (d) a UBW contravening the MWCS requirements;
 - (e) for a UBW case being identified through a public report, the UBW posing imminent danger, causing serious health hazards or environmental nuisance to the public, found being newly constructed or under construction;
 - (f) a UBW on which repeated public reports have been received;

- (g) prosecution of a UBW owner may have immediate influence on other owners to remove their UBWs in the vicinity;
- (h) a removal order with the specified date for action having lapsed for over 10 years; or
- (i) a UBW which is excessive in scale and in blatant disregard of law or public safety.
- The BD guidelines also state that the possibility that a defendant may advance a reasonable excuse as defence does not constitute a reason for not taking prosecution actions against UBW owners. According to the BD, items (a) to (c) in paragraph 5.25 are accorded the highest priority for taking prosecution actions, item (d) is accorded a higher priority and items (e) to (i) are not accorded any order of importance.
- Audit also noted that, of the 68,134 outstanding removal orders as of October 2014 (see para. 5.16), only 9,608 (14%) had been referred to BD Legal Services Section for taking prosecution action against non-compliant owners. Regarding the remaining 58,526 (86%) cases, the BD did not have information indicating the number of such cases meeting one or more of the nine priority criteria for prosecution (see para. 5.25). In this connection, Audit examination of two cases (see Cases 3 and 4) revealed that, up to February 2015, no summonses had been issued to the non-compliant owners although the related UBWs had met 3 or more of the 9 prosecution criteria.

Case 3

A long-outstanding UBW on Hong Kong Island

- 1. In September 2002, the BD received a public report that the lower ground floor of a residential building on Hong Kong Island had been altered without BD approval. In the same month, the BD inspection found that the owner of the related floor had erected in his 435-square-feet flat a number of UBWs, including removal of a wall and a staircase, erection of a new staircase and unauthorised occupation of a space to create an additional area of 708 square feet. The BD's assessment revealed that it would be dangerous for any person to use the expanded area.
- 2. In January 2004, the BD issued a removal order to the owner requiring him to reinstate by May 2004 the affected parts of the building back to those stated in the approved building plan. In April 2008, the BD issued a warning letter to the owner stating that the BD was considering taking prosecution action against him.
- 3. From February 2010 to July 2012, the BD received three more public reports on the concerned UBWs, with two reports raised by the same person. In July 2014, the BD issued another warning letter to the owner. Up to February 2015, the case had not been referred to the BD Legal Services Section for taking prosecution action.

Audit comments

4. In this case, although four prosecution criteria (see items (e), (f), (h) and (i) in para. 5.25) were met, up to February 2015, the BD had not taken prosecution action against the non-compliant owner.

BD response

- 5. In March 2015, the BD informed Audit that:
 - (a) at the early stage, the owner had employed an authorised person to handle the removal works and prosecution action was therefore not initiated. Subsequently, in view of negative response from the owner and authorised person, the BD had attempted to conduct inspection in order to establish non-compliance of the removal order for initiating prosecution action. However, the BD could not gain access to the premises; and
 - (b) the BD would take action to apply for a court warrant for entering the premises for enforcement actions.

Source: BD records

Case 4

A long-outstanding UBW on Lantau Island

- 1. In March 2004, the BD received a public report that a UBW was under construction at the yard of a residential building on Lantau Island. On the next day, a BD consultant's inspection found that an unauthorised aluminium structure was being erected. The consultant submitted an inspection report to the responsible BD officer and the Legal Services Section, and recommended that a removal order be issued and prosecution be instigated. In April 2004, the BD received a report from another person on the same UBW.
- 2. In August 2004, the BD issued a removal order to the owner requiring him to demolish the UBW by September 2004. In December 2004, after taking witness statements from two witnesses, BD Legal Services Section sought directions from the responsible BD officer on whether prosecution action should be taken against the owner. In October 2006, BD consultant also submitted his witness statement to the BD. Up to February 2015, prosecution action had not been taken on the case.

Audit comments

- 3. In this case, although three prosecution criteria (see items (e), (f) and (h) in para. 5.25) were met, up to February 2015, the BD had not taken prosecution action against the non-compliant owner.
- 4. In this connection, in January 2001, the DEVB informed the then LegCo Panel on Planning, Lands and Works that new UBWs of any sort should be cleared as soon as they were identified in order to give a clear message to the public that the Government would not tolerate perpetuation of the UBW problem. In Audit's view, the BD needs to strengthen prosecution actions on new UBWs.

BD response

- 5. In March 2015, the BD informed Audit that:
 - (a) prosecution actions against persons for carrying out new UBWs without the BD's prior approval and consent had ceased in December 2004, and the dedicated investigation teams on new UBWs were disbanded in the year. Therefore, prosecution action in this case was not pursued; and
 - (b) the BD was initiating prosecution action against the owner on the non-compliance of the removal order.

Source: BD records

5.28 In Audit's view, the BD needs to conduct a review of the 58,526 outstanding removal orders (see para. 5.27) with a view to identifying cases warranting the issue of summonses according to BD criteria for prosecution (see para. 5.25).

Estimates on issuing summonses not met

Audit examination revealed that the BD did not meet its estimates on the number of summonses (relating to non-compliance with removal orders) issued in 2010, 2011, 2012 and 2014, as follows:

Year	Estimated number of summonses (a)	Actual number of summonses (b)	Percentage $(c) = (b) \div (a) \times 100\%$
2010	3,000	2,616	87%
2011	3,000	2,264	75%
2012	3,300	2,105	64%
2013	2,500	2,515	101%
2014	3,000	2,532	84%
Overall	14,800	12,032	81%

In October 2010, the DEVB informed LegCo that, since there were views in the community that a tougher stance should be taken against non-compliant UBW owners to create stronger deterrent effects, in order to protect public safety, the BD would instigate prosecution action more readily to sanction owners who did not duly observe the statutory orders (including removal orders). In Audit's view, the BD needs to take measures to ensure that its estimates on issuing summonses on related cases are met.

Audit recommendations

- 5.31 Audit has recommended that the Director of Buildings should:
 - (a) strengthen prosecution actions on new UBWs in order to give a clear message to the public that the Government would not tolerate perpetuation of the UBW problem;
 - (b) conduct a review of outstanding removal orders with a view to identifying cases warranting the issue of summonses according to BD criteria for prosecution; and
 - (c) take measures to ensure that BD estimates on issuing summonses on non-compliant UBW owners are met.

Response from the Government

5.32 The Secretary for Development and the Director of Buildings agree with the audit recommendations.

Default works carried out by BD contractors

- 5.33 Under section 24 of the Buildings Ordinance, if an owner of a UBW fails to comply with a removal order within the specified period, the BD may carry out the works on behalf of the owner (default works) and recover the costs from him.
- 5.34 From 2009 to 2013, the BD had completed default works on 174 UBW cases, involving a total expenditure of \$14.77 million.

Default works not carried out on many UBWs meeting BD criteria

5.35 According to BD guidelines, default works should be carried out under the following special circumstances:

- (a) a UBW owner having excusable reasons for not complying with the removal orders after trying reasonable and legitimate efforts and showing real intention to comply with the orders;
- (b) a UBW posing a risk to life or limb or causing public nuisance;
- (c) a highly publicised case;
- (d) a highly political case; or
- (e) a UBW involving a blatant breach of the law (e.g. re-construction of the UBW shortly after its removal).
- 5.36 In March 2015, the DEVB and the BD informed Audit that:
 - (a) the criteria in paragraph 5.35 set out the types of situations suitable for carrying out default works, and it did not mean that the BD should proceed with default works for each and every case meeting such criteria; and
 - (b) default works should not be over-emphasised as it remained the owner's responsibility to comply with a removal order and, in the event of non-compliance, the BD should make use of prosecution action to induce him to remove the UBW.
- Audit examination of the 68,134 outstanding removal orders as of October 2014 revealed that 98 (0.1%) of these orders had been issued with default works orders. Furthermore, of the remaining 68,036 (68,134 less 98) outstanding orders, 7,216 (11%) were classified as relating to UBWs that may pose structural or higher fire-safety risks (see para. 5.17). In particular, 73 of these 7,216 outstanding orders had been issued for over 10 years. Moreover, Audit noted that the BD did not have information indicating the number of non-compliant UBW cases meeting BD criteria for default works. In Audit's view, the BD needs to conduct a review of the 68,036 outstanding orders with a view to identifying cases warranting the carrying out of default works. Thereafter, the BD needs to devise an action plan with timeframe for carrying out default works for warranted cases. In order to enhance public safety, the BD also needs to strengthen actions to carry out default works for UBWs associated with structural or higher fire-safety concern.

Audit recommendations

- 5.38 Audit has recommended that the Director of Buildings should:
 - (a) conduct a review of the outstanding removal orders with a view to identifying cases warranting the carrying out of default works;
 - (b) devise an action plan with timeframe for carrying out default works for warranted cases; and
 - (c) in order to enhance public safety, strengthen actions to carry out default works for removing UBWs associated with structural or higher fire-safety concern.

Response from the Government

5.39 The Secretary for Development and the Director of Buildings agree with the audit recommendations. They have said that the BD will give priority to carrying out default works on UBWs associated with structural or higher fire-safety concern.

Actions to recover costs of default works

- 5.40 Under sections 24 and 33 of the Buildings Ordinance, the BD may recover the costs, supervision charges plus a surcharge of not exceeding 20% of the cost from the owner for carrying out removal works on the UBWs. According to BD guidelines, the BD will take the following actions to recover the costs from the pertinent owners upon completion of default works:
 - (a) finalising the account of default works and issuing demand notes to the owners of UBWs;
 - (b) serving a certificate under section 33 of the Buildings Ordinance (s.33 certificate) on an owner who does not promptly settle the demand note, and registering the certificate at the LR, which will constitute a first charge against the title of the property. Under this legal charge, the BD may sell or lease the property for the purpose of settling any outstanding default-works cost; and

- (c) referring appropriate cases to the Department of Justice for taking legal action for recovering the debts.
- 5.41 Of the total 174 default works completed from 2009 to 2013 involving a total cost of \$14.77 million (see para. 5.34), as of October 2014, the BD had not recovered \$8.94 million (61% of \$14.77 million) in 99 cases (57% of 174 cases).

Time targets for cost recovery actions not met

According to BD guidelines, demand notes should be issued to owners of UBWs within 6 months after completion of default works. However, Audit examination revealed that, as of October 2014, of the 99 cases having completed default works with outstanding costs, the BD had not issued demand notes to the UBW owners of 42 cases, which involved a total outstanding cost of \$5.73 million. As of October 2014, the 42 cases had been completed for 10 months to 4 years and 10 months, as follows:

Period from works completion to October 2014	Number of cases not yet issued with demand notes	
10 months to 24 months	15 (36%)	
More than 24 months to 36 months	15 (36%)	
More than 36 months to 58 months	12 (28%)	
Total	42 (100%)	

According to BD guidelines, s.33 certificates should be registered at the LR within 4 months after issue of the demand notes. However, Audit examination revealed that, as of October 2014, of the 57 (99 less 42) cases having completed default works where demand notes had been issued, s.33 certificates for 38 cases (67%) had been registered at the LR and 18 cases (32%) had not been registered at the LR (Note 28). As of October 2014, 13 of the 18 cases had been outstanding for more than 4 months, contrary to the BD's 4-month time target, as follows:

Note 28: For the remaining case, the BD had granted approval to the UBW owner to settle the outstanding balance by instalments and hence it had not served the s.33 certificate on the owner.

Period from issuance of demand note to October 2014	Number of s.33 certificates not yet registered at LR	
7 months to 12 months	4 (31%)	
More than 12 months to 24 months	7 (54%)	
32 months and 52 months	2 (15%)	
Total	13 (100%)	

- 5.44 Under section 33 of the Buildings Ordinance, a first charge from registration of an s.33 certificate shall be void and no liability shall accrue to a bona fide purchaser if he has acquired a property and registered an interest in the property after the date of completion of default works but before the registration of an s.33 certificate. Furthermore, under the Limitation Ordinance (Cap. 347), legal action to recover costs must be taken within 6 years from the completion date of default works.
- In order to protect the Government's financial interest, the BD needs to take measures to ensure that demand notes are issued to UBW owners within 6 months after completion of default works, and s.33 certificates are registered at the LR within 4 months after issue of related demand notes.

Audit recommendations

- 5.46 Audit has recommended that the Director of Buildings should take measures to ensure that BD officers:
 - (a) issue demand notes to owners of UBWs within 6 months after completion of default works; and
 - (b) register s.33 certificates at the LR within 4 months after issue of related demand notes.

Response from the Government

5.47 The Secretary for Development and the Director of Buildings agree with the audit recommendations.

PART 6: SYSTEM FOR SUPPORTING ENFORCEMENT ACTIONS

6.1 This PART examines the BD's computer information system deployed in supporting its enforcement actions on UBWs.

Building Condition Information System

- 6.2 In April 2000, in seeking funding of \$19.7 million for implementing the BCIS, the BD informed the FC that the BCIS's functions would include providing:
 - (a) an effective means of recording, processing and retrieving details of complaints, referrals, planned surveys, statutory orders, works orders and consultancy assignments;
 - (b) timely and up-to-date information on the status of complaints, statutory orders and referrals for internal monitoring and handling of enquiries;
 - (c) searches on the basic data of individual private buildings and maintaining records of UBWs reported to and inspected by the BD; and
 - (d) enquiries and statistical reporting facilities for operational and planning purposes.

The BCIS was fully implemented in November 2002.

BCIS data quality review

6.3 In September 2010, the BD completed a review (2010 Review) of the quality of data (Note 29) maintained in the BCIS. According to the 2010 Review report submitted to BD senior management:

Note 29: In March 2015, the DEVB and the BD informed Audit that the review focused on the quality of core BCIS data, namely those bearing direct relevance to the BD's performance indicators shown in its COR, Monthly Digests and webpage.

- (a) the overall data recorded in the BCIS were 95.9% complete and 85.4% accurate, and the input of 3.3% of data had been delayed; and
- (b) the completeness, accuracy and timeliness of some data were unsatisfactory, which had affected the information released to the public through the BD's COR and website.
- 6.4 The salient recommendations of the 2010 Review included:
 - (a) issuing new guidelines to BD officers outlining the workflow of data entry, crucial data fields and responsibilities of different ranks of officers in maintaining the BCIS data;
 - (b) arranging regular tailor-made training or refreshment courses for BCIS users; and
 - (c) strengthening the monitoring on the completeness, accuracy and timeliness of BCIS data through regular exception reports generated from the system.

According to the BD, by March 2013, the 2010 Review recommendations had been implemented.

- In July 2014, the BD completed another review (2014 Review) on the quality of data (see Note 29 to para. 6.3) maintained in the BCIS. Comparing with the 2010 Review, the 2014 Review report found that:
 - (a) the overall BCIS data completeness and accuracy rates had improved to 98.9% and 97.4% respectively, and input of 3.2% data had been delayed; and
 - (b) most of the identified data deficiencies would not affect the BD's information released to the public.

The 2014 Review recommended that some improvement measures should be incorporated into the BCIS revamping project (see para. 6.6).

BCIS revamping project

6.6 In February 2014, in the light of the obsolete and outdated hardware, software and technology of the BCIS, the Office of the Government Chief Information Officer (OGCIO — Note 30) approved the BD's proposal to revamp the BCIS at an estimated cost of \$9.9 million. The BCIS revamping project commenced in April 2014 and was targeted for completion in March 2016.

Important information not provided by BCIS

- 6.7 As outlined in the earlier PARTs of this Audit Report, the following important information had not been input into or could not be provided by the BCIS:
 - (a) the dates of different stages of LSO actions taken (namely survey stage, order-serving stage, compliance-inspection stage and final stage see para. 4.4) on each target building;
 - (b) management reports on the number of removal orders issued and actionable UBWs identified in each building under an LSO (see para. 4.15); and
 - (c) the dates of most of the removal orders referred to the LR for registration (see para. 5.5).
- 6.8 Furthermore, in April 2014, in response to a LegCo Member's enquiry on the number of rooftop-podium-lane UBWs removed in each year from 2011 to 2013, the DEVB and the BD informed the FC that the BD did not keep separate statistics on the number of different types of UBWs removed.

Note 30: The OGCIO is responsible for overseeing the use of information, communication and technology of the Government, including the funding policies, procedures and monitoring of computerisation projects. According to OGCIO Circular No. 3/2007 of June 2007, administrative computer systems costing between \$150,001 and \$10 million are to be funded under the block allocation Subhead A007GX of the Capital Works Reserve Fund Head 710 under the control of the OGCIO.

- According to the BD, for the purposes of monitoring of long-outstanding removal orders and planning, its officers compiled and provided BD senior management with information on the progress of actions taken (Note 31) on outstanding removal orders issued before 2004. However, there was no record showing the provision to BD senior management of information on progress of actions taken on outstanding removal orders issued since 2004.
- 6.10 In addition, according to the DEVB and the BD, a BD coordinator for each type of LSO regularly collated information and reported the progress of LSOs to BD senior management, and there were cases where the coordinators collected information (kept in personal computers) from relevant BD divisions for compiling progress reports. Audit considers this arrangement unsatisfactory and the BD needs to make use of information technology to ensure that all essential information is consolidated in the BCIS and summarised for the review by the senior management.

6.11 In March 2015, the DEVB and the BD informed Audit that:

- (a) given that the BCIS enhancement had been made in September 2011, and that there had been several changes to the BCIS data definitions in recent years, accurate statistics on the number of rooftop-podium-lane UBWs removed (see para. 6.8) could not be simply generated from the BCIS. The data had to be verified by checking individual case files. Owing to the significant time and manpower resource implications, it was not practical for the BD to produce accurate figures under a tight timeframe for answering the query raised by the LegCo Member, and it would be irresponsible for the Government to provide information to LegCo where the Government had doubts on its accuracy;
- (b) the reporting of progress of actions taken (see para. 6.9) had been introduced primarily for monitoring of long-outstanding repair orders by BD senior management. Owing to the large number of removal orders involved and the significant resource implications, BD staff were not required to input the progress of actions into the BCIS for compiling

Note 31: The progress of actions included: (a) no action being taken by the UBW owner; (b) building professionals being appointed; (c) remedial works were in progress; (d) cases being referred to the BD's Legal Services Section for issuing summonses; and (e) default works being carried out by the BD.

- management reports for removal orders issued after 2004, except those issued under certain LSOs that were closely monitored by BD senior management; and
- (c) in response to operational needs, enhancements had been made to the BCIS from time to time in order to capture essential data to facilitate compilation of progress reports. It usually took time to introduce new data fields and work out the system logic. Therefore, before launching the necessary enhancement to the BCIS, LSO coordinators (see para. 6.10) had to collect the data manually for compiling statistics.
- 6.12 In Audit's view, in implementing the BCIS revamping project, the BD needs to take measures to provide functions in the system that would overcome the deficiencies outlined in paragraphs 6.7 to 6.11.

Number of removal orders not accurately published in CORs and website

- Audit noted that the numbers of removal orders published in the BD's CORs had been consistently less than those recorded in the BCIS. For example, the numbers of removal orders issued in 2011, 2012 and 2013 as recorded in the BCIS were 11,601, 13,475 and 15,668 respectively, whereas the corresponding numbers published in the BD's CORs were 9,176 (79% of 11,601), 12,292 (91% of 13,475) and 12,005 (77% of 15,668) respectively.
- According to the BD, for example, owing to the need to submit related data for 2013 to the Financial Services and the Treasury Bureau in the first week of January in 2014 for compiling the COR, information of some removal orders issued in last few months of 2013 had not been input into the BCIS by the time of submission of data to the Bureau for compiling the related COR. Hence, the number of removal orders issued in 2013 as reported in the COR was less than actual number. Audit considers this arrangement unsatisfactory. In Audit's view, information of all removal orders issued should be promptly input into the BCIS which would help monitor the progress of actions taken and prevent the situation of reporting inaccurate number of removal orders in the BD's COR. The BD should consider implementing an integrated system for issuing removal orders under which the BCIS will be automatically updated with related information upon issue of removal orders.

- 6.15 Furthermore, Audit also noted that the numbers of outstanding removal orders at year ends as published on BD website had been consistently less than those as reported to BD senior management. For example, the numbers of outstanding removal orders at year ends of 2011, 2012 and 2013 as reported to BD senior management were 60,510, 64,980 and 67,903 respectively, whereas the corresponding numbers published on BD website were 52,365 (87% of 60,510), 53,470 (82% of 64,980) and 56,941 (84% of 67,903) respectively.
- According to the BD, for example, the 56,941 outstanding removal orders (as reported on BD website) as of December 2013 represented removal orders issued in or before December 2012 but remained outstanding as of December 2013 (excluding orders issued in 2013 that had not been complied with), whereas the 67,903 outstanding removal orders (as recorded in the BCIS) represented all outstanding removal orders as of December 2013 (including orders issued in 2013 that had not been complied with). Audit considers the BD needs to publish accurate information in this area.

Audit recommendations

- 6.17 Audit has recommended that the Director of Buildings should:
 - (a) in implementing the BCIS revamping project, take measures to provide functions in the system for monitoring the progress of actions taken on:
 - (i) LSOs; and
 - (ii) outstanding removal orders;
 - (b) take measures to ensure that accurate information on the number of annual removal orders issued is published in the BD's CORs;
 - (c) consider implementing a function under the BCIS that would integrate essential information of removal orders issued; and
 - (d) take measures to ensure that accurate information on the number of outstanding removal orders at year end is published on BD website.

Response from the Government

- 6.18 The Secretary for Development and the Director of Buildings agree with the audit recommendations. They have said that:
 - (a) regarding paragraphs 6.8 and 6.11(a), the BD will look into ways in the BCIS revamping project to address the current system deficiency that the system cannot provide the number of rooftop-podium-lane UBWs removed;
 - (b) regarding paragraph 6.17(a), the BCIS has recently been customised to facilitate progress monitoring of target buildings under certain LSOs, and such features will be incorporated in the BCIS revamping project. In the revamped BCIS, the BD will explore the feasibility of introducing a function for monitoring the progress of actions taken on outstanding removal orders; and
 - (c) regarding paragraph 6.17(b) and (c), a batch-record uploading function will be adopted in the BCIS to enhance the accuracy of information published in the BD's COR, including the number of removal orders issued each year.

PART 7: WAY FORWARD

7.1 This PART outlines the major Audit concerns and examines the way forward.

Policies and enforcement actions on UBWs

UBWs may pose structural and fire-safety risks to building users and members of the public, and they may also cause hygiene problems and environmental nuisance. With a view to removing risks to public safety within resources available, the BD has adopted policies on UBWs to focus enforcement actions on certain types of actionable UBWs. However, although the BD had removed 474,559 UBWs from 2001 to 2014, the BD has not published statistics on the number of actionable UBWs that have been removed. According to the BD, majority of the UBWs removed were likely to be actionable UBWs. Furthermore, although the 2011 stock-taking exercise found some 2,290,000 suspected UBWs, the BD has not taken action to identify the actionable ones.

Major areas for improvement

- 7.3 Audit noted that the annual number of public reports on UBWs had increased from 24,577 in 2004 to 41,146 in 2014 (a 67% increase), and the annual number of UBWs removed had decreased from 41,210 in 2004 to 22,866 in 2014 (a 45% decrease).
- Inadequacies in BD actions to deal with UBWs. Audit examination revealed that there were inadequacies in BD actions to deal with UBWs, including long time taken to issue removal orders on actionable UBWs, significant slippages in conducting LSOs on rooftop-podium-lane UBWs and SDFs, delays in referring warning notices, removal orders and s.33 certificates to the LR for registration, default-works actions not being carried out on many UBWs associated with structural or higher fire-safety concern, and lack of safety inspections of UBWs posing public safety risks. The long time taken to respond to public reports on UBWs may fall short of public expectation, and call into question the effectiveness of the BD's UBW enforcement actions.

- 7.5 **Deficiencies of BD information system.** Audit examination revealed that the BD had not maintained some essential information in its BCIS to support its actions on UBWs. For example, the BCIS did not:
 - (a) maintain data on the dates of different stages of LSO actions taken on each building covered in an LSO (see para. 4.4);
 - (b) generate reports on the number of removal orders issued and actionable UBWs identified in each building under an LSO for management oversight and necessary remedial actions (see para. 4.15); and
 - (c) capture data on the dates of most of the removal orders referred to the LR for registration (see para. 5.5) which were essential for monitoring and assessing the timeliness and effectiveness of the enforcement action.

Way forward

- 7.6 Under BD enforcement policies on UBWs, the BD would take more stringent enforcement actions on actionable UBWs by issuing removal orders to related UBW owners, registering the removal orders at the LR, taking prosecutions against the owners and carrying out default works on related UBWs. For non-actionable UBWs, the BD would only issue warning notices and advisory letters to the owners, where the former would be registered at the LR.
- Audit also noted that, as of October 2014, there were 68,134 outstanding removal orders, of which 21% had been outstanding for more than 6 years to 10 years and 1% for more than 10 years to 30 years. As reported in paragraph 2.17, the BD has yet to ascertain from the 2011 stock-taking exercise the number of actionable UBWs in existence that have not been issued with removal orders. In this connection, as of October 2014, there were 21,956 public reports (see para. 3.12) and 25,887 warning notices (see para. 3.13) related to rooftop-podium-lane UBWs on which the BD had not issued removal orders to the UBW owners.
- 7.8 The BD is facing a challenge in clearing UBWs under the 68,134 removal orders, some of which have been issued for long periods of time. Given that owners of a large number of UBWs have not taken UBW removal actions after

registration of the removal orders at the LR, the title-encumbrance arrangement alone may not be sufficiently effective in inducing these owners to remove their UBWs.

- According to the DEVB, in the light that there were views in the community that a tougher stance should be taken against non-compliant UBW owners to create stronger deterrent effects, and in order to protect public safety, the BD would instigate prosecution action more readily to sanction owners who did not duly observe the statutory orders (including removal orders see para. 5.30). Audit noted that the BD had issued a total of 4,620 summonses in 2012 and 2013 involving 5,439 UBWs. However, as of October 2014, only 3,047 (56% of 5,439) UBWs had been removed.
- According to the BD, prosecution actions are effective means to clear UBWs. In this connection, the BD has set estimates of issuing 2,500 to 3,300 summonses a year on outstanding removal orders (see para. 5.29). Accordingly, for the 68,134 outstanding removal orders (not counting new removal orders issued in coming years), in the absence of other means to induce voluntary compliance of these orders, the BD would take a long time to issue summonses to all related owners. Furthermore, although taking prosecution actions against UBW owners is an effective means to resolve the UBW problem, any increase in the annual number of summonses issued (see para. 5.29) would require additional BD resources.
- Audit considers the large number of long-outstanding removal orders unsatisfactory and that the BD needs to explore other effective means to clear these UBWs after issue of removal orders. For example, the BD may consider introducing a fixed penalty system for UBWs. The introduction of a fixed penalty system for UBWs would help streamline the prosecution actions and more effective deployment of BD resources.

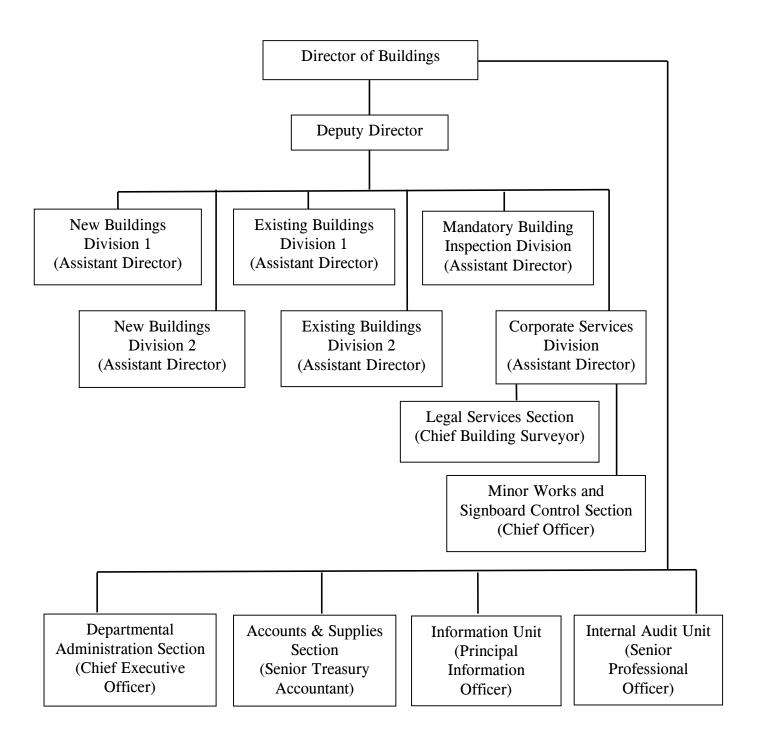
Audit recommendation

7.12 Audit has recommended that the Director of Buildings should, in addition to taking prosecution actions against UBW owners, explore other effective means to induce the owners to remove their UBWs after issuing removal orders to them.

Response from the Government

- 7.13 The Secretary for Development and the Director of Buildings agree with the audit recommendation. They have said that:
 - (a) the BD will continue to adopt a multi-pronged approach to tackle the problem of UBWs. Apart from existing measures including prosecution, surcharge on default works, validation schemes, financial assistance schemes and support from social service teams, the BD will explore other effective means to induce owners to remove their UBWs; and
 - (b) the BD has introduced a fixed penalty system for the Mandatory Window Inspection Scheme, under which a penalty notice may be served to an owner who fails to comply with a statutory window inspection notice. The BD will review the effectiveness of the system and explore the possibility of extending its application.

Buildings Department: Organisation chart (extract) (31 October 2014)



Source: BD records

Suspected UBWs identified in 2011 stock-taking exercise

	UBW type	UBWs (Number)	Buildings involved (Number)
1.	Chimney/vent duct and associated metal supporting frames	58,000	7,300
2.	UBW on rooftops, podiums, yards and lanes	47,000	16,000
3.	Retractable awnings	41,000	14,000
4.	Supporting structures for antenna and transceiver	37,000	9,600
5.	UBW/misuse of balcony	18,300	1,400
6.	Pavement structure	10,300	3,000
7.	Opening in external wall	9,000	2,300
8.	Alteration to parapet/railing	7,200	2,300
9.	UBW/misuse of cantilevered slab balcony	6,200	500
10.	Metal grilles/bars	6,100	2,300
11. Supporting structure for satellite disc antenna		6,000	3,800
12.	Supporting structures for air-conditioner cooling tower	5,500	1,500
13. Conversion of plant box/etc. to balcony/bay window		4,300	400
14.	Alteration and addition of external wall to glass panel wall	3,600	800
15.	Alteration to hood/plant box/architectural feature	2,600	400
16.	Solid extension from external wall	2,300	800
17.	UBW on canopy	1,600	400
18.	Others (include supporting frames for light fittings, barriers, alteration of window to solid wall, etc)	34,000	8,000
	Overall	300,000	28,600 (Note)

Source: Audit analysis of BD records

Note: Some buildings had more than one type of UBW.

Time targets on handling public reports

		Time target (Note 1)	
No.	Particulars	Before May 2014	From May 2014 (Note 2)
Fron	n receipt of report to inspection		
1.	Receiving a public report		
2.	Assigning a case number, category and UBW type to the case, and inputting case details into BD's computer system	20 days	20. 1
3.	Issuing an acknowledgement reply	30 days (Note 1)	30 days (Note 1)
4.	Screening the report by making reference to relevant BD records, and deciding whether an inspection is required	(14010-1)	(Note 1)
5.	Carrying out inspection and preparing inspection report		
	Subtotal (a)	30 days	30 days
Fron	n inspection to issuance of removal order/warning notice		
6.	Recommending action (i.e. enforcement actions for actionable and non-actionable UBWs), searching for ownership particulars, and replying to informant	30 days	30 days
7.	Receiving ownership particulars and preparing removal order/warning notice	30 days	60 days
8.	8. Issuing removal order/warning notice		90 days
	Subtotal (b)	105 days	180 days
Follo	ow up of removal order		
9.	Specified date for action (normally 60 days)	60 days	60 days
10.	Carrying out compliance inspection	15 days	150 days
11.	Determining the status (i.e. whether the owner has complied with the order) and issuing warning letter to the owner before taking prosecution action	14 days	50 days
	Subtotal (c)	89 days	260 days
	Total (d) = (a) + (b) + (c)	224 days	470 days

Source: BD records

Note 1: The time targets stated in this table relate to non-emergency public reports on existing UBWs erected on external walls. For a non-emergency public report (according to information provided by the informant and BD officers' judgement) on UBWs, BD officers should inspect the alleged UBWs under construction within 48 hours, existing UBWs on external walls within 30 days and other UBWs within 50 days. For an emergency public report on UBWs, BD officers should normally inspect the UBWs within 3 hours.

Note 2: According to the BD, for the purpose of expediting actions to clear the backlog of outstanding removal orders, some time targets on handling public reports have been extended with effect from May 2014.

Appendix D

Acronyms and abbreviations

Audit Audit Commission

BCIS Building Condition Information System

BD Buildings Department

COR Controlling Officer's Report

DEVB Development Bureau

FC Finance Committee

LegCo Legislative Council

LR Land Registry

LSO Large-scale operation

MWCS Minor Works Control System

OGCIO Office of the Government Chief Information Officer

SDF Sub-divided flat

UBW Unauthorised building works

CHAPTER 2

Government Flying Service

Operation of the Government Flying Service

Audit Commission Hong Kong 1 April 2015 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. 64 of the Director of Audit contains 8 Chapters which are available on our website at http://www.aud.gov.hk

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OPERATION OF THE GOVERNMENT FLYING SERVICE

Contents

	Paragraph
EXECUTIVE SUMMARY	
PART 1: INTRODUCTION	1.1 - 1.6
Audit review	1.7
General response from the Government	1.8
Acknowledgement	1.9
PART 2: PROVISION OF FLYING SERVICES	2.1
Performance targets of primary tasks	2.2 - 2.12
Audit recommendations	2.13
Response from the Government	2.14 - 2.15
Response rates for service requests	2.16 - 2.17
Audit recommendations	2.18
Response from the Government	2.19 - 2.20
Other management issues	2.21 - 2.27
Audit recommendations	2.28 - 2.29
Response from the Government	2.30 - 2.31

	Paragraph
PART 3: MANAGEMENT OF AIRCREW MEMBERS	3.1
Manning for 24-hour flying services	3.2 - 3.10
Aircrew duty and rest hours	3.11 - 3.12
Audit recommendations	3.13
Response from the Government	3.14
PART 4: MAINTENANCE OF AIRCRAFT	4.1 - 4.2
Aircraft availability target	4.3 - 4.6
Aircraft downtime	4.7 - 4.17
Audit recommendations	4.18
Response from the Government	4.19
PART 5: PROCUREMENT OF AIRCRAFT AND SPARE PARTS	5.1
Payment issues and low utilisation of training aircraft	5.2 - 5.14
Audit recommendations	5.15 - 5.16
Response from the Government	5.17 - 5.18
Delays in delivery of fixed-wing aircraft	5.19 - 5.26
Audit recommendations	5.27
Response from the Government	5.28
Replacement of existing helicopters by a single-model fleet	5.29 - 5.32
Audit recommendation	5.33
Response from the Government	5.34

	Paragraph
Procurement of spare parts	5.35 - 5.38
Audit recommendations	5.39
Response from the Government	5.40
PART 6: WAY FORWARD	6.1
Major audit observations	6.2 - 6.6
Recent development	6.7
Audit recommendation	6.8
Response from the Government	6.9
Appendices	Page
A: Performance of flying services provided by the Government Flying Service (2010 to 2014)	76 - 78
B: Establishment and strength of pilot and air crewman officer grades (31 December 2014)	79
C: Summary of two contract variations in the procurement of the two fixed-wing aircraft	80 - 81
D: Acronyms and abbreviations	82



OPERATION OF THE GOVERNMENT FLYING SERVICE

Executive Summary

1. The Government Flying Service (GFS) was established under the GFS Ordinance (Cap. 322) in 1993 to provide flying services to the Government and those in need, including air ambulance service, search and rescue, fire fighting, aerial surveys and law enforcement. The GFS is committed to providing its round-the-clock flying services in a safe, efficient and cost-effective manner. As at 31 December 2014, the GFS had a strength of 218 staff and a fleet of 11 aircraft comprising nine operational aircraft and two training aircraft. From 2010 to 2014, the flying services in terms of flying hours provided by the GFS increased by 18% from 3,253 hours to 3,833 hours. The Audit Commission (Audit) has recently conducted a review of the operation of the GFS with a view to identifying room for improvement.

Provision of flying services

2. **Performance targets.** The GFS has set 23 performance targets in its Controlling Officer's Report (COR) for four types of operations (i.e. air ambulance service, search and rescue, law enforcement and fire-fighting operations) for measuring the percentage of the call-out cases in a year with the responding aircraft arriving on scene within the pledged times. The GFS reported in its CORs that on average, six (26%) of the 23 on-scene time targets were not met each year from 2010 to 2014. Over the same period, the GFS responded to 11,175 call-outs relating to the 23 on-scene time targets, of which 902 call-outs (8%) could not meet the respective pledged on-scene times. Of the 902 out-of-pledge cases, 59% were caused by weather limitations/air traffic control delay and 22% were due to unserviceable aircraft/unavailable aircrew. Audit found that the GFS's reported figures had not taken into account 609 multiple call-outs of which 550 were out-of-pledge cases. In addition, 311 out-of-pledge cases were incorrectly reported as on time cases. After making adjustments for these cases, the average number of on-scene time targets not met each year for the five years from 2010 to 2014 was 9.8 instead of six as reported by the GFS in the CORs (paras. 2.3 to 2.7, 2.10 and 2.12).

- 3. Response rates for service requests. Upon receiving a request for flying services, the GFS will arrange aircraft and aircrew with due consideration given to the urgency, weather conditions, availability of air assets and tasking priority. From 2010 to 2014, the GFS declined a total of 852 service requests after examining all relevant factors. The GFS had not duly taken into account these declined cases when reporting its response rates to flying services in the CORs (paras. 2.16 and 2.17).
- 4. *Other management issues*. Audit found that there was room for improvement in the GFS's management review of the flying services, particularly the out-of-pledge cases in providing emergency services and declined cases due to resource limitations. For the provision of familiarisation flight service for bureaux/departments, there is a need to enhance transparency and public accountability (paras. 2.22 to 2.24).

Management of aircrew members

- 5. **Manning for 24-hour flying services.** The GFS has to roster its aircrew to work in three shifts on a daily basis in order to provide emergency response on a 24-hour basis year-round. The GFS has laid down guidelines on the minimum crew requirements for each shift to meet the primary emergency response in addition to other planned tasking commitments. Audit found that of the 4,142 shifts arranged in 2013 and 2014, 178 (4.3%) were insufficiently manned. As a result, some emergency call-out cases were delayed or declined (paras. 3.2 and 3.4 to 3.6).
- 6. Aircrew duty and rest hours. To ensure safety and health in flight operations, the GFS has set the maximum flying/duty hours and minimum rest hours for its aircrew. Any extension of flying/duty hours of the aircrew or reduction of their rest time is recorded in a Commander Discretion Report (CDR) and a target number of CDRs is set each year to serve as a safety performance indicator. For three of the five years from 2010 to 2014, there were more CDRs than targeted (paras. 3.11 and 3.12).

Maintenance of aircraft

- 7. Aircraft availability target. For management reporting purpose, the GFS's Engineering Section is committed to making available a minimum of five of the nine operational aircraft from 7:30 to 23:00 and four operational aircraft from 23:01 to 7:29 for 95% of the time for each month. From 2010 to 2014, there were shortfalls on aircraft availability against the target in 33 (55%) months mainly due to major repairs and inspections. The failure to meet the aircraft availability target during the long maintenance period was a cause for concern as the provision of emergency services could be affected (paras. 4.3 to 4.6).
- 8. Aircraft downtime. From 2010 to 2014, the downtime of the nine operational aircraft totalled 78,961 hours, of which 26% were due to unscheduled maintenance. Unscheduled maintenance is disruptive to day-to-day operations and maintenance planning. The increasing trend in unscheduled maintenance (from 3,799 hours in 2010 to 4,539 hours in 2014) warrants the management's attention. Over the same period, there were a total of 2,895 aircraft defects reported by pilots before take-off for flying duties or after airborne. Besides rectifying the reported defects, the Engineering Section reviewed some of the defect cases for identifying room for improvement in the future maintenance work. The GFS needs to continue its effort in this regard and extend the scope of the review to cover all out-of-pledge cases (paras. 4.7, 4.8, 4.10 and 4.12).

Procurement of aircraft and spare parts

9. Payment issues and low utilisation of training aircraft. The GFS procured two training aircraft at a total cost of \$11.06 million in 2008 and 2012. Audit found that the 5% payment discount (\$181,000) provided for in one of the procurement contracts was not obtained. Moreover, advance payments for spare parts totalling \$550,760 were written off after the overseas contractor's bankruptcy. Audit noted that the utilisation of the training aircraft was low. According to the GFS, the utilisation of the two training aircraft was lower than expected due to the reduced number of target trainees and resignation of some trainers. Even though the two aircraft had low flying hours, both aircraft had experienced long downtime due to maintenance-related issues (paras. 5.2, 5.3, 5.5, 5.7 and 5.10 to 5.13).

- 10. **Delays in delivery of fixed-wing aircraft.** In June 2009, the GFS obtained the Finance Committee (FC)'s funding approval of \$776 million to replace the two fixed-wing aircraft. Due to technical problems encountered in the flight tests, the expected delivery date of the first aircraft would be late 2015 (i.e. 33 months later than the target commissioning date of March 2013 as stated in the FC paper). As a result, the expected benefits of the new aircraft to enhance the GFS's operational efficiency and flight safety could not be realised in the interim. Meanwhile, there were difficulties in maintaining the serviceability of the existing ageing fixed-wing aircraft and their mission equipment (paras. 5.19 and 5.22 to 5.24).
- 11. Replacement of existing helicopters by a single-model fleet. In June 2013, the GFS obtained the FC's funding approval of \$2,187.5 million to replace the existing seven helicopters by a single-model fleet. The FC was informed that one of the existing helicopters would be used as backup for about four to five years after the new fleet was commissioned. Given that these existing helicopters would reach the end of their service lifespan after 2017 and there were occasions of suspension of these helicopters from services due to engineering problems, the GFS needs to review the adequacy of the contingency plan for the new single-model helicopter fleet (paras. 5.31 and 5.32).

Recent development

12. In November 2014, the GFS obtained funding from the Security Bureau for 2015-16 to commission a consultancy study on how well and sustainable the GFS's manpower and structure could support its mission, objectives and needs in the short, medium and long terms (para. 6.7).

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 Controller, GFS should:

Provision of flying services

- (a) improve accuracy and efficiency in the reporting of performance information in the CORs including multiple call-out cases and response rates for service requests (paras. 2.13 and 2.18(a));
- (b) strengthen the monthly management review of the performance of the GFS flying services by placing more emphasis on the exceptional cases such as those relating to long time taken/failure in providing top priority emergency services (para. 2.28(b));

Management of aircrew members

(c) make greater effort to maintain sufficient crew for each shift of flying duties to provide a reliable primary emergency response (para. 3.13(a));

Maintenance of aircraft

(d) continue to review the maintenance planning and endeavour to synchronise as far as possible major repairs and inspections with a view to increasing the availability of serviceable aircraft (para. 4.18(a));

Procurement of aircraft and spare parts

- (e) tighten internal control to ensure that the Standing Accounting Instructions requirements on payment control are always complied with (para. 5.15(a));
- (f) review the downtime of the two training aircraft with a view to identifying effective ways to improve their serviceability (para. 5.15(c));

- (g) closely monitor the outstanding contract work for the supply of the two new fixed-wing aircraft to ensure that greatest efforts are being made to expedite delivery of the aircraft (para. 5.27(a)); and
- (h) review the adequacy of the contingency plan for the new single-model helicopter fleet in the event of manufacturing defects or reported failure and make refinement where appropriate (para. 5.33).

Response from the Government

14. The Government generally 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 Government Flying Service (GFS) was established under the GFS Ordinance (Cap. 322) in 1993 to take over the functions of the then Royal Hong Kong Auxiliary Air Force. Its statutory functions include providing flying services for medical, search and rescue, and casualty evacuation purposes, fire fighting, aerial surveys, supporting law enforcement agencies in carrying out their law enforcement duties, and carrying passengers as authorised by the Secretary for Security. The GFS is committed to providing a safe, efficient and cost-effective round-the-clock flying service to the Government (to support the work of various bureaux/departments (B/Ds)) and those in need. The GFS's search and rescue operations cover both the Hong Kong Flight Information Region and Hong Kong Maritime Rescue Co-ordination Centre area of responsibility, i.e. extending up to 1,300 kilometres (km) south of Hong Kong.
- Organisation. The GFS is headed by the Controller who reports directly to the Secretary for Security. The Controller is supported by five sections, namely the Operations Section, Training and Standards Section, Engineering Section, Quality and Flight Safety Section, and Administration Section. As at 31 December 2014, the GFS had a strength of 218 staff comprising the Controller, 37 pilots, 31 air crewman officers, 25 aircraft engineers, 71 aircraft technicians and 53 support staff. In addition, the GFS employed 12 staff of various posts on non-civil service terms. The GFS also appointed 77 auxiliary members (Note 1).

Note 1: The auxiliary members are mainly specially trained doctors and nurses. They volunteer their services to provide specialist trauma and emergency treatment to the patients on board the aircraft from Friday to Monday and on public holidays. For air ambulance service, the Hospital Authority will deploy a staff to accompany the patient if needed. The estimated pay and allowances for the auxiliary services totalled \$0.65 million for 2014-15.

Introduction

For 2014-15, the estimated expenditure of the GFS was \$367.3 million (Note 2). According to the Memorandum of Understanding between the Security Bureau and the then Economic Services Bureau (the policy bureau of the Civil Aviation Department (CAD) — Note 3) in 1995, the GFS is required to:

- (a) ensure that its aircraft are operated in accordance with the Air Navigation (Hong Kong) Order 1995 (Cap. 448C) as if flying for the purposes of public transport;
- (b) comply with the requirements of the Air Operator's Certificates Requirements Document issued by the CAD; and
- (c) agree acceptable means of compliance with the provisions and requirements with the CAD.

To assure that the GFS's operations comply with the requirements, the CAD carries out inspections and audits of the GFS activities. The GFS also engages overseas military organisations to conduct periodic audits of its operations such as search and rescue. According to the GFS, such engagements are to ensure that its more complex missions meet high level of safety and professional standards.

1.4 *GFS aircraft fleet.* As at 31 December 2014, the GFS had a fleet of 11 aircraft comprising four fixed-wing aircraft and seven helicopters (see Table 1 for details).

Note 3: The policy responsibilities for civil aviation are now taken over by the Transport and Housing Bureau.

Note 2: The estimated expenditure comprised staff cost (\$132 million), departmental expenses (\$96.6 million), equipment and component overhaul (\$131.2 million), and the estimated cash flow requirements of two capital projects for the replacement of aircraft during the year (totalling about \$7.5 million—see para. 1.6).

Table 1

GFS fleet (31 December 2014)

Aircraft	Number	Year commissioned	Main tasks
Helicopter			
Eurocopter Super Puma AS332 L2 (Super Puma)	3	2001 and 2002	 Inshore and offshore search and rescue Air ambulance service Law enforcement Fire fighting Transportation of personnel and equipment
Eurocopter EC155 B1 (EC155)	4	2002	 Inshore search and rescue Air ambulance service Law enforcement Transportation of personnel and equipment Aerial survey and photography

Table 1 (Cont'd)

Aircraft	Number	Year commissioned	Main tasks
Fixed-wing aircraft			
Jetstream 41 (J-41)	2	1999	 Long-range search and rescue Law enforcement Aerial survey and photography
Zlin Z242L (Zlin)	1	2009	- Training
Diamond DA42 (Diamond)	1	2013	- Training
Total	11		

Source: GFS records

1.5 **Flying services provided by GFS.** From 2010 to 2014, the overall flying services in terms of flying hours provided by the GFS increased from 3,253 hours by 18% to 3,833 hours (see Table 2). All services reported increases ranging from 9% to 65%.

Table 2
Flying services provided by the GFS (2010 to 2014)

Flying service	2010	2011	2012	2013	2014	Percentage of increase between 2010 and 2014
		(r	lying hou	ir)		
Air ambulance service	1,010	1,100	1,236	1,317	1,270	26%
Search and rescue	574	488	592	567	687	20%
Law enforcement	178	232	185	210	211	19%
Fire fighting	77	212	94	130	127	65%
Other services for B/Ds (Note)	1,414	1,586	1,537	1,580	1,538	9%
Overall	3,253	3,618	3,644	3,804	3,833	18%

Source: GFS records

Note: Examples of other flying services for B/Ds are aerial surveys, passenger transfer and oil pollution surveillance.

Remarks: Besides providing flying services, the GFS also uses its aircraft for aircrew training/examinations (see para. 2.2). The number of flying hours for such purposes totalled 2,657 hours in 2014.

1.6 Aircraft replacement exercises. In June 2009, the GFS obtained funding of \$776 million (Note 4) from the Legislative Council Finance Committee (FC) to replace the two fixed-wing aircraft (J-41) which were approaching the end of their serviceable life. After the award of procurement contract in August 2011, the new aircraft had undergone a period of construction, special installation and testing. As at February 2015, some tests of the aircraft and mission equipment had yet to be completed. The first of such aircraft was expected to be delivered in late 2015. In June 2013, the GFS also obtained the FC's approval of \$2,187.5 million (Note 5) to replace the seven helicopters which would reach the end of their service lifespan after 2017. As at February 2015, tender evaluation of the helicopter replacement project was in progress.

Audit review

- 1.7 In October 2014, the Audit Commission (Audit) commenced a review of the operation of the GFS with a view to identifying room for improvement. The review focused on the following areas:
 - (a) provision of flying services (PART 2);
 - (b) management of aircrew members (PART 3);
 - (c) maintenance of aircraft (PART 4);
 - (d) procurement of aircraft and spare parts (PART 5); and
 - (e) way forward (PART 6).
- Note 4: The approved funding comprised capital cost of aircraft (\$266 million), and cost of mission equipment and modification work for the installation of the equipment (\$358 million), spare parts and tools (\$43 million), training for aircrew and engineering staff (\$8 million) and contingency (\$101 million).
- Note 5: The approved funding comprised capital cost of aircraft (\$1,456 million), and cost of mission equipment and modification work (\$494.8 million), spare parts and tools (\$119.7 million), training for aircrew and engineering staff (\$12.4 million), evaluation and support (\$0.4 million) and contingency (\$104.2 million).

General response from the Government

1.8 The Secretary for Security and the Controller, GFS generally agree with the audit recommendations.

Acknowledgement

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

PART 2: PROVISION OF FLYING SERVICES

- 2.1 This PART examines the following issues relating to the provision of flying services by the GFS:
 - (a) performance targets of primary tasks (paras. 2.2 to 2.15);
 - (b) response rates for service requests (paras. 2.16 to 2.20); and
 - (c) other management issues (paras. 2.21 to 2.31).

Performance targets of primary tasks

- According to the Policy Statement issued by the Secretary for Security and the GFS Operations Manual, the priorities for the use of the GFS's flying hours are as follows:
 - (a) essential aircrew training and examinations to acquire/maintain/renew aircrew categories, flight crew licences and qualifications;
 - (b) air tests of aircraft after maintenance work;
 - (c) primary tasks including emergency operations such as air ambulance service, search and rescue, operational support to the Hong Kong Police Force (HKPF) and other B/Ds in connection with civil emergencies, and airborne fire fighting;
 - (d) basic cadet pilot and ab-initio air crewman officer training, and other operational training; and
 - (e) secondary tasks which the GFS will perform when resources are not required for the primary ones. Should there be a last minute call on resources arising from a primary task, any commitments to secondary functions will be cancelled or postponed. Secondary tasks include other services provided to B/Ds such as aerial surveys, oil pollution surveillance and VIP flights.

In any emergency situation, the Controller, GFS is responsible for determining priorities between competing claims.

2.3 Performance measurement, including setting performance targets/indicators and their reporting (e.g. in the Controlling Officer's Report (COR)), helps enhance government performance, transparency and accountability. The GFS has set 23 performance targets in its COR for four types of primary tasks (air ambulance service, search and rescue, law enforcement and fire-fighting operations) carried out under different situations (Note 6). Each target (on-scene time target) is expressed as a percentage of the call-out cases (Note 7) in a year with the responding aircraft arriving on scene within the pledged time.

Some on-scene time targets not met

2.4 Between 2010 and 2014, the GFS responded to 11,175 call-outs (excluding the multiple call-out cases — see para. 2.8) relating to the 23 on-scene time targets, of which 902 call-out cases (or 8% of the total) could not meet the respective pledged on-scene times. On average, six (26%) of the 23 on-scene time targets were not met each year (see Appendix A). In particular, four targets were consistently not met for four to five years (see Table 3).

Note 6: The different situations include different service locations, time of day of the call-outs and types of responding aircraft.

Note 7: The emergency call-out requests are normally made by the HKPF, the Fire Services Department, the Marine Department and the CAD. For air ambulance service, the Hospital Authority's requests are made through the HKPF.

Table 3

Four on-scene time targets not met for four to five years (2010 to 2014)

	Call-out for flying services	Pledged on-scene time	Target	Actual				
		(Minute)	(%)	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)
1	Air ambulance service: Type A+ and A casualty evacuation situations (Note 1) within Island Zone (Note 2)	20	90	95	89	86	87	87
2	Inshore search and rescue by helicopter: between 22:00 and 6:59 where additional crew/specialised equipment not required	40	90	83	67	79	78	76
3	Law enforcement: outside Island Zone where additional crew/specialised equipment not required	30	90	79	73	83	76	80
4	Fire fighting: water bombing	40	85	74	72	76	65	74

Source: GFS records

Note 1: Type A+ denotes casualty evacuation involving life-threatening cases. Type A refers to casualty evacuation involving emergency medical conditions which are not life-threatening, and Type B refers to casualty evacuation involving lesser emergency.

Note 2: Island Zone includes Hong Kong Island, Cheung Chau, Hei Ling Chau, Lamma Island, Lantau Island, Peng Chau and Soko Islands.

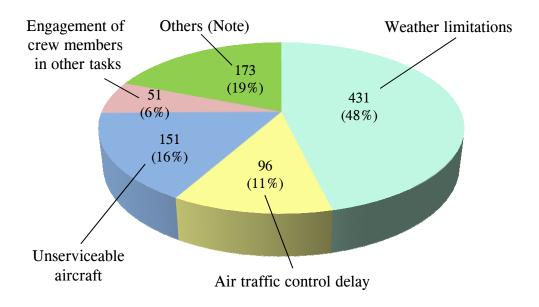
Remarks: Actual performance figures not meeting the on-scene time targets are shown in bold.

Out-of-pledge call-out cases

2.5 The GFS has maintained records of the reason for each out-of-pledge call-out case. Figure 1 shows an analysis of the reasons for the 902 out-of-pledge call-out cases.

Figure 1

Reasons for 902 out-of-pledge call-out cases (2010 to 2014)



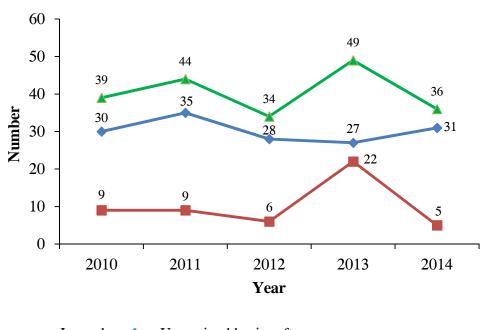
Source: GFS records

Note: Other reasons included change of role of aircraft for different tasks (e.g. a helicopter undertaking a fire-fighting operation will have to be fitted with a different set of equipment from a rescue operation), longer flight time required due to extreme range and location, and fuel planning (e.g. for long-range search and rescue operations, the GFS may need to plan the refuelling of helicopters at oil rigs).

Among the reasons for the out-of-pledge cases, weather limitations and air traffic control delay (accounting for 59% of the 902 cases) were not within the control of the GFS. For 202 (22%) out-of-pledge cases, they were caused by engagement of crew members in other tasks or unserviceable aircraft (management of aircrew members and maintenance of aircraft will be further discussed in PARTs 3 and 4). The annual figures for the out-of-pledge call-out cases from 2010 to 2014 are shown in Figure 2.

Figure 2

Number of out-of-pledge call-out cases due to unserviceable aircraft and engagement of crew members in other tasks (2010 to 2014)



Legend:

Unserviceable aircraft

Engagement of crew members in other tasks

Total out-of-pledge call-out cases due to unserviceable aircraft and unavailable aircrew

Source: GFS records

Errors in reporting the total number of on time call-out cases

2.7 The GFS maintains a computerised Integrated Application System to record details of the flying tasks and to compile statistics for reporting performance in the CORs. While the System has captured the call-out time and the on-scene time of each task, there is no built-in function to automatically compare them with the pledged on-scene time to show whether it is an on time case. Such comparisons are done manually and the results are then input into the System by the GFS staff. Using computer-assisted audit technique, Audit found that the number of on time call-out cases was 311 less than that reported by the GFS for compiling performance statistics in the CORs for 2010 to 2014 (see Table 4). Audit noted that the GFS had secured funding from the Office of the Government Chief Information Officer in 2012 to upgrade the System in phases from 2012 to 2016. In Audit's view, the GFS needs to take this opportunity to automate certain procedures in recording and verifying the call-out data so that the processing and reporting of the number of on time call-out cases can be streamlined to minimise human error and improve operational efficiency.

Table 4

Discrepancies in the reported number of on time call-out cases (2010 to 2014)

On time call-out cases	2010	2011	2012	2013	2014	Total
As reported by the GFS (a)	1,771	1,931	2,071	2,249	2,251	10,273
Per Audit checking (b)	1,616	1,911	2,028	2,202	2,205	9,962
Difference (c) = $(a) - (b)$	155	20	43	47	46	311

Source: Audit analysis of GFS data

Subsequent responses not measured in reporting multiple call-out cases

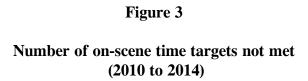
- From time to time, there were cases when the number of call-outs within a period of time exceeded the maximum number to which the GFS could possibly respond. Under such circumstances, one GFS aircraft had to respond to multiple call-out requests sequentially within that period. The GFS has laid down priority guidelines in meeting competing demands for its primary tasks (see para. 2.2(c)). For example, top priority is accorded to search and rescue, and air ambulance service, followed by urgent operational need of the HKPF, and other operational tasks of the law enforcement departments and the Fire Services Department.
- Before 2003, for multiple call-outs at different locations carried out by the same crew, only the on-scene time of the first call-out was used for measuring performance against the set targets. After a review in 2003, the GFS announced the following changes in the 2004-05 COR in order to give a more accurate picture on how the GFS performed:
 - (a) from 2003 onwards, the on-scene time of all call-outs would be used for measuring performance against the set targets; and
 - (b) in view of the revised arrangement for measuring performance of multiple call-outs, the percentage within target for Type A+ and A air ambulance service was revised from 95 in 2003 to 90 in 2004 to provide a more realistic target.

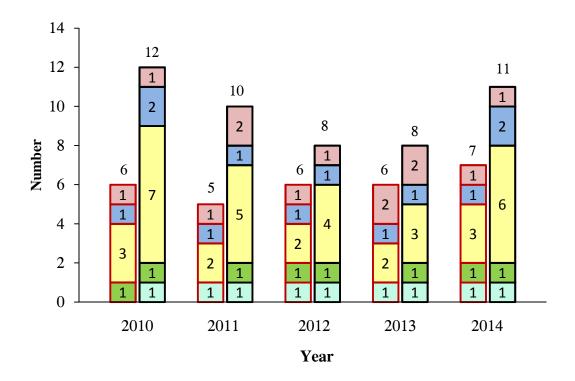
In the CORs for the subsequent years up to 2008-09, the GFS had provided explanatory notes where the target percentage of on time call-outs for a particular service could not be achieved due to delays in responding to multiple call-outs at different locations.

2.10 According to the Guidelines issued by the Financial Services and the Treasury Bureau, Controlling Officers should make sure that the information set out in the CORs is substantiated and accurate. In an examination of the reported performance data in the CORs for 2010 to 2014, Audit found that the GFS had changed the reporting basis from including all multiple call-outs to excluding all subsequent responses from both the total number of call-out cases and the number of

cases meeting the pledged targets. The number of such subsequently responded tasks of multiple call-outs that was not used for compiling the CORs totalled 609 (equaling to 5.4% of the 11,175 reported call-out cases — see para. 2.4). Audit analysis of these 609 unreported multiple call-out cases revealed that:

- (a) 550 (90%) could not meet the pledged on-scene times. While these multiple call-out cases were not reported in the CORs, the GFS used the target of 90% on time call-out cases for measuring the performance of Type A+ and A air ambulance service. The 90% target (down from 95% in 2003) was actually set in 2004 for taking into account multiple call-out cases (see para. 2.9 (b)); and
- (b) 500 (82%) were of the top priority category (i.e. 393 (65%) for Type A+ and A air ambulance service, and 107 (17%) for search and rescue see para. 2.8).
- 2.11 In the CORs for 2010 to 2014, the GFS had not provided any explanation on the changes in the basis of reporting multiple call-out cases but using a target set for multiple call-outs to measure the performance of Type A+ and A air ambulance service. In Audit's view, the GFS should review the issue and take measures to improve the reporting of multiple call-out cases.
- After making adjustments for the overstated 311 on time call-out cases and 550 unreported multiple call-out cases which could not meet the pledged times (see paras. 2.7 and 2.10(a)), Audit found that the total number of on-scene time targets not met was 49 (averaging 9.8 per year) instead of 30 (averaging six per year) as reported by the GFS in the CORs for the five years from 2010 to 2014 (see Figure 3).





Legend: Reported by the GFS in CORs

Adjusted by Audit

Type A+ and A air ambulance service

Type B air ambulance service

Search and rescue

Law enforcement

Fire fighting

Source: Audit analysis of GFS data

Audit recommendations

- 2.13 Audit has recommended that the Controller, GFS should:
 - (a) enhance the computer system with a view to automating certain procedures in recording and verifying call-out data so as to improve the accuracy and efficiency in reporting performance information; and
 - (b) improve the reporting of the performance of multiple call-out cases in the CORs.

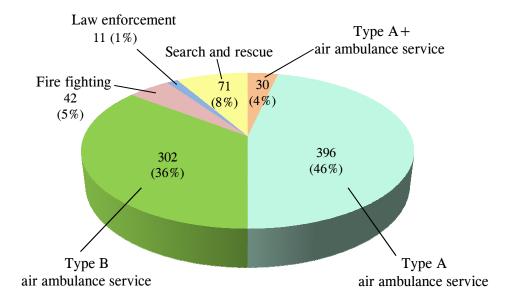
Response from the Government

- 2.14 The Controller, GFS generally agrees with the audit recommendations and will take follow-up actions accordingly.
- 2.15 The Secretary for Financial Services and the Treasury has said that the Financial Services and the Treasury Bureau will closely monitor the GFS's follow-up actions when preparing its future Estimates/CORs.

Response rates for service requests

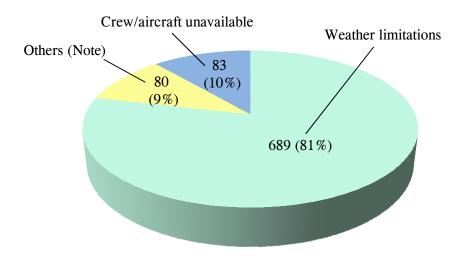
Upon receiving a request for flying services, the GFS will arrange aircraft and aircrew to respond with due consideration given to the urgency, weather conditions, availability of air assets and tasking priority. During the period 2010 to 2014, the GFS could not respond to a total of 852 service requests (8% of the total 11,175 responded cases) after examining all relevant factors. Analyses of these declined cases by service types and by reasons are shown in Figures 4 and 5 respectively. Out of the 852 declined service requests, 81% were due to weather limitations.

Figure 4 Analysis of 852 declined call-outs by service types (2010 to 2014)



Source: Audit analysis of GFS data

Figure 5 Reasons for declining 852 call-outs (2010 to 2014)



Source: Audit analysis of GFS data

Note: These included declined air ambulance service due to unsuitable patient conditions and declined fire-fighting

services after sunset.

- 2.17 Audit found that the GFS had not duly taken into account the 852 declined call-out cases when reporting its response rates to flying services in the CORs for 2010 to 2014, as follows:
 - (a) with the exception of one service in 2010, the GFS reported that it had responded to 100% of all other service call-outs. A recasting of the response rates after taking into account the 852 declined cases is shown in Table 5; and
 - (b) the GFS's guideline on the compilation of statistics for CORs stated that "the percentage of call-outs responded to figure can always be assumed to be 100% as GFS always makes a response even if the response is to decline the sortie after examining all the factors". Audit considers that the GFS needs to review the guideline as the assumed 100% response rates could give rise to misunderstanding that the GFS had provided flying services for all the requests it received, which was actually not the case. It would help stakeholders better understand the actual situation if declined cases are taken into account in reporting the response rates in the CORs. The reasons for declining service requests can be included as explanatory notes so that the response rates will be seen in context.

Table 5

Response rates after taking into account the declined cases (2010 to 2014)

Flying service	2010	2011	2012	2013	2014
Air ambulance service	90%	95%	91%	93%	94%
	(100%)	(100%)	(100%)	(100%)	(100%)
Search by fixed-wing aircraft	94%	100%	89%	100%	100%
	(100%)	(100%)	(100%)	(100%)	(100%)
Rescue by helicopters	93%	98%	97%	97%	96%
	(100%)	(100%)	(100%)	(100%)	(100%)
Law enforcement	95%	100%	99%	96%	98%
	(97%)	(100%)	(100%)	(100%)	(100%)
Fire fighting	92%	85%	88%	88%	91%
	(100%)	(100%)	(100%)	(100%)	(100%)

Source: Audit analysis of GFS data

Remarks: Figures in brackets were the GFS's reported response rates (see para. 2.17(a)).

Audit recommendations

2.18 Audit has recommended that the Controller, GFS should:

- (a) take into account declined cases in reporting the response rates for service requests in the CORs; and
- (b) review the relevant guideline on performance reporting to include this requirement accordingly.

Response from the Government

- 2.19 The Controller, GFS generally agrees with the audit recommendations. He has said that the GFS will make reference to the practices of other disciplined services departments in reviewing the presentation of the COR.
- 2.20 The Secretary for Financial Services and the Treasury has said that the Financial Services and the Treasury Bureau will closely monitor the GFS's follow-up actions when preparing its future Estimates/CORs.

Other management issues

Provision of familiarisation flight service for other B/Ds

- 2.21 The General Regulations have stipulated the following requirements on the use of flying services by B/Ds:
 - (a) when training and operational commitments permit, the GFS may carry out suitable flying tasks for B/Ds. However, such flights will only be approved if they are considered to be in the public interest and when no other form of transport would be suitable in the circumstances; and
 - (b) since it is impracticable to lay down precisely the circumstances in which the use of aircraft by government officers is justified, responsibility is placed on Heads of B/Ds and their authorised senior officers (normally at directorate level) to make sure every request is necessary.
- Standard familiarisation flights for guests. Carrying passengers is one of the statutory functions of the GFS. From time to time, B/Ds made requests for flying services to carry passengers for various purposes, such as expediting conveyance of passengers to remote areas and providing familiarisation tour of Hong Kong. From 2010 to 2014, the number of such familiarisation flights provided by the GFS increased from 54 by 7% to 58. During the period, the GFS also arranged, on average, 26 familiarisation and passenger flights each year (including flights for charity and youth organisations). Audit's sample check of the passenger lists of these flights revealed that passenger details were not always recorded. The lack of proper recording of passenger details on the GFS's flights

could undermine public accountability. The GFS needs to make improvement in this regard. In 2013, some Members of the Legislative Council expressed concern over media reports of alleged abuse of the GFS services. To allay public concern and enhance transparency, consideration should be given to proactive disclosure of annual statistics on the provision of familiarisation flight service with a breakdown by user B/Ds (say on the GFS's website).

Need to raise B/Ds' cost-consciousness in using familiarisation flight service. According to the GFS's COR for 2014, the direct operating cost (Note 8) of the helicopter (EC155) was \$23,890 per hour and \$35,270 per hour for the Super Puma. In the absence of interdepartmental charging (Note 9), user B/Ds may not be cost-conscious of their demand for familiarisation flight service. In the light of the competing demands for the GFS's limited resources (see para. 2.16), the GFS needs to raise B/Ds' cost-consciousness in using the familiarisation flight service (e.g. through proactive disclosure of the cost of services provided to them).

Management review of flying services needed

- The GFS prepares monthly statistics on the extent of achievement of the 23 on-scene time targets and the number of out-of-pledge call-out cases (with a breakdown of the underlying reasons) for the attention of its senior management. While these statistics are useful in providing an overview of the performance of the GFS services, there is merit to also highlight the exceptional cases for the management's review, including the following:
 - (a) Out-of-pledge cases in providing top priority emergency services. Long time taken in providing the top priority emergency services (i.e. Type A+ and A air ambulance service, and search and rescue) is undesirable. From 2010 to 2014, of the 202 out-of-pledge cases (or 1.8% of the total 11,175 responded cases) due to unavailable crew/aircraft, 72 were top priority cases and the times taken for responding to the call-outs exceeded the respective pledged on-scene times by more than 50%. Cases 1 and 2 are examples of such cases;
- **Note 8:** The direct operating cost only included fuel cost and maintenance cost.
- **Note 9:** Financial and Accounting Regulation 435 states that except where special approval has been given by the Secretary for Financial Services and the Treasury, no charge will be made for services rendered by one department to another.

- (b) **Declined cases due to resource limitations.** Failure in providing emergency services is undesirable, in particular those of top priority. Of the 83 declined call-outs (or 0.7% of the total 11,175 responded cases from 2010 to 2014) due to unavailable crew/aircraft (see Figure 5 in para. 2.16), 32 were related to top priority emergency services; and
- (c) Out-of-pledge cases due to not prioritising services in accordance with laid-down instructions. According to the instructions issued by the Secretary for Security, should there be a last minute call on resources arising from a primary task (e.g. air ambulance service), any commitments to secondary functions (e.g. familiarisation flight) will be cancelled or postponed (see para. 2.2(e)). Case 3 is an example of out-of-pledge cases with apparently task prioritisation problem.

Case 1

Out-of-pledge case due to unavailable aircrew

On 28 May 2013, the GFS received a call-out at 8:42 to support the ground parties of the Fire Services Department and the HKPF in conducting a search for a suspected distress person. At that moment, four helicopters engaging six pilots had been scheduled to provide operational training support for the HKPF starting from 8:45. At 8:50, the GFS informed the Fire Services Department that it would arrange for the search when resources became available with the estimated arrival time after 10:00 (Note). At 10:08, the GFS diverted one of the helicopters from the training tasks to assisting in the aerial search operation. The on-scene time at 10:45 exceeded the performance target of 40 minutes by 83 minutes.

Source: GFS records

Note: In February 2015, the GFS informed Audit that on 28 May 2013, the GFS was not able to immediately respond to the search call-out case as its aircraft and aircrew were engaged in other tasks, and information on the exact location of the incident and the nature of the call-out was not available initially. The GFS diverted a helicopter to assist in the search operation when additional information was subsequently made available. However, such additional information was not documented in the GFS records.

Case 2

Out-of-pledge case due to unserviceable aircraft

- 1. On 22 December 2014, the GFS received a call-out for Type A air ambulance service at 16:53. However, the responding helicopter (EC155) was reported to have a nose wheel problem by the pilot before take-off. Additional time was spent on changing helicopter. Hence, the on-scene time exceeded the performance target of 20 minutes by 15 minutes.
- 2. Subsequently, the Engineering Section investigated the case and arranged to replace potentially problematic brakes of all the EC155 helicopters as a proactive measure to prevent similar problems from happening in the future (see para. 4.12).

Source: GFS records

Case 3

Out-of-pledge case due to scheduled familiarisation flight

- 1. On 16 April 2013, the GFS received call-outs for Type B and Type A air ambulance service (CAS3 and CAS4) at 10:48 and 11:26 respectively. According to the tasking agent (i.e. the HKPF) of the Type A call-out, the patient would be ready in 30 minutes (i.e. at 11:56). At that moment, two helicopters engaging three pilots had been deployed for other air ambulance services (CAS1 and CAS2), and one other helicopter operated by a pilot (Pilot A) was providing a familiarisation flight (FF1). A fourth helicopter available on ground was scheduled to provide the next familiarisation flight (FF2) starting at 11:40.
- 2. At 11:28, Pilot A informed the GFS that he would respond to the air ambulance call-outs (CAS3 and CAS4) using another helicopter fitted with equipment for air ambulance service purposes after finishing the familiarisation flight (FF1). While another pilot (Pilot B) returned from the air ambulance service (CAS1) at 11:30, the GFS decided to deploy him to operate the familiarisation flight (FF2) as scheduled at 11:40, after considering Pilot A's acknowledgement and the time of patient's readiness. In the event, Pilot A returned from the familiarisation flight (FF1) at 11:45 and changed to another helicopter (previously used for CAS1). It was airborne at 12:03 and arrived on scene at 12:08, exceeding the time specified by the tasking agent of 11:56 by 12 minutes.

Source: GFS records

Need to monitor the proper use of Type B air ambulance service

Air ambulance service accounted for about one-third of the total operation flying hours of the GFS. From 2010 to 2014, the number of call-outs for air ambulance service totalled 10,005 (Note 10). While the number of call-outs for Type A+ air ambulance service decreased by 4%, there were increases in Type A and Type B services, ranging from 11% to 82% (see Table 6). According to the GFS Operations Manual and the guidelines issued by the Hospital Authority, Type B air ambulance service should be requested by medical doctors for patients suffering from conditions of lesser emergency and for which public transport is not appropriate. Type B air ambulance service is only available between 7:00 and 21:59, and the pledged on-scene time is 120 minutes.

Table 6

Call-outs for air ambulance service (2010 to 2014)

Type of casualty evacuation	2010	2011	2012 (Number)	2013	2014	Percentage of increase/ (decrease) between 2010 and 2014
Type A+	188	195	191	182	180	(4%)
Type A	100	193	191	102	100	(470)
Type A	1,132	1,196	1,271	1,335	1,258	11%
Type B	382	432	638	730	695	82%
Overall	1,702	1,823	2,100	2,247	2,133	25%

Source: Audit analysis of GFS data

Note 10: Of the 10,005 call-out requests, 728 (30 Type A+, 396 Type A and 302 Type B) were declined by the GFS (see Figure 4 in para. 2.16) and 141 were withdrawn by the tasking agents.

- 2.26 The significant increase in Type B air ambulance service call-outs between 2010 and 2014 was mainly attributable to the increase in the number of cases for Cheung Chau (from 257 by 109% to 536) and Lantau Island (from 59 by 12% to 66). Audit noted that the auxiliary medical officers of the GFS would re-assess some of the Type B call-out requests. As a result of such re-assessments, other modes of transport had been used to transfer some patients of Cheung Chau and Lantau Island, indicating that there could be room for improvement in the initial assessments of the patients' need. The following cases are some examples:
 - (a) in 2012, there were two Type B call-out cases on Cheung Chau for which the transfer of patients by vessels instead of air ambulance service was considered appropriate having regard to their stable condition and low urgency; and
 - (b) similarly in 2010, there were three Type B call-out cases on Lantau Island for which the transfer of patients by land transport was considered appropriate.
- Bearing in mind that the primary duties of the auxiliary medical officers of the GFS are to provide specialist trauma and emergency treatment to the patients on board the aircraft (see Note 1 to para. 1.3), it is important that the initial patient assessments are properly carried out in the first place with due regard to patient safety and proper use of the GFS flying resources. In March 2015, in response to Audit's enquiries, the Hospital Authority said that it had updated the casualty evacuation guidelines for the classification of patients for such service by its medical staff and other user departments in January 2015. In Audit's view, the Hospital Authority needs to closely monitor the implementation of and compliance with the updated guidelines to see if further enhancement is necessary.

Audit recommendations

- 2.28 Audit has recommended that the Controller, GFS should:
 - (a) enhance transparency and accountability in the provision of familiarisation flight service by:

- (i) maintaining proper records of all passengers carried on such flights; and
- (ii) considering proactive disclosure of annual statistics on the provision of familiarisation flight service with a breakdown of the usage and related costs by user B/Ds;
- (b) strengthen the monthly management review of the performance of the GFS flying services by placing more emphasis on the exceptional cases such as those relating to long time taken/failure in providing top priority emergency services; and
- (c) take measures to ensure that the laid-down tasking priorities are followed in responding to competing demands for the GFS flying services.
- 2.29 Audit has *recommended* that the Chief Executive, Hospital Authority should closely monitor the implementation of and compliance with the updated casualty evacuation guidelines by its medical staff to see if further enhancement is necessary.

Response from the Government

- 2.30 The Controller, GFS generally agrees with the audit recommendations in paragraph 2.28. Regarding the recommendation in paragraph 2.28(c), he has said that:
 - (a) because of the multi-role nature of the GFS, resource constraints and strong demand for the GFS flying services, resources of the GFS are always engaged in different emergency missions, and essential training and tasks instead of standing by on ground. Inevitably there are occasions where a new emergency call-out comes in when all available aircraft and/or aircrew members are engaged in other tasks. Under such circumstances, while a system for monitoring the deployment of resources

is in place, the GFS still relies on the professional judgement of flight operation supervisors to determine the relative urgency of competing demands and complexities of individual flying missions in deploying its resources to deliver services in the most appropriate and effective way;

- (b) the GFS has already issued internal guidelines on the need to observe tasking priorities to facilitate more effective and efficient deployment of limited resources; and
- (c) the GFS will also continue to produce daily occurrence review reports and weekly event summary reports, and highlight the out-of-pledge cases for review and monitoring by the senior management.
- 2.31 The Chief Executive, Hospital Authority agrees with the audit recommendation in paragraph 2.29. He has said that the Hospital Authority will continue to monitor the implementation of and compliance with the casualty evacuation guidelines by its medical staff (such as regular audits).

PART 3: MANAGEMENT OF AIRCREW MEMBERS

- 3.1 This PART examines the following issues relating to the management of the GFS aircrew members for flying duties:
 - (a) manning for 24-hour flying services (paras. 3.2 to 3.10); and
 - (b) aircrew duty and rest hours (paras. 3.11 and 3.12).

Manning for 24-hour flying services

3.2 The GFS is required to provide emergency response on a 24-hour basis year-round. Subject to flight and duty regulations as stipulated by the CAD, the GFS has to roster on a daily basis sufficient suitably qualified crew members to work in three shifts to operate its aircraft for providing the essential services. Table 7 summarises the crew requirements for operating each type of aircraft.

Table 7

Crew requirements for operating each type of aircraft

Aircraft type	Number of pilots required	Number of air crewman officers required
Super Puma helicopter	2	1 to 2
EC155 helicopter	1 (day) 2 (night)	1
J-41 fixed-wing aircraft	2	1

Source: GFS records

- 3.3 As at 31 December 2014, the GFS had 37 pilots and 31 air crewman officers on civil service terms. In addition, the GFS employed three pilots and two air crewman officers on non-civil service terms. The establishment and strength of the pilot and air crewman officer grades are shown in Appendix B. Of the 40 pilots (Note 11), 12 were in the aeroplane stream while 28 were in the helicopter stream (Note 12).
- Roster planning. According to the GFS Operations Manual, at the present staffing level, there are sufficient pilots to man three shifts per day for the helicopter stream but only two shifts for the aeroplane stream. As a guideline, the Manual sets out the minimum crew requirements (Note 13) for each shift to meet the primary emergency response in addition to other planned tasking commitments (see Table 8). Any call-out for emergency response of the aeroplane stream during the Shift C period will be subject to the call-in of available crew to respond. The shift rosters are published in advance so that crew members can plan for adequate pre-duty rest. The rostering period is for a cycle of 28 consecutive days. For any change in shift duty, a crew member should be given a minimum of 12 hours prior notification, otherwise it will be treated as an emergency call-in.

- Note 11: The pilot grade comprises Cadet Pilot, Pilot II, Pilot I, Senior Pilot and Chief Pilot. In addition to their operational flying duties, the Senior Pilots and Chief Pilots are responsible for providing in-house training for junior pilots and testing of their flying skills. As part of the senior management of the GFS, they also assume administrative duties, for example, the planning and review of aircrew's overseas training, management of aircraft replacement projects, operational planning such as development and reprovisioning of new helipad, and assessment of the adverse impact on the operations of the GFS from large-scale infrastructure projects.
- Note 12: In March 2015, the GFS informed Audit that four aeroplane pilots and 10 helicopter pilots were still under training at various stages. According to the GFS, there will always be some pilots undergoing different stages of training and upgrading.
- **Note 13:** According to the GFS, the manning level is a guideline for the supervisor to roster the 24-hour coverage. It is not a mandatory requirement and roster planning largely depends on crew availability and qualifications, and other commitments.

Table 8

Minimum crew requirements for each shift of flying duties a day

Shift	Time	Number of pilots	Number of air crewman officers	Minimum capacity
Aeroplane	stream			
A	7:00 to 15:50	2	1	One team for long-range search and rescue using one J-41
В	13:10 to 21:59	2	1	One team for long-range search and rescue using one J-41
	Total	4	2	
Helicopter	stream			
A	7:00 to 15:50 (Note 1)	3	3	One team for search and rescue using one Super Puma and one team for air ambulance service using one EC155
В	13:10 to 21:59 (Note 2)	3	3	One team for search and rescue using one Super Puma and one team for air ambulance service using one EC155
С	21:59 to 6:59	2	1	One team for search and rescue or air ambulance service using Super Puma/EC155 (Note 3)
D (on weekdays only)	8:10 to 17:00	2	1	To supplement the Shift A by providing additional coverage for multiple call-outs, government task support and training flights using Super Puma/EC155s
	Total	10	8	

Source: GFS records

Note 1: One pilot and one air crewman officer will be on duty at 6:30 to provide air ambulance coverage earlier. They will be off duty at 15:20.

Note 2: One pilot and one air crewman officer will be on duty at 13:40 and off duty at 22:30.

Note 3: The capacity of Shift C to provide emergency coverage overnight will depend on the crew qualifications and combination.

Minimum crew requirements not met in some shifts

In 2013 and 2014, the GFS arranged a total of 4,142 shifts to provide the primary emergency response in addition to meeting other planned tasking commitments. Audit analysis of the shift rosters of the pilots for the two years revealed that 178 shifts (or 4.3% of the 4,142 shifts) were manned by fewer pilots than the minimum stipulated in the guideline (see Table 9). In particular, no aeroplane pilot was rostered for 65 shifts (37% of the 178 shifts or 1.6% of the 4,142 shifts) in 2013 and 26 shifts (15% of the 178 shifts or 0.6% of the 4,142 shifts) in 2014.

Table 9

Number of shifts when fewer pilots were rostered than the minimum stipulated in the guideline (2013 and 2014)

Shift	Aeroplane stream		Helicopter stream		Total		
Silit	2013	2014	2013	2014	- Total		
Monday to Friday excluding public holidays							
A	23	12	7	7	49		
В	20	8	6	5	39		
С	Not ap	plicable	0	0	0		
D	(No	ote)	0	1	1		
Subtotal	43	20	13	13	89		
Saturday, Sunday ar	Saturday, Sunday and public holidays						
A	21	9	11	8	49		
В	21	11	6	2	40		
С	Not applicable (Note)		0	0	0		
Subtotal	42	20	17	10	89		
Total	85	40	30	23	178		

Source: Audit analysis of GFS data

Note: There were no Shifts C and D for the aeroplane stream (see para. 3.4).

Remarks: For 14 shifts in the aeroplane stream and 25 shifts in the helicopter stream, totalling 39 (22%) shifts of the 178 shifts, the shortfall in pilots was due to sick leave. For the other shifts, the shortfall was due to leave, mandatory day-off and overseas training.

According to the GFS shift rosters, the daily average number of pilots on duty on weekdays in 2013 and 2014 was 21 (16 for helicopter stream and 5 for aeroplane stream, i.e. above the minimum requirements). However, Audit noted that there were occasions when the number of pilots on duty was below the minimum. As a result, some call-out cases were delayed or declined (Note 14). Cases 4 and 5 are examples of such delayed and declined cases. For the aeroplane stream, on 19 weekdays in 2013 and 10 weekdays in 2014, only two to three aeroplane pilots were on duty. For example, on 17 January 2014, of the 12 aeroplane pilots, only three were on duty, three on leave, four on mandatory day-off and two on overseas training. As the primary role of the GFS is to provide emergency services, it needs to maintain the sufficient crew for each shift to provide the basic level of operational capacity.

Case 4

Out-of-pledge case in providing air ambulance service

On 3 October 2013, only two helicopter pilots were rostered for Shift B (i.e. falling short of the manning level for Shift B by one pilot) as one of the three Shift B pilots was redeployed to take up daytime duty in Shift D to cover other operational commitments. At 20:22, the GFS received a call-out for Type A air ambulance service. At that moment, the two helicopter pilots were engaged in a search and rescue operation on a Super Puma. As there was no other pilot available, the case was responded to after the pilots had returned from the search and rescue operation. The helicopter arrived on scene at 20:54, exceeding the performance target of 20 minutes by 12 minutes.

Source: GFS records

Note 14: According to the GFS, the number of pilots (i.e. 37 pilots on civil service terms and three pilots on non-civil service terms) were sufficient to meet the manning level in the guideline. However, as around 35% to 40% of the pilots were under training at various stages and hence, not all pilots were fully qualified for all types of missions/tasks in the shifts. Training and license tests were also their high priority tasks.

Case 5

Declined request for air ambulance service

On 12 February 2013, two helicopter pilots were rostered for Shift D but only two for Shift B (i.e. falling short of the manning level for Shift B by one pilot). At 16:56, the GFS received a call-out for Type A air ambulance service. At that moment, all the four pilots were engaged in three search and rescue operations. As there was no other pilot available, the case was turned down by the GFS and taken over by the HKPF without air support.

Source: GFS records

Need to improve call-in arrangement for night-time search and rescue

- 3.7 As mentioned in paragraph 3.4, at the existing staffing level, the GFS can only arrange two shifts (i.e. Shifts A and B) for the aeroplane stream. For any call-outs for long-range search and rescue during Shift C period (i.e. night time), the GFS needs to call in any available pilots and air crewman officers. According to the GFS Operations Manual, the following ground rules apply when calling in crew members for emergency operations:
 - (a) crew members who are on leave shall not be called in;
 - (b) no cancellation of crew members' mandatory day-off (Note 15) is allowed;

Note 15: A crew member shall: (a) not work more than six consecutive days; (b) have 2 consecutive days off in any consecutive 14 days following the previous 2 consecutive days off; (c) have at least 7 days off in any consecutive 28 days; and (d) have at least 24 days off in any three consecutive rostered 28 days period.

Management of aircrew members

- (c) prior to crew members being called in, there should be no reduction in their rest period. Meanwhile, crew members shall not be disturbed in their mandatory rest period (Note 16); and
- (d) to call in crew members who are originally on Shift A or D on the following day may lead to a reduction in crew strength available for normal tasking on the following day. Under this circumstance, cancellation or postponing of the tasking is acceptable.
- 3.8 Taking into account the call-in arrangement, the pledged on-scene times for the long-range search and rescue services during night time are 60 minutes longer than those for daytime and evening (Shifts A and B).
- 3.9 Between 2010 and 2014. the **GFS** received 103 call-outs requiring the fixed-wing aircraft for long-range search and rescue (Note 17). Of the 103 call-outs, 26 (25%) were received during night time requiring the call-in of pilots and air crewman officers. In 2014, there was one occasion on which the GFS had difficulties calling in the crew members, resulting in longer time taken in responding to the call-out (see Case 6). In Audit's view, the GFS needs to explore ways to improve the call-in arrangement in order to meet the service demand for long-range search and rescue service during night time.

Note 16: The minimum rest period prior to a duty period shall be at least as long as the preceding duty period or 12 hours, whichever is the greater.

Note 17: The figure did not include 10 call-outs that required both helicopter and fixed-wing aircraft, and for which the helicopter arrived on scene first. For performance measurement purpose, the GFS only uses the on-scene time of the first arriving aircraft.

Case 6

Out-of-pledge case in providing search and rescue service due to difficulties calling in crew members

- 1. On 11 October 2014, the GFS received a call-out at 22:47 for long-range search and rescue which required the synchronised arrival of a helicopter and a fixed-wing aircraft. For the helicopter, refuelling at an oil rig was also required. While the helicopter pilots on Shift C duty were then available, there was no overnight shift arrangement for the aeroplane stream and the GFS needed to call in available fixed-wing pilots.
- 2. At 22:50, the GFS successfully called in a pilot and an air crewman officer. However, another pilot could only be called in one hour later at 0:01 on 12 October 2014. After confirmation of availability of both helicopter and fixed-wing aircraft crew, the helicopter was airborne at 0:15 and arrived on scene at 2:35. The fixed-wing aircraft was airborne at 1:18 and arrived on scene at 2:30, exceeding the pledged time of 185 minutes by 38 minutes (see Note 17 to para. 3.9).

Source: GFS records

- 3.10 In March 2015, in response to Audit's enquiries, the GFS said that:
 - (a) due to pre-mature wastage of pilots (in particular for the aeroplane stream) and the increase in the number of call-outs in recent years, the GFS was suffering from manpower shortage problems in its pilot grade. Unlike many other grades in the civil service, it was difficult to implement short-term measures to relieve the manpower pressure of the pilot grade;
 - (b) the GFS had been implementing a number of measures, including speeding up its recruitment and training process, to mitigate the problem in the longer term; and
 - (c) the GFS would make continuous effort to review the manning needs with a view to enhancing the night-time coverage.

Aircrew duty and rest hours

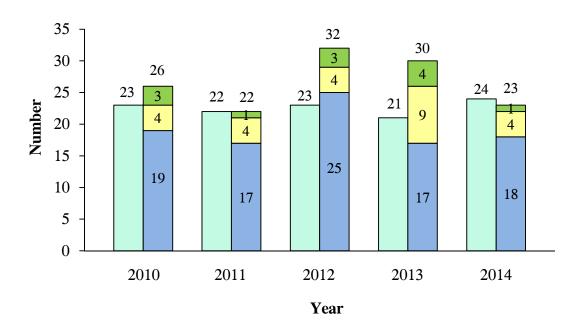
- 3.11 The GFS operates in accordance with civil aviation rules and regulations which require the setting of the maximum flying hours, maximum duty hours and minimum rest hours (Note 18) for pilots and air crewman officers in different shifts to ensure their safety and health in flight operations. Due to the complexity and dynamic nature of the operational response, any need to extend the flying hours or duty hours, or to reduce the rest time has to be recorded in a Commander Discretion Report (CDR). The GFS aims to minimise the number of CDRs and sets a target (Note 19) each year to serve as a safety performance indicator.
- During the five-year period from 2010 to 2014, the GFS could not meet the targets in three years (see Figure 6). Of the total 133 CDRs, 52 involved pilots, 76 involved air crewman officers and 5 involved both of them. Audit noted that the number of CDRs had decreased in the past three years (from 32 in 2012 to 23 in 2014) and the CDR target was met in 2014. However, the GFS needs to continue closely monitoring the situation and take effective measures to address the issue.

Note 18: Depending on the types of shift and aircraft operated, the maximum flying hours range from five to eight and the maximum duty hours range from eight to 12 (see Note 16 to para. 3.7(c) for minimum rest hours).

Note 19: The safety target for each year is the average number of CDRs in the preceding five years.

Figure 6

Number of CDRs
(2010 to 2014)



Legend: ☐ Target (overall)

Actual: extended duty hour cases

☐ Actual: reduced rest time cases

■ Actual: extended flying hour cases

Source: GFS records

Audit recommendations

- 3.13 Audit has recommended that the Controller, GFS should:
 - (a) make greater effort to maintain sufficient crew for each shift of flying duties to provide a reliable primary emergency response;
 - (b) explore ways to improve the call-in arrangement in order to meet the demand for long-range fixed-wing aircraft search and rescue service during night time; and

(c) continue to closely monitor the extent of attainment of the CDR targets and take effective measures to enhance the safe and healthy working conditions for the crew members.

Response from the Government

3.14 The Controller, GFS generally agrees with the audit recommendations. He has said that the GFS will make continuous efforts to review the manning levels and manpower deployment of the aircrew against the service needs without compromising flight safety and aircrew health.

PART 4: MAINTENANCE OF AIRCRAFT

- 4.1 The GFS is an approved maintenance organisation and design organisation under the Hong Kong Aviation Requirements. Its maintenance activities are under the CAD's continuous monitoring and periodic audits. The GFS's Engineering Section is responsible for all in-house maintenance and servicing of the nine operational and two training aircraft as well as all related mission equipment. This PART examines the following issues relating to the maintenance of the operational aircraft (Note 20):
 - (a) aircraft availability target (paras. 4.3 to 4.6); and
 - (b) aircraft downtime (paras. 4.7 to 4.17).
- 4.2 In general, the maintenance of aircraft is classified into:
 - (a) **Routine maintenance.** It covers scheduled aircraft inspections and component maintenance work:
 - (i) Aircraft inspections. There are two types of aircraft inspections. First, an annual inspection for each aircraft is required before the renewal of the Certificate of Airworthiness by the CAD. Second, each type of aircraft has its own mandatory inspection cycle to ensure continued airworthiness and serviceability. The cycle is usually specified by reference to the number of flying hours or the duration between inspections; and
 - (ii) *Component maintenance work.* It relates to the maintenance, replacement or overhaul work of life-specific components, such as engines, gearboxes and propellers; and

Note 20: The maintenance issues of the two training aircraft are discussed in PART 5 of this Audit Report.

(b) Unscheduled maintenance. It is carried out to repair the aircraft before they can be used as a result of defects/incidents reported by pilots and/or found during pre-flight, between two flights and after flight inspections. According to the GFS, depending on the nature of the defects reported or identified, it is difficult to estimate or guarantee the duration of time spent on investigation and subsequent rectifications.

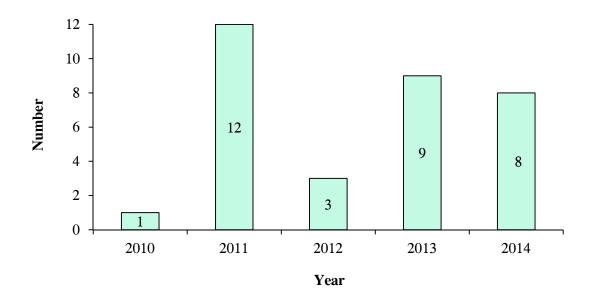
Aircraft availability target

The GFS's existing operational aircraft comprise two J-41 fixed-wing aircraft, three Super Puma helicopters and four EC155 helicopters. According to the GFS, the Engineering Section aims to ensure all operational aircraft serviceable at 7:00 daily barring scheduled maintenance or any other unforeseen unserviceability. For management reporting purpose, the Engineering Section is committed to making available a minimum of five operational aircraft (one J-41, two Super Pumas and two EC155s) from 7:30 to 23:00, and four operational aircraft (one J-41, one Super Puma and two EC155s) from 23:01 to 7:29 for 95% of the time for each month (i.e. the minimum aircraft availability target). The remaining aircraft will be on standby to meet sudden high operational demand if they are not under maintenance. The Engineering Procedures Manual has specified that not more than one of each type of aircraft will be scheduled for routine maintenance at any one time.

Shortfalls in meeting minimum aircraft availability target

The Engineering Section reports to the senior management the extent of achievement of the minimum aircraft availability target on a monthly basis. Figure 7 shows that for the five-year period from 2010 to 2014, the shortfalls on aircraft availability against the 95% target totalled 33 (55%) months. Figure 8 shows the extent of achievement of the minimum aircraft availability target.

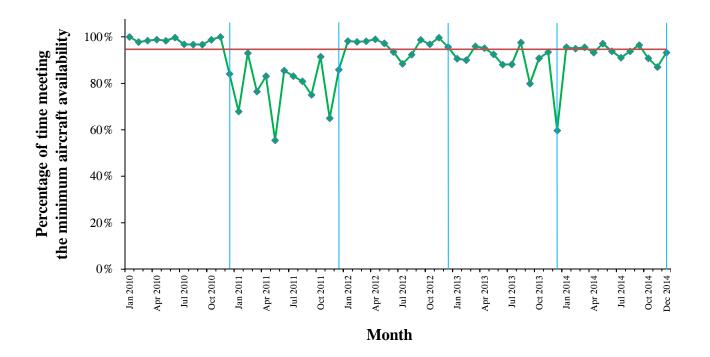
Number of months for which the minimum aircraft availability target was not met (2010 to 2014)



Source: GFS records

Figure 8

Extent of achievement of the minimum aircraft availability target (2010 to 2014)



Legend: — 95% minimum aircraft availability target

Source: GFS records

4.5 Audit noted that for 2010 and 2011, the failure to meet the aircraft availability target was mainly caused by an emergency landing accident of a Super Puma helicopter in Shing Mun Reservoir in December 2010. The damaged helicopter was subject to an investigation and major repair for a long period of time. In 2013, the GFS was required to carry out a major structural repair on all three Super Pumas to meet the mandatory airworthiness requirements of the fleet. In 2014, a mandatory 15-year inspection on one Super Puma took three months.

4.6 While the major maintenance work for the Super Puma helicopters was necessary to uphold the reliability and safety of the fleet, the failure to meet the aircraft availability target during long maintenance period was a cause for concern as the provision of emergency services by the GFS could be affected. Case 7 is an example. Audit noted that there were also occasions when the provision of emergency service was affected by insufficient number of serviceable aircraft of other type (i.e. EC155 helicopters). Case 8 is an example.

Case 7

Out-of-pledge case due to insufficient serviceable aircraft

On 5 December 2013, the GFS received a call-out at 13:38 to provide water bombing for fire fighting. At that moment, two of the three Super Puma helicopters were under maintenance, i.e. one routine and the other unscheduled (engine problem reported by the pilot). At 13:45, the only serviceable Super Puma helicopter was also reported by the pilot to have an engine problem. About one hour was spent on identifying and rectifying the problem before flying. As a result, the on-scene time exceeded the performance target of 40 minutes by 90 minutes.

Source: GFS records

Case 8

Declined request for air ambulance service due to insufficient serviceable aircraft

On 28 August 2013, the GFS received a call-out for Type B air ambulance service at 12:26. On that day, one of the four EC155 helicopters was under maintenance and required air test. However, the other three available EC155 helicopters were reported to have technical problems by the pilots after their flying tasks and became unserviceable. As a result, the GFS had to turn down the call-out request. Subsequently, the problems were rectified and the helicopters were gradually returned to service from 14:45 to 16:30.

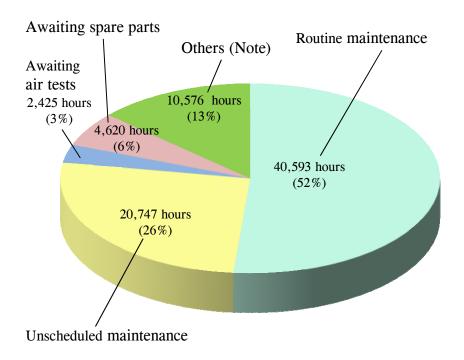
Source: GFS records

Aircraft downtime

4.7 From 2010 to 2014, the downtime of the nine operational aircraft totalled 78,961 hours. Figure 9 is an analysis of contributing factors of the downtime.

Figure 9

Analysis of 78,961 downtime hours of operational aircraft (2010 to 2014)



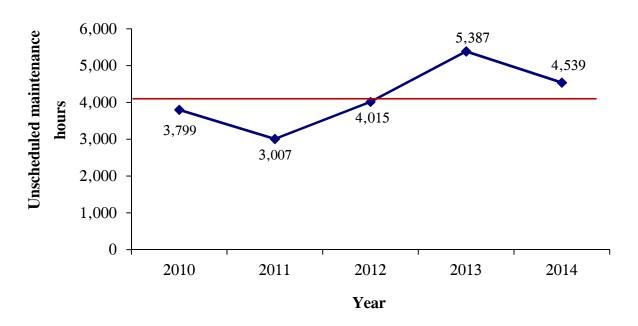
Source: GFS records

Note: These included the downtime of 8,827 hours due to the emergency landing accident mentioned in paragraph 4.5. The remaining 1,749 hours included time spent on air tests and deferred air tests due to weather limitations and air traffic control delay.

Unscheduled maintenance on the rise

As shown in Figure 9, unscheduled maintenance accounted for 26% of the total downtime (about one half of the routine maintenance hours). Unlike routine maintenance which can be planned (see para. 4.3), unscheduled maintenance cannot be predicted and is more disruptive to day-to-day operations and maintenance planning. Figure 10 shows that from 2010 to 2014, unscheduled maintenance was generally on an increasing trend (i.e. rising to 4,539 hours in 2014 which were higher than the five-year average of 4,149 hours by 9.4%). The situation warrants the GFS management's attention.

Figure 10
Unscheduled maintenance hours of GFS operational aircraft (2010 to 2014)

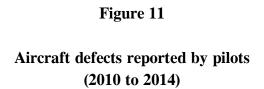


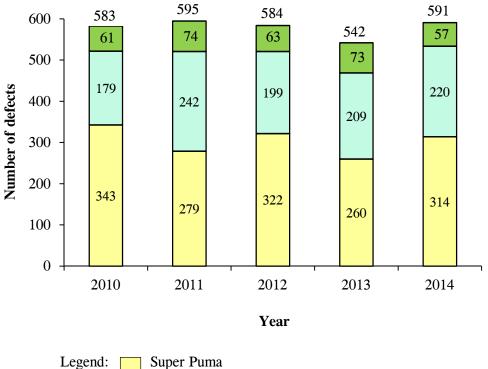
Legend: — Five-year average of 4,149 hours for 2010 to 2014

Source: GFS records

Aircraft defects reported by pilots

- 4.9 To ensure that the operational aircraft are serviceable, the Engineering Section performs the following daily inspections on aircraft used for flying duties or on standby:
 - (a) **Before the first flight of the day.** The inspection is to ensure the operational availability of the aircraft for the flights of the day;
 - (b) **Between two flights.** It is to confirm that the aircraft is immediately serviceable after the previous flight. Any defects reported or identified will be fixed before release for standby; and
 - (c) After the last flight of the day. It is to ensure that the aircraft is serviceable for the flights scheduled for the next day.
- 4.10 From 2010 to 2014, there were a total of 2,895 defects reported by pilots before take-off for flying duties or after airborne. On average, there were about 1.6 defects reported by pilots per day for the serviceable operational aircraft. Figure 11 shows the annual number of defects reported for the Engineering Section's follow-up action.





Legend: Super Puma

EC155

J-41

Source: GFS records

4.11 In 2013, there were 27 out-of-pledge cases of providing emergency services due to unserviceable aircraft (see Figure 2 in para. 2.6). Of these 27 cases, 21 were due to defects reported by pilots before take-off and 6 were due to defects reported after airborne. Case 9 shows an out-of-pledge case in providing Type A+ air ambulance service due to defects identified after airborne. Case 10 is another out-of-pledge case due to defects identified before take-off.

Case 9

Out-of-pledge case due to aircraft defects identified after airborne

On 4 June 2013, the GFS received a call-out at 22:29 for Type A+ air ambulance service (stroke case). The responding helicopter (EC155) was held up by air traffic control until 22:45. After take-off for two minutes (at 22:47), the pilot reported a hydraulic problem of the EC155 and needed to return and change aircraft (Super Puma). Consequently, the on-scene time (23:11) of the Super Puma exceeded the performance target of 20 minutes by 22 minutes.

Source: GFS records

Case 10

Out-of-pledge case due to aircraft defects identified before take-off

- 1. On 14 June 2013, the GFS received a call-out for Type A air ambulance service at 12:18. However, the responding helicopter (EC155) was reported to have a technical problem (low on hydraulic fluid level) by the pilot before take-off. Additional time was spent on changing helicopter. Finally, the on-scene time (12:47) exceeded the performance target of 20 minutes by 9 minutes.
- 2. Subsequently, the Engineering Section reviewed the case and reminded relevant staff to pay particular attention to the hydraulic fluid level in the future.

Source: GFS records

4.12 According to the GFS, besides rectifying the reported defects and reviewing the maintenance work with the CAD at monthly meetings, the Engineering Section had also reviewed some of the aircraft defect cases which caused delays in the provision of services for identifying room for improvement in the future maintenance work (see Case 10, and Case 2 in para. 2.24(a)). For 2013 and 2014, the Engineering Section reviewed a total of 53 aircraft defect cases and found that in four cases (7.5%), improvements could be made in the maintenance procedures to prevent recurrence of similar defects. Audit appreciates the GFS's

effort in this regard and considers that the review should cover all the out-of-pledge cases (i.e. the review in 2013 only covered 18 of the 27 out-of-pledge cases while the review in 2014 only covered 26 of the 31 out-of-pledge cases).

Increase in waiting time for air tests

- 4.13 According to the Policy Statement issued by the Secretary for Security, air tests of aircraft are accorded a high priority of all flying hours (see para. 2.2). However, Figure 9 in paragraph 4.7 shows that the waiting time for air tests still accounted for about 3% of the total downtime.
- 4.14 Conducting air tests requires suitably qualified pilots. As at December 2014, the GFS had two qualified pilots for conducting air tests for the two fixed-wing aircraft and nine qualified pilots for the seven helicopters (Note 21). In the past five years, waiting time for air tests increased by 271 hours (99%) from 274 hours in 2010 to 545 hours in 2014 (see Table 10). Audit considers that the GFS needs to ascertain the reasons for the increase in waiting time for air tests and take effective measures to address the issue.

Table 10
Waiting time for air tests (2010 to 2014)

Aircraft	2010	2011	2012	2013	2014	
	(Hour)					
Fixed-wing	20	23	_	5	72	
Helicopter	254	239	489	848	473	
Total	274	262	489	853	545	

Source: GFS records

Note 21: Of the nine pilots qualified for carrying out air tests of helicopters, five were qualified for both the Super Puma and EC155, three for the Super Puma only and one for the EC155 only. These air test pilots were mainly Chief Pilots and Senior Pilots who also carried out other duties (see Note 11 to para. 3.3).

- 4.15 In March 2015, in response to Audit's enquiries, the GFS said that:
 - (a) for safety reasons, air tests could only be conducted during hours of daylight and a large proportion of helicopter air tests must be carried out at a relatively high altitude (3,000 to 6,000 feet) in visual flying conditions;
 - (b) due to weather, airspace and air traffic control restrictions, suitable conditions were rarely available especially during spring time and typhoon season in summer; and
 - (c) because of operational priority, there were instances that those air test qualified pilots would be deployed for emergency response. This had a significant effect on the timeliness of helicopter air tests, though the GFS would further review the situation to determine whether improvements could be made to address the issue.

Delays in placing orders for essential spare parts

- 4.16 Some spare parts are of critical importance for aviation maintenance and enabling an aircraft to return to service. According to the Engineering Procedures Manual, the GFS needs to raise purchase order for such essential spare parts immediately.
- 4.17 During 2011-12 to 2013-14, the GFS placed 260 orders for the supply of these essential spare parts. Audit examination of these 260 orders revealed that on six occasions (2.3%), it had taken 3 to 15 working days to place orders after receiving suppliers' price quotations (see Table 11). The GFS needs to remind relevant staff to make improvement in this regard.

Table 11

Delays in placing orders for essential spare parts
(2011-12 to 2013-14)

Occasion	Aircraft	Quotation received	Order placed	Number of working days between quotation received and order placed
1	Super Puma	12/10/2011	17/10/2011	3
2	Super Puma	24/4/2013	10/5/2013	11
3	Super Puma	6/5/2013	21/5/2013	10
4	Super Puma	7/5/2013	20/5/2013	8
5	J-41	7/2/2013	18/2/2013	4
6	J-41	30/1/2014	24/2/2014	15

Source: Audit analysis of GFS records

Audit recommendations

- 4.18 Audit has recommended that the Controller, GFS should:
 - (a) continue to review the maintenance planning and endeavour to synchronise as far as possible major repairs and inspections with a view to increasing the availability of serviceable aircraft;
 - (b) continue the efforts to improve the maintenance procedures through reviewing aircraft defect cases;
 - (c) extend the scope of the review of aircraft defect cases to cover all emergency service cases with on-scene time exceeding the pledge;
 - (d) ascertain the reasons for the increase in waiting time for air tests and take effective measures to address the issue; and

(e) remind relevant staff to promptly place orders for spare parts essential for servicing the operational aircraft in accordance with the laid-down requirement.

Response from the Government

- 4.19 The Controller, GFS generally agrees with the audit recommendations. He has said that the GFS will:
 - (a) continue its efforts in reviewing maintenance planning and synchronising major repairs and inspections as far as possible without compromising the safety, quality and airworthiness of its fleet;
 - (b) pay particular attention to the review of reported aircraft defects related to out-of-pledge cases;
 - (c) look into the arrangements of air tests and take necessary measures to minimise waiting time without compromising the emergency response needs; and
 - (d) continue to issue regular reminders to the relevant staff for promptly placing orders for spare parts essential for servicing the operational aircraft in accordance with the laid-down requirement.

PART 5: PROCUREMENT OF AIRCRAFT AND SPARE PARTS

- 5.1 This PART examines the following issues relating to the procurement of aircraft and spare parts by the GFS:
 - (a) payment issues and low utilisation of training aircraft (paras. 5.2 to 5.18);
 - (b) delays in delivery of fixed-wing aircraft (paras. 5.19 to 5.28);
 - (c) replacement of existing helicopters by a single-model fleet (paras. 5.29 to 5.34); and
 - (d) procurement of spare parts (paras. 5.35 to 5.40).

Payment issues and low utilisation of training aircraft

- In November 2006 and November 2010, the Financial Secretary under delegated authority approved funding of \$3.62 million and \$7.81 million respectively for the GFS to purchase two training aircraft. Through open tendering, the GFS acquired the following two aircraft:
 - (a) in June 2008, the Government Logistics Department (GLD) awarded a contract on behalf of the GFS for the supply of a single-engine fixed-wing aircraft (Zlin) at a cost of \$3.62 million. Designed for a relatively short flying range under daytime and good weather conditions, Zlin was intended to provide training for pilots within Hong Kong in order to enhance advanced handling skills on extreme flying attitudes (such as stall recovery), confidence and decision making in demanding situations; and
 - (b) in March 2012, the GLD awarded a contract on behalf of the GFS for the supply of a twin-engine fixed-wing aircraft (Diamond) at a cost of \$7.44 million. The twin-engine Diamond allowed training to be conducted at long range and under all weather situations to meet the wide-range training needs of the GFS pilots (including cross country and night flying) so as to better prepare pilots for converting to the new

fixed-wing aircraft (which shares a similar cockpit design concept with the Diamond — see para. 5.19) at a lower training cost and at the same time spare the operational fixed-wing aircraft for mission readiness.

Payment discount not obtained

- 5.3 According to the Standing Accounting Instructions issued by the Treasury, the officer authorising a payment should check and confirm, and is held responsible for, the accuracy of every detail of the payment authorised. He should ensure, among other things, that where discount terms are applicable, payment discounts should be obtained, as appropriate. In an examination of the payment records for the purchase of the training aircraft Zlin and Diamond, Audit found that payment discount was duly obtained in accordance with the contract terms for Diamond but not for Zlin. The details are as follows:
 - (a) according to the procurement contract for Zlin, the GFS was entitled to 5% discount for payments made within seven working days from the date of receipt of the invoice or from the date of acceptance of goods whichever was the later. In September 2008 when forwarding the procurement contract to the GFS for retention, the GLD reminded the GFS to take due note of any prompt payment terms offered by the contractor (an overseas limited company hereinafter referred to as Contractor A); and
 - (b) in June 2009, Contractor A issued an invoice requesting the GFS to effect payment for Zlin. On 29 July 2009, the GFS issued to Contractor A the final acceptance certificate for the aircraft. On 4 August 2009 (four working days later), the GFS made the final payment of \$3.62 million to Contractor A. However, the 5% discount (i.e. \$181,000) provided for in the contract was not obtained.
- 5.4 To prevent recurrence of similar problem, the GFS needs to tighten internal control to ensure that the Standing Accounting Instructions requirements on payment control are always complied with.

Write-off of advance payments for undelivered spare parts

- From November 2008 to May 2009, the GFS placed nine purchase orders with Contractor A for the supply of spare parts at a total cost of \$762,600. At the request of Contractor A and having considered that Contractor A was the manufacturer of Zlin, the GFS made advance payments for all these orders. With the exception of five orders (totalling \$79,410), Contractor A failed to fully deliver the spare parts for the remaining four orders (totalling \$683,190).
- For the four outstanding orders, the GFS received on 14 May 2009 about one quarter by value (i.e. \$60,100 out of \$229,110) of the spare parts for the first order. No more spare parts had been received since then. Subsequently, the GFS made advance payments for the three remaining orders (\$15,130 on 15 May 2009, \$2,300 on 20 May 2009 and \$436,650 on 21 July 2009). On 22 July 2009, the former sales representative of Contractor A informed the GFS that Contractor A's production programme had been taken over by a new company (Company B). From that point onwards, the GFS tried but in vain to press Contractor A and Company B for the delivery of the outstanding spare parts.
- In September 2010, the legal representative of Company B informed the GFS that Contractor A was in bankruptcy and Company B would not undertake any obligation of Contractor A. Thereafter, the GFS tried again to request Company B to deliver the outstanding spare parts but to no avail. In 2012, the GFS sought advice from the Department of Justice (DoJ) and the relevant Consulate (of Contractor A's country of incorporation). Both of them informed the GFS that a proof of debt should have been filed in time with the liquidator who would discharge any debt if Contractor A had any assets to do so. However, the deadline for filing of debts expired in 2010. In February 2014, in response to the Financial Services and the Treasury Bureau's enquiries, the GFS said that it had not consulted any party the risk of agreeing to advance payment because there were no government regulations/guidelines in this regard. In June 2014, with the approval of the Financial Services and the Treasury Bureau, the GFS wrote off the irrecoverable amount of \$550,760 (Note 22).

Note 22: The irrecoverable amount was arrived at by deducting from the total prepayment of the four outstanding orders (\$683,190), the value of spare parts received (\$60,100) and the deposit (\$72,330) under the procurement contract for Zlin which the Government had exercised the contractual right of deduction for setting off any sum due to the Government.

- To prevent recurrence of similar loss, in January 2014 the GFS informed the Financial Services and the Treasury Bureau that it had issued instructions requiring all advance payments to be approved by the Departmental Stores Manager (Note 23) (except six categories of goods/services Note 24). Audit noted that in June 2012, the DoJ advised the GFS of the good practice in contracting with overseas contractors, i.e. securing a foreign legal letter so that the Government would know the legal position as to the incorporation of the overseas company, its ability and capability to enter into contract and any problem with the enforceability in case recovery action is necessary.
- In Audit's view, the GFS should also issue instructions requiring relevant staff to follow the DoJ's advice on ways to protect the Government's interest in contracting with an overseas company and in the event of a bankrupt contractor (see paras. 5.7 and 5.8). To enable other B/Ds to learn from this case, the Treasury and the GLD need to consider issuing guidelines promulgating the good practices in handling advance payments particularly in respect of overseas contractors.

Low utilisation of the two training aircraft

- In 2007 when planning for the purchase of the training aircraft Zlin, the GFS estimated that Zlin would be operated for about 200 flying hours per year. However, Audit found that since the commissioning of Zlin in 2009, its flying hours were consistently below the estimate and had decreased from 138 in 2010 to 61 in 2014.
- 5.11 In June 2011, in an information note on the procurement of aircraft for the GFS, the Government informed the FC that the twin-engine training aircraft (Diamond) to be procured would increase the availability of the operational aircraft (J-41s) for responding to emergency call-outs by minimising the use of operational aircraft for training purpose. In February 2012 during the tendering stage of the training aircraft Diamond, the GFS informed the GLD that Diamond would be
- **Note 23:** The Departmental Stores Manager is responsible for supervising all procurement and stores management matters within the GFS.
- **Note 24:** The six categories include subscription of periodicals, telephone line rental charges, Internet service charges, pager/mobile phone charges, annual office equipment maintenance charges and training/conference fees.

operated for at least 500 hours per year. However, Audit found that the actual flying hours of Diamond were 108 in 2013 and 90 in 2014, well below the estimated 500 hours per year. On the other hand, the use of the operational aircraft J-41s for training had not decreased, i.e. 1,299 hours in 2013 and 2014 which were comparable to 1,200 hours in 2011 and 2012.

- 5.12 Between December 2014 and February 2015, in response to Audit's enquiries, the GFS said that:
 - the low utilisation of Zlin was mainly due to the reduced number of target trainees in these years, i.e. two such pilots were on operational detachment (one for 11 months and the other for 12 months). Two Cadet Pilots failed during training and left the GFS (one in 2009 and the other in 2012). The resignation of two trainers (one in 2010 and the other in 2012) was another contributing factor;
 - (b) as for Diamond, it was intended to be a training plane for the two new fixed-wing operational aircraft which were originally planned to be commissioned in 2013 (see para. 5.19(d)) because both types of aircraft had similar cockpit design concept. Due to the delay in delivery of the new fixed-wing operational aircraft, training use of Diamond was lower than expected;
 - (c) in recent years, the availability of suitable take-off and landing slots for the GFS at the Hong Kong International Airport and Shek Kong Airfield had decreased due to an increase in demand for airspace, and the rapid increase in the number of residential development in the vicinity of Shek Kong; and
 - (d) maintenance priority placed on operational aircraft also contributed to the low utilisation of both training aircraft. In the case of Zlin, there was a shortage of spare parts (see para. 5.5) and in the case of Diamond, there had been a process for the GFS pilots and engineers to familiarise themselves with the new aircraft.

Long downtime of the two training aircraft

Audit examination of the serviceability reports of the two training aircraft revealed that both aircraft had experienced long downtime in addition to their low utilisation (see Table 12). In particular, Zlin had been out of service since September 2014.

Table 12

Downtime and flying hours of training aircraft (2010 to 2014)

Aircraft	2010	2011	2012	2013	2014		
Zlin							
Downtime (Hour)	4,036	507	1,760	195	3,962		
Flying hours	138	108	71	69	61		
Diamond							
Downtime (Hour)	Not applicable			1,797	2,603		
Flying hours	(Note)			108	90		

Source: Audit analysis of GFS data

Note: The training aircraft Diamond was put into use in February 2013.

Audit considers that the GFS needs to review the downtime of the two training aircraft with a view to identifying effective ways to improve their serviceability for supporting the training of fixed-wing pilots.

Audit recommendations

5.15 Audit has recommended that the Controller, GFS should:

- (a) tighten internal control to ensure that the Standing Accounting Instructions requirements on payment control are always complied with;
- (b) establish procedures for relevant staff responsible for procurement of aircraft and equipment on ways to protect the Government's interest in contracting with an overseas company and in the event of a bankrupt contractor; and
- (c) review the downtime of the two training aircraft with a view to identifying effective ways to improve their serviceability for supporting the training of fixed-wing pilots.
- 5.16 Audit has *recommended* that the Director of Accounting Services and the Director of Government Logistics should consider issuing guidelines promulgating the good practices in handling advance payments particularly in respect of overseas contractors.

Response from the Government

- 5.17 The Controller, GFS generally agrees with the audit recommendations in paragraph 5.15. He has said that the GFS:
 - (a) has reminded all relevant staff of the Standing Accounting Instructions requirements on payment control. It will continue to take measures to ensure tight control in this regard;
 - (b) will, in consultation with the GLD, work out appropriate procedures to safeguard the Government's interest in contracting with an overseas company and in the event of a bankrupt contractor; and
 - (c) will review and take measures to improve the serviceability of the two training aircraft.
- 5.18 The Director of Accounting Services and the Director of Government Logistics agree with the audit recommendation in paragraph 5.16.

Delays in delivery of fixed-wing aircraft

- 5.19 In June 2009, the GFS obtained the FC's funding approval of \$776 million to replace the two fixed-wing aircraft and the associated mission equipment. The FC (Note 25) was then informed that:
 - (a) the existing J-41s were approaching the end of their serviceable life. The aircraft manufacturer had ceased production of J-41. As a result, the level of technical support available from the manufacturer and spares suppliers had been on a gradual decline. The GFS estimated that its stock of essential spare parts for the J-41s would be depleted in about four years;
 - (b) the mission equipment installed on the two J-41s had been in use since the aircraft came into service in 1999. Most of the equipment had become obsolete and the production of some spare parts had already ceased;
 - (c) the GFS conducted a market research on possible replacement for J-41s and the associated mission equipment. The research indicated that it would take approximately three years to build and modify an aircraft to the standards required for its operations; and
 - (d) according to the GFS implementation plan, award of contract for the supply for the new aircraft was targeted for December 2010 and the new aircraft were expected to be commissioned in March 2013.
- 5.20 In August 2011, the GLD awarded a contract on behalf of the GFS at a sum of \$748.1 million (Note 26) for the supply of the two fixed-wing aircraft. The contract delivery dates of the two aircraft were scheduled for November 2013 and
- **Note 25:** The Legislative Council Panel on Security was also advised of the same at its meeting held on 5 May 2009.
- Note 26: In 2012 and 2013, the GFS obtained the GLD Tender Board's approval to implement enhancements to the aircraft through two contract variations which together increased the contract sum by \$10.2 million to \$758.3 million (see Appendix C). According to the GFS, the variations had no impact on the aircraft delivery schedule. Up to February 2015, the accumulated expenditure for this replacement project was \$563.3 million.

January 2014 (instead of March 2013 as stated in the FC paper). According to the GFS, as the commercial and legal terms of the tender were far more complicated than anticipated, it took a longer time to prepare the tender requirements/specifications. As a result, the award of contract was eight months later than planned (see para. 5.19(d)).

- Modification work of the new aircraft on order. Since the award of contract in August 2011, the GFS had held weekly tele-conferencing progress meetings with the contractor (hereinafter referred to as Contractor C) to monitor the progress. According to the contract, besides supplying the aircraft, Contractor C was required to modify the aircraft in order to install and certify various mission equipment. One of the mission equipment items to be installed was the digital aerial camera of the Lands Department which would be used for the provision of aerial photograph services for all B/Ds (Note 27). Contractor C was required to install the aerial camera and provide an optical glass window in the fuselage belly through which the camera could take pictures in a pressurised cabin. Contractor C was also required to provide a sliding cover to protect the glass window not in use. In 2012, the GFS and Contractor C discussed the outstanding matters of the aerial camera and the modification work through meetings and exchange of correspondence.
- 5.22 Failed flight tests of the new aircraft on order. According to the contract, Contractor C should conduct a series of certification flight tests for the first aircraft in May 2013 and complete all the tests within 125 days (i.e. in However, the aircraft failed the flight test conducted in October 2013). August 2013 due to flying stability problems related to the camera sliding cover (see para. 5.21). At a progress review meeting held in September 2013, Contractor C informed the GFS that the contracted delivery of the aircraft would be deferred from mid-November 2013 (by five months) to early April 2014. Since then, the GFS had issued regular reminders to Contractor C to follow up the modification work for the camera sliding cover and sought legal advice on handling the delay issue. July 2014, the aircraft failed the second flight test. In November 2014, the aircraft passed some milestone flight tests. However, there were still other tests of the aircraft and mission equipment to be carried out in accordance with the contract In December 2014, Contractor C informed the GFS that the expected

Note 27: In May 2011, the Lands Department obtained the FC's funding approval of \$41.6 million to replace its aged film-based aerial camera by a digital aerial camera for installation in the GFS's new fixed-wing aircraft.

delivery date of the first aircraft would be late 2015 (i.e. 33 months later than March 2013 as stated in the FC paper).

- 5.23 **Expected benefits not yet realised.** Due to the delays in the delivery of the new aircraft, the following expected benefits (as stated in the FC paper) could not be realised in the interim:
 - (a) because of their faster speed and longer endurance (Note 28), the new aircraft would reach the scene of the incident much quicker and remain on scene for longer and more thorough search. This was expected to increase the chance of locating survivors, reduce their exposure time in a hostile environment and increase their chance of survival;
 - (b) the meteorological data collected by the new aircraft for the Hong Kong Observatory's analysis of wind shear and turbulence would be of high reference value to the airlines using the Hong Kong International Airport; and
 - (c) the mission equipment to be installed on the new aircraft would greatly improve the GFS's operational efficiency and enhance flight safety. For example, the integration of the forward looking infrared detection system with the global positioning system of the new aircraft would allow the pilot to locate the exact position of the target more speedily (e.g. a vessel in distress). This would enhance the chance of success of search and rescue operations.
- 5.24 *Difficulties in maintaining existing aircraft*. Audit noted that there were difficulties in maintaining the serviceability of the ageing J-41s and their mission equipment:
 - (a) the total downtime of the two J-41s had increased from 1,704 hours in 2012 to 3,187 hours in 2014. In 2013, there were two consecutive days on which both J-41s were not serviceable;

Note 28: The speed and maximum range of the J-41 were 220 nautical miles per hour and 1,600 nautical miles respectively while those of the new aircraft were 430 nautical miles per hour and 3,900 nautical miles respectively.

- (b) the only spare weather radar system and spare engine for J-41s had become unserviceable since April 2013 and November 2014 respectively. There is a risk that the J-41s may have to be grounded if there is any problem with their engine or weather radar system on board; and
- (c) the infrared detection system of one of the J-41s had become unserviceable since December 2014 leaving one such system available for operations. The system was important for the pilot to locate the exact position of the target more speedily (e.g. a vessel in distress).

5.25 In Audit's view, the GFS needs to:

- (a) closely monitor the outstanding contract work for the supply of the two new fixed-wing aircraft to ensure that greatest efforts are being made to expedite delivery of the aircraft;
- (b) step up maintenance efforts for the existing J-41s and their mission equipment to ensure a reliable fixed-wing flying service; and
- (c) learn from the experience of this case as the new helicopters (see para. 5.31) now under purchase also have to undergo modification work to accommodate essential mission equipment.
- 5.26 Information for Legislative Council. In 2009 when seeking funding of \$776 million for replacing the existing fixed-wing aircraft J-41s which were approaching the end of their serviceable life, the GFS informed the Legislative Council Panel on Security and the FC that the new aircraft would be commissioned in March 2013. In April 2014 (in response to Members' questions), the GFS informed the FC that the delivery of the two new aircraft had been delayed because of an unforeseen flying stability issue. As at February 2015 (after a delay of almost two years), the new aircraft had not yet completed all the contract required tests and the delivery date of the first aircraft was estimated to be late 2015. For public accountability, the GFS needs to keep the FC and relevant Legislative Council Panels informed of the progress in implementing major procurement projects which have experienced significant delays.

Audit recommendations

- 5.27 Audit has recommended that the Controller, GFS should:
 - (a) closely monitor the outstanding contract work for the supply of the two new fixed-wing aircraft to ensure that greatest efforts are being made to expedite delivery of the aircraft;
 - (b) step up maintenance efforts for the existing J-41s and their mission equipment to ensure a reliable fixed-wing flying service;
 - (c) closely monitor and manage the procurement project of the new helicopters, especially the modification work for installing essential mission equipment, in the light of the experience of the delays in the delivery of the two new fixed-wing aircraft; and
 - (d) for public accountability, keep the FC and relevant Legislative Council Panels informed of the progress in implementing major procurement projects which have experienced significant delays.

Response from the Government

- 5.28 The Controller, GFS generally agrees with the audit recommendations. He has said that the GFS will:
 - (a) continue to make its best efforts in monitoring the outstanding contract work and expediting the delivery of the new aircraft;
 - (b) continue its on-going maintenance efforts for the existing J-41s and their mission equipment;
 - (c) take steps to ensure that the modification work planned for the new helicopter fleet will be closely monitored and managed; and
 - (d) keep the FC and relevant Legislative Council Panels informed of the progress of the aircraft procurement projects when appropriate.

Replacement of existing helicopters by a single-model fleet

- 5.29 In May 2013, the GFS consulted the Legislative Council Panel on Security on its plan to replace the existing two-model helicopter fleet by a single-model fleet. The GFS informed the Panel that a single-model medium-sized helicopter fleet would better meet its operational needs, as follows:
 - (a) *Improving flight safety*. A single-model helicopter fleet would allow uniformity in operational procedures, hence enhancing flight safety;
 - (b) Raising operational efficiency. The new helicopters could be installed with various kinds of mission equipment, enabling the GFS to deploy them for responding to emergency incidents with greater flexibility, effectiveness and efficiency, especially when a number of different emergency call-out requests were received simultaneously;
 - (c) Improving overall disaster response and counter-terrorist capabilities of Hong Kong. As all the new helicopters could be installed with various kinds of mission equipment, the GFS would be able to deploy more aircraft at any one time for providing different disaster relief, and search and rescue operations, such as large-scale maritime or air accidents. The fleet would also allow greater flexibility in responding to different counter-terrorist and law enforcement operations, and would better serve the operational needs of the HKPF in promptly responding to potential threats;
 - (d) *Increasing cost-effectiveness*. Given the synergy effect, a single-model helicopter fleet would require stocking fewer spare parts, tools and equipment than a two-model helicopter fleet (which would require different approved tools and equipment for repairing different aircraft models), resulting in a more effective use of resources; and
 - (e) *Enhancing training*. As flight crew and engineering staff would only need to familiarise themselves with the operation of one helicopter model, the training could be more focused on enhancing service quality and safety level. This would improve operational efficiency and cost-effectiveness.

Risk of a single-model fleet

- 5.30 In response to a Legislative Council Panel Member's question on whether the new fleet comprising one model would come to a halt with any suspension of operation of the model arising from manufacturing defects, the Security Bureau said that one of the helicopters (EC155s) would be retained as backup. In addition, the fixed-wing aircraft could also assist in operations by coordinating with other surface vessels in the vicinity to provide rescue service.
- 5.31 In June 2013, the GFS obtained the FC's funding approval of \$2,187.5 million to replace the existing two-model helicopter fleet by a single-model fleet. In response to a FC Member's question on whether the Government would consider maintaining two EC155s as backup, the Security Bureau said that:
 - (a) one EC155 would ensure that the emergency service could be maintained in case the new helicopters could not be deployed due to failure or reported failure of the same type of helicopters by other operators. The GFS could deploy the fixed-wing aircraft for search and rescue operations; and
 - (b) the EC155 would remain in the fleet for about four to five years after the new fleet was commissioned. The Government would then assess the operational needs for keeping the EC155 further.

As at February 2015, tendering for the supply of the helicopters was in progress.

- Audit noted that from 2009 to 2014, there were three occasions on which either all the Super Pumas or all the EC155s had to be suspended from service (see Table 13). Similar incidents with a single-model helicopter fleet in future could mean a full-scale suspension of some emergency services (such as air ambulance service and rescue operation by winching which cannot be provided by fixed-wing aircraft). In March 2015, in response to Audit's enquiries, the GFS said that:
 - (a) it had assessed the risk of using a single model before submitting the FC paper and considered that the added benefits of single model far outweighed the risks; and

(b) as reported to the FC in 2013, the EC155 would be used as backup for about four to five years after the new fleet was commissioned.

However, Audit noted that the backup EC155 would reach the end of its service lifespan after 2017 (see para. 1.6). In Audit's view, the GFS needs to review the adequacy of the contingency plan and make refinement where appropriate.

Table 13
Suspension of specific type of helicopters from service (2009 to 2014)

Helicopter	Date	Number of days affected	Reason
Super Puma	18 to 21 April 2009	4	An overseas Super Puma crashed into the North Sea with no survivors on 1 April 2009. The accident was caused by the main gearbox problem. Mandatory inspection was conducted on all the GFS's Super Pumas.
	28 to 31 December 2010	4	A GFS's Super Puma needed emergency landing in Shing Mun Reservoir due to main gearbox problem. All three Super Pumas were inspected.
EC155	28 and 29 August 2013	1	Main gearbox problem of an EC155 was reported by a pilot at 17:22 on 28 August 2013. As a safety measure, all four EC155s were inspected and three were back to service at 16:00 on 29 August 2013.

Source: GFS records

Audit recommendation

5.33 Audit has *recommended* that the Controller, GFS should review the adequacy of the contingency plan for the new single-model helicopter fleet in the event of manufacturing defects or reported failure and make refinement where appropriate.

Response from the Government

5.34 The Controller, GFS generally agrees with the audit recommendation.

Procurement of spare parts

- 5.35 In connection with the acquisition of new aircraft, the GFS usually has to stock up sufficient spare parts for maintenance purposes. For the two aircraft replacement exercises now underway, the following provisions were made for the purchase of initial batch of spare parts and tools:
 - (a) *New fixed-wing aircraft.* An amount of \$43 million was earmarked for the purchase of initial batch of spare parts and tools, representing 16% of the capital cost of the aircraft of \$266 million; and
 - (b) *New helicopters.* An amount of \$119.7 million was earmarked for the purchase of initial batch of spare parts and tools, representing 8% of the capital cost of the aircraft of \$1,456 million.

Excessive spare parts for training aircraft Diamond

- 5.36 As for the two training aircraft, the following expenditure had been incurred for the purchase of initial batch of spare parts and tools since their acquisition:
 - (a) **Zlin.** About \$0.4 million had been spent on spare parts, representing 11% of the capital cost of the aircraft of \$3.62 million; and

- (b) **Diamond.** About \$4.6 million had been spent on spare parts, representing 62% of the capital cost of the aircraft of \$7.44 million.
- 5.37 In view of the disproportionally higher expenditure on spare parts for the training aircraft Diamond than those of other aircraft, Audit sample checked the high-valued items and found that two sets each of the following spare parts were purchased for Diamond:
 - (a) one aircraft engine was purchased in November 2012 and another one in February 2013 (each costing about \$0.6 million);
 - (b) two sets of multi-function and primary flight display (each costing \$0.16 million) were purchased in March 2013; and
 - (c) two transceivers (each costing \$80,000) were purchased in March 2013.
- 5.38 However, Audit noted that for the two existing operational J-41 aircraft, only one spare engine was stocked. The stocking of two engines for one training aircraft Diamond appears to be excessive. It is also undesirable to purchase similar items with limited warranty period or shelf life within a short time. For example, the 12-month warranty periods of both transceivers had expired in March 2014. Similarly the 30-month warranty periods of the two spare engines would expire in September 2015 and January 2016 respectively. The GFS needs to conduct a review of the stock level of spare parts for Diamond with a view to identifying room for improvement in stock management.

Audit recommendations

- 5.39 Audit has recommended that the Controller, GFS should:
 - (a) place orders by phases for spare parts with limited warranty period or shelf life; and
 - (b) review the stock level of spare parts for the training aircraft Diamond with a view to identifying room for improvement in stock management.

Response from the Government

- 5.40 The Controller, GFS generally agrees with the audit recommendations. He has said that the GFS will:
 - (a) exercise prudence in ordering aircraft spare parts in the future without compromising the airworthiness of the aircraft and the operations of the GFS; and
 - (b) continue its review of the stock level of the spare parts for the training aircraft Diamond.

PART 6: WAY FORWARD

6.1 This PART outlines the major audit observations and examines the way forward.

Major audit observations

- 6.2 The GFS has a multi-role mission. As an emergency response department, it is required to provide round-the-clock search and rescue, and air ambulance service. At the same time, it has to provide a wide range of flying services to support the work of other B/Ds. From 2010 to 2014, the flying services in terms of flying hours provided by the GFS had increased by 18%. The increasing demands for the GFS flying services put a great strain on its limited resources.
- The GFS reported in its CORs that on average, six (26%) of the 23 on-scene time targets for some emergency services could not be met each year from 2010 to 2014. In PART 2, Audit found that unavailable aircraft and crew members accounted for 22% of the out-of-pledge cases. There were inadequacies in reporting out-of-pledge and multiple call-out cases in the CORs. After making adjustments for these cases, the total number of on-scene time targets not met for the five years from 2010 to 2014 totalled 49 (averaging 9.8 per year) instead of 30 (averaging six per year) as reported by the GFS in the CORs. Audit also found that from 2010 to 2014, the GFS declined a total of 852 service requests after examining relevant factors such as the urgency, weather conditions, availability of air assets and tasking priority. The GFS had not duly taken into account these declined cases when reporting its response rates to flying services in the CORs.
- The GFS has to roster its aircrew to work in three shifts on a daily basis in order to provide emergency response on a 24-hour basis year-round. In PART 3, Audit found that of the 4,142 shifts arranged in 2013 and 2014, 178 (4.3%) were insufficiently manned. As a result, some emergency call-out cases were delayed or declined. Audit also found that for three of the five years from 2010 to 2014, there were more occasions of extension of flying/duty hours of the aircrew and reduction of their rest time than targeted.

- The GFS's Engineering Section is committed to achieving the minimum aircraft availability target. In PART 4, Audit found that there were shortfalls on aircraft availability against the target in 33 (55%) months during 2010 to 2014. There were occasions where the call-out cases had been declined or delayed due to insufficient serviceable helicopters. From 2010 to 2014, the downtime of the nine operational aircraft totalled 78,961 hours, of which 26% were due to unscheduled maintenance. Unscheduled maintenance is disruptive to day-to-day operations and maintenance planning. The increasing trend in unscheduled maintenance hours from 2010 to 2014 warrants the management's attention. From 2010 to 2014, there were a total of 2,895 aircraft defects reported by pilots before take-off for flying duties or after airborne. The GFS needs to continue its efforts to improve the maintenance procedures through reviewing aircraft defect cases.
- In PART 5, Audit found that the utilisation of the two training aircraft was lower than expected due to the reduced number of target trainees and resignation of some trainers. Even though the two aircraft had low utilisation, both aircraft had experienced long downtime. For the fixed-wing aircraft replacement exercise currently underway, there were technical problems in the flight tests. The expected delivery date of the first new aircraft would be late 2015, i.e. 33 months later than the target commissioning date of March 2013 as stated in the FC paper. As a result, the expected benefits of the new aircraft to enhance the GFS's operational efficiency and flight safety could not be realised in the interim. Meanwhile, there were difficulties in maintaining the existing ageing fixed-wing aircraft. For the single-model helicopter fleet currently under purchase, the GFS needs to review the adequacy of the contingency plan in the event of manufacturing defects or reported failure and make refinement where appropriate.

Recent development

In November 2014, the GFS obtained funding from the Security Bureau for 2015-16 to commission a consultancy study on how well and sustainable the GFS's manpower and structure could support its mission, objectives and needs in the short, medium and long terms. In Audit's view, in conducting the study, the GFS needs to take on board the audit findings and recommendations in this Audit Report.

Audit recommendation

6.8 Audit has *recommended* that the Controller, GFS should, in conducting the consultancy study of the GFS's manpower and structure, take on board the audit findings and recommendations in this Audit Report.

Response from the Government

6.9 The Controller, GFS generally agrees with the audit recommendation and will suitably take on board the findings and recommendations in this Audit Report in future studies.

Performance of flying services provided by the Government Flying Service (2010 to 2014)

	Call-out for flying services	Pledged on-scene time	Target		I	Actual	ı	
		(Minute)	(%)	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)
Ai	r ambulance service							
1	Type A+ and A casualty evacuation situations within Island Zone	20	90	95	89	86	87	87
2	Type A+ and A casualty evacuation situations outside Island Zone	30	90	N.A.	N.A.	N.A.	N.A.	N.A.
3	Type B casualty evacuation	120	100	99	100	99	100	99
Ins	shore search and rescue by helicopter							
4	Between 7:00 and 21:59	40	90	97	96	95	96	96
5	Between 22:00 and 6:59 where additional crew/specialised equipment not required	40	90	83	67	79	78	76
6	Between 22:00 and 6:59 where additional crew/specialised equipment required	100	90	50	100	100	100	100
Of	fshore search and rescue by helicopter							
7	Between 7:00 and 21:59 and less than 92.5 km from GFS Headquarters	60	90	N.A.	100	100	N.A.	100
8	Between 7:00 and 21:59 and 92.5 km to 370 km from GFS Headquarters	for the 1st 92.5 km plus 30 per an extra 92.5 km	90	N.A.	N.A.	N.A.	100	N.A.
9	Between 22:00 and 6:59 and less than 92.5 km from GFS Headquarters	120	90	100	100	N.A.	100	100
10	Between 22:00 and 6:59 and 92.5 km to 370 km from GFS Headquarters	for the 1st 92.5 km plus 30 per an extra 92.5 km	90	100	50	N.A.	N.A.	N.A.

		Pledged on-scene						
	Call-out for flying services	time	Target		<u> </u>	Actual	1	
		(Minuto)	(97.)	2010 (%)	2011	2012	2013	2014
		(Minute)	(%)	(%)	(%)	(%)	(%)	(%)
Sec	arch and rescue by fixed-wing aircraft	T		T	ı	1	ı	
11	Between 7:00 and 21:59 and less than 92.5 km from GFS Headquarters	50	90	100	100	100	100	100
12	Between 7:00 and 21:59 and 92.5 km to 185 km from GFS Headquarters	65	90	88	100	100	100	100
13	Between 7:00 and 21:59 and beyond 185 km from GFS Headquarters	65 for the 1st 185 km plus 15 per an extra 92.5 km	90	93	100	86	80	78
14	Between 22:00 and 6:59 and less than 92.5 km from GFS Headquarters	110	90	N.A.	100	100	100	N.A.
15	Between 22:00 and 6:59 and 92.5 km to 185 km from GFS Headquarters	125	90	100	100	100	100	N.A.
16	Between 22:00 and 6:59 and beyond 185 km from GFS Headquarters	for the 1st 185 km plus 15 per an extra 92.5 km	90	100	100	100	100	80
La	w enforcement				•	•	•	
17	Island Zone where additional crew/specialised equipment not required	20	90	98	100	100	99	100
18	Island Zone where additional crew/specialised equipment required	80	90	N.A.	N.A.	N.A.	N.A.	100
19	Outside Island Zone where additional crew/specialised equipment not required	30	90	79	73	83	76	80
20	Outside Island Zone where additional crew/specialised equipment required	90	90	100	N.A.	N.A.	N.A.	N.A.

Appendix A (Cont'd) (para. 2.4 refers)

Call-out for flying services		Pledged on-scene time	Target	Actual				
		(Minute)	(%)	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)
Fin	re fighting							
21	Water bombing	40	85	74	72	76	65	74
22	Trooping where additional crew/ specialised equipment not required	40	85	100	100	N.A.	50	100
23	Trooping where additional crew/ specialised equipment required	100	85	N.A.	N.A.	N.A.	N.A.	N.A.
Nu	Number of flying services not meeting performance targets			6	5	6	6	7

Source: GFS's CORs

Remarks: Actual performance figures not meeting the on-scene time targets are shown in bold.

— 78 —

Establishment and strength of pilot and air crewman officer grades (31 December 2014)

Grade	Establishment	Strength	Number of vacancies					
Pilot								
Chief Pilot	2	2	_					
Senior Pilot	10	9	1					
Pilot I	16	12	4					
Pilot II	13	11	2					
Cadet Pilot	2	3	_					
		(Note 1)						
Total	43	37	6					
			(Note 2)					
Air crewman officer								
Senior Air Crewman Officer	1	1	_					
Air Crewman Officer I	4	4	_					
Air Crewman Officer II	6	6	_					
Air Crewman Officer III	22	20	2					
Total	33	31	2					

Source: GFS records

Note 1: The establishment of Cadet Pilot was two. The GFS created one supernumerary post, which was held against a vacant post in the Pilot II rank to accommodate one Cadet Pilot for temporary purposes.

Note 2: Two newly recruited Cadet Pilots will report duty in 2015.

Summary of two contract variations in the procurement of the two fixed-wing aircraft

Contract variation 1

- 1. In April 2012, the GFS obtained the GLD Tender Board's approval to acquire the following enhancements to the two new aircraft at a cost of \$4.7 million by way of a contract variation:
 - (a) a cockpit touch screen to provide electronic database manual for easy access to the flight and maintenance manuals during flight;
 - (b) two additional forward facing seats for each aircraft to increase the seating capacity from four to six;
 - (c) integrated headrests to improve occupational safety of the aircrews;
 - (d) a removable partition wall system for medical evacuation missions. The system would provide a better sealing off for the cabin entry door which was important for maintaining a constant temperature and humidity environment for the cabin area. The system could be removed to reduce the risk of damaging the cabin interior when loading and unloading medical equipment; and
 - (e) an additional antenna to extend the range for reception and transmission of signal.
- 2. According to the GFS, the reasons for the enhancements were:
 - (a) the technical requirements specified in the tender document represented the minimum requirements of the GFS in order to enhance the competition of the tendering exercise. After the award of contract, the GFS reviewed the specifications of the aircraft and identified the possibilities of the above-mentioned enhancements to improve the flight and cabin safety, and the operational efficiency of the GFS;

Appendix C (Cont'd) (Note 26 to para. 5.20 refers)

- (b) the enhancements involved product design, product development, installation and necessary arrangements for compliance with the airworthiness test. For protection of the copyright in the design of aircraft and ensuring compatibility with the aircraft, the enhancements had to be arranged by the existing contractor;
- (c) if the aircraft were to be modified by a new supplier, it would be difficult to hold the existing contractor accountable for future failure; and
- (d) to meet the aircraft delivery schedule, it would be more effective to vary the existing contract instead of arranging another tendering exercise.

Contract variation 2

- 3. In June 2013, the GFS obtained the GLD Tender Board's approval to acquire a life support stretcher system for the two new aircraft at a cost of \$5.5 million by way of a contract variation.
- 4. According to the GFS, in a visit to the contractor during the aircraft assembly stage in March 2013, it was found that the life support stretcher system could enhance the medical support capability during long distance patient transportation. The justifications for procurement by a contract variation were similar to those of Contract variation 1 (see para. 2(b) to (d)).

Appendix D

Acronyms and abbreviations

Audit Audit Commission

B/Ds Bureaux/departments

CAD Civil Aviation Department

CDR Commander Discretion Report

COR Controlling Officer's Report

DoJ Department of Justice

FC Finance Committee

GFS Government Flying Service

GLD Government Logistics Department

HKPF Hong Kong Police Force

km Kilometres

CHAPTER 3

Food and Environmental Hygiene Department

Public cooked food markets managed by the Food and Environmental Hygiene Department

Audit Commission Hong Kong 1 April 2015 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. 64 of the Director of Audit contains 8 Chapters which are available on our website at http://www.aud.gov.hk

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PUBLIC COOKED FOOD MARKETS MANAGED BY THE FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT

Contents

	Paragraph
EXECUTIVE SUMMARY	
PART 1: INTRODUCTION	1.1 - 1.5
Audit review	1.6 - 1.9
General response from the Government	1.10
Acknowledgement	1.11
PART 2: VACANCY RATES OF MARKETS	2.1 - 2.2
Vacancy rates of Cooked Food Hawker Bazaars	2.3 - 2.7
Vacancy rates of Cooked Food Markets and Centres	2.8 - 2.12
Viability of public cooked food markets	2.13 - 2.15
Audit recommendations	2.16
Response from the Government	2.17
PART 3: PROVISION OF FACILITIES IN MARKETS	3.1
Fire safety measures	3.2 - 3.10
Audit recommendations	3.11
Response from the Government	3.12 - 3.14

	Paragraph
Electricity supply for stall operation	3.15 - 3.21
Audit recommendations	3.22
Response from the Government	3.23
Air-conditioning of markets	3.24 - 3.28
Audit recommendations	3.29
Response from the Government	3.30 - 3.31
PART 4: MANAGEMENT OF MARKET STALLS	4.1
Management of stalls in Cooked Food Markets and Centres	4.2 - 4.7
Audit recommendations	4.8
Response from the Government	4.9
Management of hawkers operating in Cooked Food Hawker Bazaars	4.10 - 4.15
Audit recommendations	4.16
Response from the Government	4.17
Routine inspections of stalls	4.18 - 4.24
Audit recommendations	4.25
Response from the Government	4.26
PART 5: MANAGEMENT OF STALL RENTALS AND CHARGES	5.1
Charging of rentals	5.2 - 5.11
Audit recommendations	5.12
Response from the Government	5 13

	Paragraph
Recovery of rates	5.14 - 5.17
Audit recommendation	5.18
Response from the Government	5.19
Recovery of air-conditioning costs	5.20 - 5.28
Audit recommendations	5.29
Response from the Government	5.30
PART 6: WAY FORWARD	6.1 - 6.2
Areas for improvement	6.3 - 6.4
Exploring redevelopment potential or alternative use	6.5 - 6.8
Audit recommendations	6.9
Response from the Government	6.10
Appendices	Page
A: Cooked Food Hawker Bazaars (31 December 2014)	76
B: Cooked Food Markets (31 December 2014)	77
C: Cooked Food Centres (31 December 2014)	78 - 79
D: Public cooked food markets located at temporary sites (31 December 2014)	80
E: Reasons for public market tenants paying lower-than-market rentals	81
F: Redevelopment of the Tai Po Temporary Market	82
G: Acronyms and abbreviations	83



PUBLIC COOKED FOOD MARKETS MANAGED BY THE FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT

Executive Summary

1. The Food and Environmental Hygiene Department (FEHD) is responsible for managing public cooked food markets. It has been the Government's policy since the early 1970s that no new hawker licences should be issued under normal circumstances and on-street licensed hawkers should be put into off-street hawker bazaars or public markets. As at 31 December 2014, there were a total of 75 public cooked food markets, comprising 11 Cooked Food Hawker Bazaars (CFHBs), 25 Cooked Food Markets (CFMs) and 39 Cooked Food Centres (CFCs). CFHBs and CFMs are free-standing markets, and CFCs are attached to public markets that sell wet and dry goods. Stall operators in CFHBs must be licensed cooked food hawkers. For CFMs and CFCs, stall operators must not hold any hawker licence and holders of hawker licences are required to surrender their licences before they are allowed to operate. The 75 public cooked food markets provided a total of 1,282 stalls, comprising 238 stalls in CFHBs, 483 stalls in CFMs and 561 stalls in CFCs. The Audit Commission (Audit) has recently conducted a review to examine the FEHD's management of public cooked food markets.

Vacancy rates of markets

2. High vacancy rates of CFHBs. The hawker policy has resulted in a decreasing number of licensed hawkers operating in CFHBs and an increasing number of vacant CFHB stalls over time. However, the FEHD has not taken timely action to deal with the problem. As at 31 December 2014, the 11 CFHBs had a stall vacancy rate of 61% on average, with the largest two having a vacancy rate of 75% and 81%. Of the total of 144 vacant stalls in these 11 CFHBs, 114 (79%) stalls had been vacant for over 10 years. The high percentage of long-vacant CFHB stalls suggests that the land is not put to the best use. The FEHD needs to critically examine the problem and take effective improvement measures, such as consolidating CFHBs with high vacancy rates and releasing sites which are no longer required (paras. 2.3 to 2.7).

- 3. *Markets located at temporary sites*. Nine public cooked food markets had been located at temporary sites for some 30 to 42 years. The Cheung Sha Wan CFM, the largest one, had a high vacancy rate of 57% as at 31 December 2014. In 2001, the FEHD considered that the CFM should be closed down and the site returned to the Government. However, the FEHD did not formulate any work plan to do so, except for freezing 16 vacant stalls. The CFM continued to operate, and the 16 stalls (out of 28) had been frozen for over a decade. The FEHD needs to formulate exit plans as appropriate for markets located at temporary sites (paras. 2.8 to 2.11).
- 4. *Viability of markets*. The FEHD intends that all genuinely non-viable hawker pitches and market pitches should be delisted. However, it is not the FEHD's practice to conduct periodic reviews to assess the viability of each public cooked food market and its alternative use. Based on a review of the provision of the 25 CFMs and 39 CFCs by the FEHD in 2010, Audit noted that there were some CFMs/CFCs with low patronage, casting doubt on their viability (paras. 2.14 and 2.15).

Provision of facilities in markets

- 5. *Fire safety measures*. In 2003, a joint meeting between the FEHD, the Fire Services Department and the Architectural Services Department concluded that full-scale fire service upgrading works should be implemented in the FEHD's markets. The FEHD drew up an implementation plan for CFCs and public markets selling wet and dry goods but not CFHBs and CFMs. The progress in improving fire safety measures has been slow. As at December 2014, many public cooked food markets had implemented only a few upgraded fire safety measures. This is a cause for concern because Audit's site visits revealed certain fire risk factors in public cooked food markets, such as open kitchens without fire-resistant partitions, keeping many liquefied petroleum gas cylinders, etc (paras. 3.4 to 3.9).
- 6. **Electricity supply for stall operation.** According to the FEHD's current standard, the electricity supply for each cooked food stall should have a capacity of 60 amperes. As at December 2014, none of the 25 CFMs, and only 2 of the 39 CFCs, had electricity supply that met the standard. Sub-standard electricity supply has caused problems such as overloading of electric system, and rendering the stalls unfit for letting and retrofitting of air-conditioning systems not feasible (paras. 3.15, 3.17 and 3.19).

7. Air-conditioning of markets. As at December 2014, only 22 (29%) of the 75 public cooked food markets were air-conditioned. Retrofitting of air-conditioning systems for some markets could not go ahead due to inadequate electricity supply. Some stall operators have installed standalone air-conditioners without the FEHD's prior approval and without due consideration of the inadequate electricity supply, which could be a safety concern (paras. 3.24, 3.27 and 3.28).

Management of market stalls

- 8. **Management of stalls in CFMs and CFCs.** CFM and CFC stalls were intended for small-scale operation. They may not meet the hygiene requirements and safety standards applicable to restaurants. However, some stalls were actually operating at a larger scale than traditional cooked food stalls. In addition, Audit's site visits found that some stalls without liquor licence sold liquor to patrons for consumption in the stall area, and some stalls without food factory licence might be used as food factories (paras. 4.5 to 4.7).
- 9. **Routine inspections of stalls.** Audit examination of the FEHD's routine inspections of stalls in the public cooked food markets revealed the following inadequacies: (a) not taking actions on some irregularities such as obstruction of public areas and improper use of liquefied petroleum gas; (b) inspections not thoroughly conducted; and (c) inspections not conducted in a timely manner in accordance with the FEHD's requirements (paras. 4.19 to 4.24).

Management of stall rentals and charges

10. Stall operators in CFMs and CFCs, being public market stall tenants, are required to pay rentals and rates. They are also required to pay air-conditioning charges if their CFMs and CFCs are air-conditioned. In 2008, Audit conducted a review of the FEHD's management of public markets, and recommended that the FEHD should: (a) establish a suitable rental adjustment mechanism to address the issue that many stall tenants were paying lower-than-market rentals; (b) examine the issue that the FEHD had not recovered from stall tenants the rates paid on their behalf; and (c) work out an appropriate arrangement to tackle the issue of under-recovery of air-conditioning costs from stall tenants. As at December 2014, the FEHD had not fully implemented its follow-up actions on the issues (paras. 5.2 to 5.11, 5.14 to 5.17, and 5.20 to 5.28).

Way forward

In 2012, the Financial Services and the Treasury Bureau (FSTB) selected some government sites to study their redevelopment potential, including 12 public cooked food market sites. The FEHD considered that 3 CFHB sites could be released. So far, the FEHD has started the negotiation with the licensees of 2 of the CFHBs on closure. As the 2012 FSTB study did not cover the other 63 public cooked food market sites and some of these sites might be underutilised, the FEHD needs to explore their redevelopment potential or alternative use (paras. 6.5 to 6.8).

Audit recommendations

12. 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 Food and Environmental Hygiene should:

Vacancy rates of markets

- (a) take effective measures to tackle the high vacancy problem of individual public cooked food markets, such as consolidating the markets and formulating exit plans for markets located at temporary sites (para. 2.16(b) and (c));
- (b) conduct periodic reviews to monitor the vacancy rate and assess the viability of each public cooked food market (para. 2.16(c));

Provision of facilities in markets

- (c) expedite the implementation of fire safety measures at public cooked food markets and explore effective measures to help better ascertain and address their fire risk (para. 3.11(a) and (c));
- (d) where feasible, take prompt actions to enhance the electricity supply for CFMs and CFCs, and take forward proposals for retrofitting air-conditioning systems (paras. 3.22(c) and 3.29(a));

(e) promptly step up control to curb unauthorised installation of air-conditioners (para. 3.29(c));

Management of market stalls

- (f) review the adequacy of facilities provided to stalls in CFMs and CFCs operating at a much larger scale than traditional cooked food stalls, and explore improvement measures (para. 4.8(a) and (b));
- (g) take necessary follow-up actions on the issue of selling liquor by stalls in public cooked food markets without liquor licence, and the cases involving stalls suspected to be running as food factories without food factory licence (para. 4.8(e) and (f));
- (h) ensure that FEHD staff conduct effective and timely inspections of public cooked food markets in accordance with the FEHD's requirements and properly follow up irregularities identified during inspections (para. 4.25(a), (c) and (e));

Management of stall rentals and charges

(i) expedite action to establish a suitable rental adjustment mechanism for public markets and to recover rates and air-conditioning costs from stall tenants (paras. 5.12(a), 5.18 and 5.29(a)); and

Way forward

(j) expedite actions to release the three public cooked food market sites for redevelopment, and explore the redevelopment potential or alternative use of other public cooked food market sites (para. 6.9(b) and (c)).

Response from the Government

13. The Secretary for Food and Health and the Director of Food and Environmental Hygiene 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.

Hawker policy

1.2 On-street hawkers, while providing a primary source of daily provisions for the general public, might cause obstruction, environmental nuisance or even hazards relating to hygiene and fire risks. It has been the Government's policy since the early 1970s that no new hawker licences should be issued under normal circumstances and on-street licensed hawkers should be put into off-street hawker bazaars or public markets. Succession to and transfer of hawker licences already issued have also been subject to stringent restrictions. As at January 2015, the total number of licensed hawkers was about 6,300, compared with about 20,000 in the late 1980s.

Public cooked food markets

- 1.3 On-street cooked food stalls operated by hawkers (commonly known as "Dai Pai Tong") have a long history in Hong Kong. In the 1970s to 1990s, in pursuit of the prevailing hawker policy, the former Urban Council and Regional Council built many public cooked food markets to resite on-street licensed cooked food stalls. These public cooked food markets include the following three types:
 - (a) Cooked Food Hawker Bazaars (CFHBs). CFHBs are free-standing markets (see Photographs 1 and 2). Stall operators must be licensed cooked food hawkers;
 - (b) *Cooked Food Markets (CFMs)*. CFMs are also free-standing markets (see Photographs 3 and 4). Stalls are let, under a tenancy agreement, to operators not holding any hawker licence. Holders of hawker licences must surrender their licences before they are allowed to operate a CFM stall; and
 - (c) Cooked Food Centres (CFCs). CFCs are attached to public markets that sell wet and dry goods (see Photographs 5 and 6). Similar to CFMs, stalls are let, under a tenancy agreement, to operators not holding any hawker licence.

Photographs 1 and 2

A free-standing CFHB (Lai Yip Street CFHB, Kwun Tong)

Photograph 1



Photograph 2



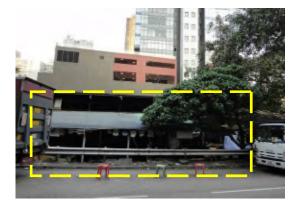
Outside Inside

Source: Photographs taken by the Audit Commission in December 2014

Photographs 3 and 4

A free-standing CFM (Chai Wan Kok CFM, Tsuen Wan)

Photograph 3



Photograph 4



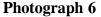
Outside Inside

Source: Photographs taken by the Audit Commission in January 2015

Photographs 5 and 6

A CFC on the second floor of a municipal services building (Tai Shing Street CFC, Wong Tai Sin)

Photograph 5







Outside Inside

Source: Photographs taken by the Audit Commission in December 2014

Remarks: The ground and first floors house the Tai Shing Street Market selling wet and

dry goods.

On 1 July 1997, the Urban Council and Regional Council were replaced by the Provisional Urban Council and Provisional Regional Council respectively. Since the dissolution of these two provisional councils on 1 January 2000, the Food and Environmental Hygiene Department (FEHD) has been responsible for managing public cooked food markets as part of the work under its Market Management and Hawker Control programme. The aim of the programme is to maintain a clean and hygienic environment in public markets and to control on-street hawking activities. Its work involves managing and maintaining public markets; inspecting markets to ensure cleanliness and compliance with tenancy requirements and conditions; controlling and containing on-street hawking activities and obstruction; managing licensed hawker pitches, hawker permitted places and hawker bazaars; and taking enforcement actions. For 2014-15, the staff establishment for the entire Market Management and Hawker Control programme is about 3,650 and the estimated financial provision is about \$1,690 million. The FEHD does not have a breakdown

of the programme resources showing the part of resources allocated to managing public cooked food markets (Note 1).

- 1.5 As at 31 December 2014, there were 75 public cooked food markets managed by the FEHD, comprising 11 CFHBs, 25 CFMs and 39 CFCs. Their years of commissioning, areas and number of stalls are summarised below (see Appendices A to C for details):
 - (a) Years of commissioning. All the 11 CFHBs and the majority of the CFMs and CFCs were built in the 1980s or before (see Table 1). CFHBs and CFMs were mostly located in the old industrial areas. CFCs were mostly located within or near residential areas;

Table 1

Years of commissioning of public cooked food markets
(31 December 2014)

Year of	No. of public cooked food markets				
commissioning	СҒНВ	CFM	CFC	Total	
Before 1980	9	3	6	18	
1980 to 1989	2	18	15	35	
1990 to 1999	0	2	13	15	
2000 to 2009	0	2	5	7	
Total	11	25	39	75	

Source: Audit analysis of FEHD records

Note 1: The management of public cooked food markets accounts for a small part of the work under the programme. For example, the programme includes managing some 13,400 stalls that sell wet and dry goods in public markets, compared to some 1,300 stalls in public cooked food markets (see para. 1.5(c)).

- (b) Areas. Public cooked food markets had areas ranging from 150 to 4,030 square metres (m²). In general, CFHBs and CFMs were smaller in size than CFCs. There were 3 CFHBs, 7 CFMs and 22 CFCs with areas exceeding 1,000 m²; and
- (c) *Number of stalls*. The total number of stalls was 1,282, comprising 238 stalls in CFHBs, 483 stalls in CFMs and 561 stalls in CFCs. The number of stalls in individual markets ranged from 2 to 56. On average, a CFHB had 22 stalls, a CFM had 19 stalls and a CFC had 14 stalls.

Audit review

- 1.6 The FEHD manages the public cooked food markets in accordance with the provisions on public markets or hawker bazaars stipulated in the Public Health and Municipal Services Ordinance (Cap. 132) or its subsidiary legislation (e.g. the Hawker Regulation Cap. 132AI), as follows:
 - (a) *CFMs and CFCs*. The provisions on public markets apply. For the purposes of the Ordinance, public markets comprise free-standing CFMs and public markets selling wet and dry goods, with or without CFCs attached (Note 2); and
 - (b) *CFHBs*. The provisions on hawker bazaars apply because CFHBs are not public markets for the purposes of the Ordinance.
- 1.7 **2003** and 2008 audit reviews. The Audit Commission (Audit) conducted a review of the FEHD's management of public markets in 2003 (Chapter 2 of the Director of Audit's Report No. 41) and a follow-up review in 2008 (Chapter 6 of the Director of Audit's Report No. 51). Both reviews covered public markets in general, excluding CFHBs (see para. 1.6(b)). The Public Accounts Committee (PAC) of the Legislative Council (LegCo) considered both Reports, and expressed concern about,
- Note 2: As at December 2014, the number of public markets governed by the Ordinance was 101, comprising 25 CFMs, 39 public markets selling wet and dry goods with CFC attached and 37 public markets selling wet and dry goods without CFC attached.

among others, the management of market stall rental and charges (see paras. 5.5, 5.15 and 5.22).

- 1.8 **FEHD** review of CFMs and CFCs. In response to Audit's recommendations in 2008, the FEHD conducted a review of the provision of CFMs and CFCs in 2010. The findings and conclusions as reported to the LegCo Panel on Food Safety and Environmental Hygiene in December 2010 are summarised as follows:
 - on average, the stall let-out rate of CFMs was 92% and each CFM had 610 patrons per day. The figures for CFCs were 95% and 1,130 respectively;
 - (b) the main reasons for patronising CFMs/CFCs were low prices and proximity to workplace or home. Many patrons considered that the decor was old, ventilation should be improved and the seating and layout should be upgraded. As regards management of the facilities, "crowded passageways" and "wet floor" were most cited as areas for improvement; and
 - the Government believed that CFMs/CFCs were still in demand. On the other hand, industrial areas were in decline and, more than 20,000 restaurant and factory canteen licences had been issued to provide adequate catering services for the public. Since there was strong public sentiment in favour of the preservation of the Dai Pai Tong culture, the Government did not see the need for building new CFMs/CFCs to resite on-street licensed Dai Pai Tongs. It would explore ways to further improve the condition of the existing CFMs/CFCs.
- 1.9 In November 2014, Audit commenced a review to examine the FEHD's management of public cooked food markets (Note 3), including following up relevant issues identified in the 2008 audit review of public markets. The review has focused on the following areas:
- Note 3: There are cooked food venues in public housing estates operated by the Hong Kong Housing Authority. These cooked food venues mainly serve residents of the public housing estates concerned. This audit review does not cover such venues.

- (a) vacancy rates of markets (PART 2);
- (b) provision of facilities in markets (PART 3);
- (c) management of market stalls (PART 4);
- (d) management of stall rentals and charges (PART 5); and
- (e) way forward (PART 6).

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 Food and Health and the Director of Food and Environmental Hygiene generally agree with the audit recommendations. On CFHBs, the FEHD has expressed the following views:
 - (a) it was a clear policy intention that CFHBs were intended to be transient. As a corollary, a progressively high vacancy rate is a natural step leading to the ultimate decommissioning of a CFHB. The only discretion left to the Government is whether to let the vacancy situation aggravate naturally as licensees stop operation, persuade the licensees to move their operation to more permanent cooked food markets as and when such become available in the vicinity, or to accelerate the demise of a CFHB through non-renewal of licensees or even forcible eviction of licensees still in operation in CFHBs with a high vacancy rate;
 - (b) the demand for cooked food hawkers began to fall in the 1970s probably due to rising community affluence, changes in local eating habits, and the expansion of the restaurant and fast food business. With the passage of time, as no new cooked food hawker licence was issued, some CFHBs had a high vacancy rate; and

(c) although the Director of Food and Environmental Hygiene has the authority not to renew the relevant hawker licences and require the licensees to vacate their pitches within a certain period of time when a CFHB has reached a very low occupancy rate, the cost of social acrimony associated with non-renewal and forced eviction would need to be taken into account, especially since most of the operators are the grassroots of the community. The policy, therefore, has wider social considerations than just economic ones.

Acknowledgement

1.11 Audit would like to acknowledge with gratitude the assistance and full cooperation of the staff of the FEHD during the course of the audit review.

PART 2: VACANCY RATES OF MARKETS

- 2.1 This PART examines the vacancy rates of public cooked food markets, focusing on the following areas:
 - (a) vacancy rates of CFHBs (paras. 2.3 to 2.7);
 - (b) vacancy rates of CFMs and CFCs (paras. 2.8 to 2.12); and
 - (c) viability of public cooked food markets (paras. 2.13 to 2.17).

Intended use and average vacancy rates of public cooked food markets

As mentioned in paragraph 1.3, public cooked food markets were built with a view to resiting on-street licensed cooked food stalls. Stalls in CFHBs were allocated to licensed hawkers mainly by ballot (Note 4). Stall operators in CFMs and CFCs must not hold hawker licences. Some of the stalls were let by open auction while some were let at concessionary rental (e.g. to former licensed hawkers who surrendered their licences voluntarily under special resiting schemes). As at 31 December 2014, the 75 public cooked food markets provided a total of 1,282 stalls. Table 2 shows the average vacancy rates as at 31 December 2014.

Note 4: The licensed hawkers do not need to pay rentals for their stalls. They are required to pay an annual fee (currently \$1,980) for licence renewals and another annual fee (currently \$26,514) for using their stalls.

Table 2

Average vacancy rates of public cooked food markets
(31 December 2014)

Market	No. of stalls	No. of vacant stalls	Vacancy rate
	(a)	(b)	(c) = $\frac{\text{(b)}}{\text{(a)}} \times 100\%$
11 CFHBs	238	144	61%
25 CFMs	483	31	6%
39 CFCs	561	18	3%
Overall	1,282	193	15%

Source: Audit analysis of FEHD records

Vacancy rates of Cooked Food Hawker Bazaars

High vacancy rates of CFHBs

Table 2 shows that the 11 CFHBs had a total of 144 vacant stalls, much more than the 31 vacant stalls for the 25 CFMs and 18 vacant stalls for the 39 CFCs. The average vacancy rate of the 11 CFHBs was 61%, also significantly higher than the 6% for the 25 CFMs and 3% for the 39 CFCs. An analysis of the vacancy rates of individual CFHBs is shown in Table 3. It can be seen that the largest CFHB (the Ma Kok Street CFHB) had a vacancy rate of 75% (see Figure 1 and Photograph 7). The second largest CFHB (the Luen Yan Street CFHB) had a vacancy rate of 81% (see Figure 2 and Photograph 8).

Table 3
Vacancy rates of CFHBs
(31 December 2014)

Serial no.	Name	Area	No. of stalls	No. of vacant stalls	Vacancy rate
			(a)	(b)	$(c) = \frac{(b)}{(a)} \times 100\%$
		(\mathbf{m}^2)			
1	Ma Kok Street CFHB	2,360	36	27	75%
2	Luen Yan Street CFHB	1,673	36	29	81%
3	Tai Lin Pai Road CFHB	1,208	22	18	82%
4	Woosung Street Temporary CFHB	761	24	6	25%
5	Yu Chau West Street CFHB	757	26	22	85%
6	Kwai Wing Road CFHB	515	20	15	75%
7	Lai Yip Street CFHB	425	10	4	40%
8	Haiphong Road Temporary CFHB	367	20	9	45%
9	Reclamation Street CFHB	270	12	8	67%
10	Stanley Market Open Space Hawker Bazaar	250	28 (Note 1)	6 (Note 1)	21%
11	Lam Tei Market cum Hawker Bazaar	160	4 (Note 2)	0	0%
	Overall	8,746	238	144	61%

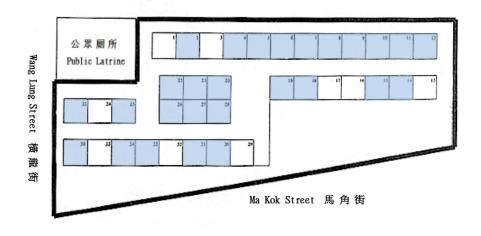
Source: Audit analysis of FEHD records

Note 1: The 28 stalls comprised 2 selling cooked food and 26 selling dry goods. None of the 6 vacant stalls was a cooked food stall.

Note 2: The 4 stalls comprised 1 selling cooked food and 3 selling vegetables/dry goods.

Figure 1

Floor plan of Ma Kok Street CFHB showing locations of vacant stalls
(31 December 2014)

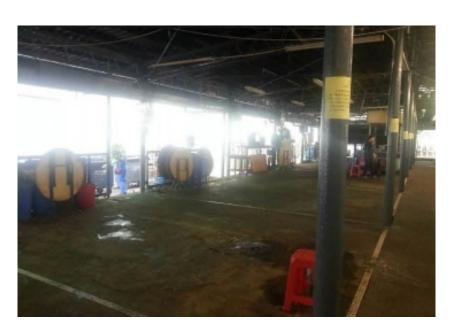


Legend: Vacant stalls

Source: FEHD records

Photograph 7

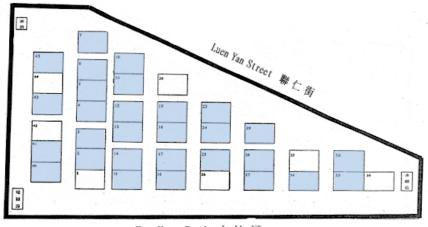
Vacant stalls in Ma Kok Street CFHB



Source: Photograph taken by Audit in January 2015

Figure 2

Floor plan of Luen Yan Street CFHB showing locations of vacant stalls
(31 December 2014)



Kwu Hang Road 古坑道

Legend: Vacant stalls

Source: FEHD records

Photograph 8

Vacant stalls in Luen Yan Street CFHB



Source: Photograph taken by Audit in January 2015

Long period of vacancy of CFHB stalls

Audit analysis also revealed that the 144 vacant CFHB stalls had been vacant for a long time (see Table 4). In particular, 114 (79%) stalls had been vacant for over 10 years. Some long-vacant stalls were in a poor condition (see Photograph 9 for an example).

Table 4
Period of vacancy of 144 CFHB stalls
(31 December 2014)

Period of vacancy (Year)	No. of stalls
1 or below	2 (1%)
Over 1 to 5	5 (4%)
Over 5 to 10	23 (16%)
Over 10 to 15	29 (20%)
Over 15 to 20	40 (28%) > 114 (79%)
Over 20 to 25	17 (12%)
Over 25 (Note)	28 (19%)
То	ral 144 (100%)

Source: Audit analysis of FEHD records

Note: The longest period of vacancy was 29 years, involving 5 stalls.

Photograph 9

A long-vacant stall in Luen Yan Street CFHB



Source: Photograph taken by Audit in January 2015

Timely action not taken to deal with vacant CFHB stalls

According to the Hawker Regulation, CFHB stalls can only be allocated for use by licensed hawkers. As mentioned in paragraph 1.2, it has been the Government's policy since the early 1970s that no new hawker licences should be issued under normal circumstances, and succession to and transfer of hawker licences already issued have also been subject to stringent restrictions (Note 5). As a result, the number of licensed hawkers operating in CFHBs has been decreasing over time, resulting in an increasing number of vacant CFHB stalls. The problem should have been anticipated when adopting the hawker policy. However, the high vacancy rates of CFHBs and long period of vacancy as at 31 December 2014 suggested that the FEHD had not taken timely action to deal with the problem. Case 1 below is an example.

Note 5: For example, hawker licences for selling cooked food in CFHBs can only be succeeded by or transferred to the licensee's spouse.

Case 1
Timely action not taken to deal with vacant CFHB stalls (2004 to 2014)

- 1. The Ma Kok Street CFHB (established in 1977) and the Luen Yan Street CFHB (established in 1985) are the two largest CFHBs. They are both located in Tsuen Wan, each providing 36 stalls (i.e. 72 stalls in total).
- 2. Like other CFHBs, the number of operators in the two CFHBs has been decreasing over time, resulting in an increasing number of vacant stalls. During the period 2004 to 2014, the number of vacant stalls increased from 43 to 56.

	31 December 2004		31 December 2014	
	No. of stalls occupied	No. of stalls vacant	No. of stalls occupied	No. of stalls vacant
Ma Kok Street CFHB	15	21	9	27
Luen Yan Street CFHB	14	22	7	29
Total	29	43	16	56

3. In late December 2014, the FEHD was exploring the feasibility of releasing some CFHB sites by relocating operators and consolidating CFHBs with high vacancies.

Audit comments

4. In 2004, the two CFHBs had in total 29 stalls occupied (see para. 2 above). All these 29 stalls could possibly be housed in either of the two CFHBs (both providing 36 stalls — see para. 1 above). The FEHD could have taken more timely action to explore such relocation/consolidation of CFHBs.

Source: Audit analysis of FEHD records

Scope for consolidating some CFHB stalls

Apart from the Ma Kok Street CFHB and the Luen Yan Street CFHB (see Case 1), Audit noted that there might be scope for rationalising the provision of stalls in other CFHBs. For example, the Woosung Street Temporary CFHB (25% vacancy rate) and the Reclamation Street CFHB (67% vacancy rate) could possibly be consolidated (see Case 2).

Case 2
Scope for further rationalising the provision of stalls

- 1. The Woosung Street Temporary CFHB and the Reclamation Street CFHB are both located in the Yau Tsim District, within a three-minute walk to each other (some 250 metres apart).
- 2. The Woosung Street Temporary CFHB is more spacious, having an area of 761 m^2 with 24 stalls (32 m^2 per stall on average Note). The Reclamation Street CFHB has an area of only 270 m^2 with 12 stalls (23 m^2 per stall on average Note).
- 3. As at 31 December 2014, the Woosung Street Temporary CFHB had 6 vacant stalls while the Reclamation Street CFHB had only 4 stalls occupied.

	No. of stalls	No. of stalls occupied	No. of stalls vacant
Woosung Street Temporary CFHB	24	18	6
Reclamation Street CFHB	12	4	8
Total	36	22	14

Audit comments

4. The 4 operators at the Reclamation Street CFHB could possibly be relocated to the nearby Woosung Street Temporary CFHB, which had 6 vacant stalls and was more spacious (see para. 2 above).

Case 2 (Cont'd)

- 5. Upon enquiry, the FEHD informed Audit in March 2015 that:
 - (a) while proximity of location and availability of vacant stalls were relevant considerations for consolidating CFHBs, the FEHD would also have to take into account the physical condition of the CFHBs concerned, and whether improvement works in the pipeline would take up extra space, limiting the scope for consolidation with other CFHBs; and
 - (b) funding had been approved to renovate the Woosung Street Temporary CFHB. Opportunity was being taken to upgrade its fire safety facilities and other building services facilities. The number of stalls was expected to be reduced upon completion of the works. The FEHD would closely monitor work progress with a view to putting the CFHB to its best use after renovation. The FEHD would also explore the redevelopment potential of the site now occupied by the Reclamation Street CFHB.

Source: Audit analysis of FEHD records

Note: The figure included communal areas.

Need to tackle the high vacancy problem

2.7 The 11 CFHBs are occupying areas of ground totalling 8,746 m². The high percentage of long-vacant CFHB stalls suggests that the land is not put to the best use. The FEHD needs to critically examine the problem and take effective improvement measures. It also needs to conduct periodic reviews to monitor the vacancy rates of the CFHBs for taking timely actions as and when required (e.g. consolidating CFHBs with high vacancy rates as appropriate).

Vacancy rates of Cooked Food Markets and Centres

As at December 2014, the average vacancy rates of 6% for the 25 CFMs and 3% for the 39 CFCs were significantly lower than that of CFHBs (61%). In total, there were 31 vacant CFM stalls and 18 vacant CFC stalls (see Table 5). Audit selected the Cheung Sha Wan CFM and the Choi Hung Road CFC for examination. The audit findings are detailed in paragraphs 2.9 to 2.12.

Table 5

CFMs and CFCs with vacant stalls
(31 December 2014)

Serial no.	Name	Area	No. of stalls	No. of vacant stalls	Vacancy rate
			(a)	(b)	$(c) = \frac{(b)}{(a)} \times 100\%$
		(m^2)			
CFMs with vacant stalls				1	
1	Cheung Sha Wan CFM	1,400	28	16	57%
2	Ka Ting CFM	648	16	3	19%
3	Kin Wing CFM	715	20	3	15%
4	Sze Shan Street CFM	370	17	2	12%
5	Nam Long Shan Road CFM	1,476	28	3	11%
6	Queen Street CFM	967	11	1	9%
7	Kwai Shun Street CFM	1,400	12	1	8%
8	Tsing Yeung CFM	922	18	1	6%
9	Wo Yi Hop Road CFM	850	18	1	6%
			Total	31	
CFC	es with vacant stalls				
1	Choi Hung Road CFC	2,502	19	6	32%
2	Aldrich Bay CFC	150	4	1	25%
3	Luen Wo Hui CFC	3,985	22	4	18%
4	Po On Road CFC	3,248	19	2	11%
5	Tai Shing Street CFC	1,661	11	1	9%
6	Bowrington Road CFC	1,049	12	1	8%
7	Ngau Chi Wan CFC	900	15	1	7%
8	Ngau Tau Kok CFC	1,500	21	1	5%
9	Tai Po Hui CFC	3,555	40	1	3%
			Total	18	

Source: Audit analysis of FEHD records

Remarks: The remaining 16 CFMs and 30 CFCs did not have vacant stalls.

Inadequate exit planning for markets located at temporary sites

- 2.9 As at December 2014, there were nine public cooked food markets located at temporary sites (see Appendix D). The total area of the temporary sites concerned was 4,850 m². The nine public cooked food markets were built on the temporary sites between 1972 and 1984 (i.e. the markets had occupied the "temporary" sites for some 30 to 42 years).
- Audit selected the largest one (i.e. the Cheung Sha Wan CFM) for case study. Of the 16 vacant stalls in the Cheung Sha Wan CFM, 11 had been vacant for some 20 years (since 1994) and 5 had been vacant for some 13 years (since 2001). Details are reported in Case 3 below.

Case 3

Continue operating a temporary CFM despite many frozen stalls (2000 to 2014)

- 1. The Cheung Sha Wan CFM was built in 1982 on a site in Sham Shui Po. The site $(1,400 \text{ m}^2)$ was acquired through temporary land allocation from the Lands Department and needed to be renewed periodically.
- 2. In 2000 when the FEHD took over the responsibility for managing the CFM (see para. 1.4), the CFM had 11 vacant stalls, which had been vacant since 1994. In 2001, the number of vacant stalls increased to 16.
- 3. In 2001 and 2003, the FEHD reviewed the use of the CFM and considered that the CFM needed to be closed down, as follows:
 - (a) **2001 review.** The FEHD considered that as the CFM was located at a temporary site, it needed to be closed down. The site should be returned to the Government. In the interim, the 16 vacant stalls (see para. 2 above) should be frozen because letting them would increase the number of operators required to be resited upon closing down the CFM; and
 - (b) **2003 review.** The FEHD considered that the CFM had strong close-down potential.

Case 3 (Cont'd)

- 4. Although the FEHD considered that the CFM needed to be closed down, it did not formulate any work plan to do so. Instead, it explored the defreezing of the 16 frozen stalls in 2002, 2009 and 2010 (for the purposes of accommodating on-street cooked food stalls in Sham Shui Po, letting out to other operators and relocating existing operators respectively). Due to various reasons, defreezing could not go ahead (Note).
- 5. As at December 2014, the 16 stalls continued to be frozen and the CFM was still in operation.
- 6. Since 2000, the FEHD had renewed six times the temporary land allocation for the CFM. The current allocation will expire in July 2016.

Audit comments

7. The FEHD has continued to operate the CFM despite its high vacancy rate. Given that more than half (57%) of the CFM's stalls had been frozen for over a decade, the FEHD needs to reconsider the continuance of the CFM and formulate a clear exit strategy.

Source: Audit analysis of FEHD records

Note: A major reason was limited electricity supply, which could not support the additional loading arising from the letting of the 16 stalls (see para. 3.21).

2.11 The FEHD needs to pay particular attention to the operation of the nine public cooked food markets located at temporary sites (e.g. their vacancy rates and viability — see paras. 2.13 to 2.15). Similar to the case of the Cheung Sha Wan CFM, if the FEHD considers that any of the other eight public cooked food markets should be closed down with the site returned to the Government, it needs to formulate a clear exit plan and ensure proper implementation of the plan.

Vacant stalls in Choi Hung Road CFC

2.12 The Choi Hung Road CFC is attached to the Choi Hung Road Market. In 2012, Members of the Wong Tai Sin District Council expressed concern about the viability of the Market, which had a low patronage. The Members considered that it should be closed down. In the event, the FEHD decided to freeze the vacant stalls in the CFC. As at December 2014, the CFC had 6 vacant stalls frozen, out of a total of 19 stalls (i.e. 32% vacancy rate).

Viability of public cooked food markets

- 2.13 When public cooked food markets were first built in the early 1970s, the original objective was to resite on-street licensed cooked food stalls. This objective has largely been achieved. More than 40 years have elapsed, and market stall operators are now facing keen competition because there is a large number of food premises in residential areas, commercial and industrial areas, and shopping malls throughout the territory. Viability of the public cooked food markets has become a cause for concern.
- According to the FEHD, being viable means that operators are able to earn a reasonable living. Also, as stated in its Hawker Management Operational Manual, the FEHD intends that all genuinely non-viable hawker pitches and market pitches should be delisted. Although viability is a key factor in determining whether a public cooked food market should continue to operate, it is not the FEHD's practice to conduct periodic reviews to assess the viability of each public cooked food market and its alternative use. In Audit's view, such reviews are useful for taking early actions (e.g. formulating exit plans for non-viable public cooked food markets, and relocating affected operators to the viable ones).
- As mentioned in paragraph 1.8, in response to Audit's recommendations in 2008, the FEHD conducted a review of the provision of the 25 CFMs and 39 CFCs in 2010. The FEHD found that CFMs/CFCs were still in demand. However, Audit analysis of the FEHD's review findings revealed that there were CFMs/CFCs with a low patronage. For example, there were 12 CFMs/CFCs with less than 20 patrons per day per stall. They included the Choi Hung Road CFC (see para. 2.12), which only had 10 patrons per day per stall. The low patronage of these CFMs/CFCs cast doubt on their viability. In Audit's view, the FEHD needs to closely monitor such CFMs/CFCs with a low patronage.

Audit recommendations

- 2.16 Audit has recommended that the Director of Food and Environmental Hygiene should:
 - (a) critically examine the high vacancy problem of CFHBs and assess how the current hawker policy may aggravate the problem over time;
 - (b) based on the results in (a) above, take effective measures to tackle the high vacancy problem of CFHBs, such as:
 - (i) rationalising the provision of stalls in CFHBs by consolidating CFHBs and releasing sites which are no longer required; and
 - (ii) formulating exit plans for individual CFHBs, particularly those located at temporary sites;
 - (c) conduct periodic reviews to monitor the vacancy rate and assess the viability of each public cooked food market, with a view to taking timely actions on non-viable markets; and
 - (d) ensure that exit plans formulated for public cooked food markets are properly implemented.

Response from the Government

- 2.17 The Secretary for Food and Health and the Director of Food and Environmental Hygiene generally agree with the audit recommendations. They have said that:
 - (a) the former Urban Council introduced an ex-gratia payment scheme in 1983 to encourage on-street cooked food hawker licensees to surrender their licensees voluntarily, and extended the scheme to cooked food hawker licensees in urban CFHBs in 1987. The FEHD aligned the scheme in 2002 so that licensees in the New Territories would also be eligible to receive ex-gratia payments for surrendering their licences from

2002 to 2007. Out of the 131 licensees operating in CFHBs then, 37 had surrendered their licences;

- (b) although the Director of Food and Environmental Hygiene has the authority not to renew the relevant hawker licences and require the licensees to vacate their pitches within a certain period of time when a CFHB has reached a very low occupancy rate, the cost of social acrimony associated with non-renewal and forced eviction would need to be taken into account;
- (c) with the development of more permanent cooked food markets, the FEHD closed some of its CFHBs, including the Mui Fong Street CFHB and Tai Kok Tsui Temporary CFHB in 2004 and 2005 respectively. The site of the ex-Canton Road Temporary Cooked Food Hawker Bazaar was resumed in 2006 after the last licensee surrendered his licence;
- (d) for CFHB sites having no redevelopment potential and a reasonable level of occupancy, the FEHD would consider improvement works subject to resource availability. For example, funding was approved in 2010-11 and 2011-12 respectively, to refurbish the Woosung Street Temporary CFHB and Haiphong Road CFHB and to upgrade their fire safety facilities;
- (e) in 2011, the FEHD commissioned a consultant to assess the business viability of three public markets and six CFHBs. Based on the findings, in January 2013 the FEHD advised the Financial Services and the Treasury Bureau (FSTB) that the sites of two markets and three CFHBs could be released for redevelopment. In July 2013, the FEHD indicated to the Planning Department that the site of another CFHB could be released for redevelopment. The FEHD has started the negotiation with the licensees of two CFHBs on closure (see para. 6.6); and
- (f) the FEHD has formulated improvement or exit plans for some of the CFHBs and would continue its work for the rest of them and other public cooked food markets, with regard to their business viability, community needs, resource availability and competing priorities. The FEHD would endeavour to deliver the plans formulated for individual CFHBs, CFCs and CFMs though being keenly aware that some proposals may trigger from some segments of the community strong sentiments which also need to be addressed to the extent possible and justified.

PART 3: PROVISION OF FACILITIES IN MARKETS

- 3.1 This PART examines the provision of facilities in public cooked food markets. Audit has found room for improvement in the following areas:
 - (a) fire safety measures (paras. 3.2 to 3.14);
 - (b) electricity supply for stall operation (paras. 3.15 to 3.23); and
 - (c) air-conditioning of markets (paras. 3.24 to 3.31).

Fire safety measures

3.2 Fire endangers lives and properties. Like any commercial premises and restaurants, public cooked food markets are subject to fire risk. From 2011 to 2014, there were 11 fire incidents at public cooked food markets (8 at CFMs, 2 at CFCs and 1 at a CFHB).

Fire safety requirements for commercial premises

- 3.3 In 1997, the Fire Safety (Commercial Premises) Ordinance (Cap. 502) was enacted. The purpose was to provide occupants and users of commercial premises and commercial buildings with better protection from fire risk. Pursuant to the Ordinance, the Director of Fire Services may require certain fire safety measures be complied with, namely, the installation of the following equipment in the commercial premises and commercial buildings:
 - (a) automatic sprinkler system;
 - (b) automatic cut-off device for mechanical ventilating systems;
 - (c) emergency lighting;
 - (d) fire hydrant and hose reel system;

Provision of facilities in markets

- (e) manual fire alarm; and
- (f) portable fire extinguisher.

According to the Department of Justice's advice given to the Director of Fire Services in 1998, government-owned commercial premises do not fall within the purview of the Ordinance.

- In 2003, a joint meeting was held between the FEHD, the Fire Services Department (FSD) and the Architectural Services Department (ArchSD). The parties discussed the applicability of the Fire Safety (Commercial Premises) Ordinance to the FEHD's markets. The meeting concluded that:
 - (a) it was a good practice for the Government to follow the spirit of the Ordinance in administering and maintaining its premises; and
 - (b) the fire safety measures stipulated in the Ordinance (referred to as stipulated measures hereinafter) were the minimum requirements. Full-scale fire service upgrading works should be implemented.

Slow progress in improving fire safety measures

- 3.5 Subsequent to the 2003 meeting (see para. 3.4), the FEHD reviewed the fire safety measures at CFCs and public markets selling wet and dry goods, and drew up an implementation plan to upgrade their fire safety measures. The implementation plan did not cover CFHBs or CFMs.
- 3.6 Upon enquiry, in December 2014, the FEHD took stock of the implementation of the stipulated measures and advised Audit of the situation (see Table 6). Of the 75 public cooked food markets, only 33 (44%) had implemented all the six stipulated measures (see para. 3.3(a) to (f)). In particular, many CFMs had implemented only a few stipulated measures, and no CFHBs had implemented more than two stipulated measures.

Table 6

Implementation of stipulated measures for fire safety
(December 2014)

No. of measures implemented (Note)	No. of public cooked food markets which had implemented the measures			
	СҒНВ	CFM	CFC	Total
6	0	3	30	33 (44%)
5	0	9	8	17 (23%)
4	0	3	1	4 (5%)
3	0	1	0	1 (1%)
2	2	7	0	9 (12%)
1	3	2	0	5 (7%)
0	6	0	0	6 (8%)
Total	11	25	39	75 (100%)

Source: Audit analysis of FEHD records

Note: This refers to the six stipulated measures mentioned in paragraph 3.3.

3.7 As at December 2014, more than 10 years had elapsed since the FEHD decided in 2003 to upgrade the fire safety measures. It is unsatisfactory that many public cooked food markets had not implemented the stipulated measures, which were considered as minimum requirements (see para. 3.4(b)).

Inadequate fire safety measures

3.8 Given the slow implementation of the stipulated measures, some public cooked food markets might not have adequate fire safety measures to guard against the fire risk. In the period November 2014 to January 2015, Audit conducted site visits to 13 public cooked food markets (2 CFHBs, 9 CFMs and 2 CFCs) to examine the provision of facilities therein.

3.9 Audit noted that CFHBs and CFMs were subject to certain fire risk factors. For example, open kitchens without fire-resistant partitions (see Photograph 10), keeping many liquefied petroleum gas (LPG) cylinders (see Photograph 11 — Note 6) and using many electric appliances in a crowded setting (see Photograph 12). The inadequate fire safety measures at these markets are a cause for concern.

Photographs 10 to 12

Examples of fire risk factors

Photograph 10



An open kitchen (Lai Yip Street CFHB)

Photograph 11



Keeping many LPG cylinders (Chai Wan Kok CFM)

Photograph 12



Using many electric appliances (Tai Yuen Street CFM)

Source: Photographs taken by Audit in December 2014 and January 2015

Note 6: The FEHD generally prohibits the use of LPG in public cooked food markets, and allows the use of such energy sources as electricity and centralised piped-supply of gas (see para. 4.20(b)).

3.10 The FSD conducts inspections of fire safety in such places as licensed restaurants and commercial premises (Note 7). However, stalls operating in public cooked food markets are not licensed restaurants (see paras. 4.3 and 4.10). Besides, like any other government-owned commercial premises, the public cooked food markets do not fall within the purview of the Fire Safety (Commercial Premises) Ordinance (see para. 3.3). Upon enquiry, the FSD informed Audit in January 2015 that it was not its practice to regularly inspect public cooked food markets for fire safety (Note 8).

Audit recommendations

- 3.11 Audit has *recommended* that the Director of Food and Environmental Hygiene should:
 - (a) expedite the implementation of fire safety measures at public cooked food markets and update the implementation plan, taking account of the need for:
 - (i) including in the plan those public cooked food markets (CFHBs and CFMs) which were not previously covered; and
 - (ii) giving priority to public cooked food markets which are subject to a higher level of fire risk;
 - (b) regularly monitor the progress of implementation of fire safety measures to ensure that they are carried out as planned; and
- **Note 7:** The FSD's inspections of fire safety cover schools, child care centres, food premises, prescribed commercial premises, specified commercial buildings, composite buildings, karaoke establishments, drug dependent persons treatment and rehabilitation centres, and places of public entertainment.
- **Note 8:** According to the Controlling Officer's Report of the FSD, a total of 82,360 fire safety inspections were conducted in 2013. The FSD informed Audit that none of the 75 public cooked food markets of the FEHD were covered by these inspections.

(c) in consultation with the Director of Fire Services, explore effective measures (e.g. conducting ad hoc inspections to selected public cooked food markets) to help better ascertain and address the fire risk at individual public cooked food markets.

Response from the Government

- 3.12 The Secretary for Food and Health and the Director of Food and Environmental Hygiene agree with the audit recommendations. They have said that:
 - (a) since 2002, the FEHD has implemented fire safety upgrading works alongside other general improvements measures at 19 CFCs and 3 CFMs. The fire safety upgrading works included the installation of automatic sprinkler systems, emergency lighting, etc;
 - (b) having implemented fire safety measures at 19 CFCs and 3 CFMs, the FEHD will pursue fire safety upgrading works at the remaining CFMs and CFHBs which were not previously covered. The FEHD will take into account the technical advice of the ArchSD and the Electrical and Mechanical Services Department (EMSD) and other relevant factors, including plans of redevelopment of the sites concerned, existing usage and fire risk; and
 - (c) the FEHD will join hands with the FSD to review the fire risk at individual public cooked food markets and take enforcement actions against violations of fire safety related regulations. Should the tenants/hawkers fail to comply with the relevant fire safety requirements despite the FSD's enforcement actions, the FEHD will consider terminating the tenancies/revoking the licences.

3.13 The Director of Fire Services has said that:

(a) one of the statutory duties of the FSD is to give fire safety advice including, inter alia, the provision of fire service installations in private and government buildings. Similar to the past, the FSD continues to stand ready to provide pertinent fire safety advice upon request; and

- (b) regarding cooked food stalls operating in public cooked food markets, frontline operational units of the FSD will conduct routine visits to familiarise themselves with local risks and carry out fire hazard abatement actions where situation warrants.
- 3.14 The Director of Electrical and Mechanical Services has said that the EMSD will continue to provide engineering support to the FEHD in promoting and ensuring electrical and gas safety in public cooked food markets managed by the FEHD and take appropriate enforcement actions according to the relevant statutory requirements.

Electricity supply for stall operation

- 3.15 Electricity is a major energy source for public cooked food markets (e.g. for lighting and cooking). According to the FEHD's standard for public markets (including CFMs and CFCs), the electricity supply for each cooked food stall should have a capacity of 60 amperes. In managing the electricity supply for public cooked food markets, the FEHD needs to seek advice from other government departments, for example, the ArchSD and the EMSD.
- 3.16 For CFHBs, operators of stalls are licensed hawkers. They make arrangements directly with electricity companies for power supply instead of via the FEHD.

Sub-standard electricity supply

3.17 Audit analysed the electricity supply for the 25 CFMs and 39 CFCs. As at December 2014, no CFM, and only two CFCs, had electricity supply that met the FEHD's 60-ampere standard (see Table 7).

Table 7

Electricity supply for CFMs and CFCs (December 2014)

Capacity (Note)	No. of Cl			
(Ampere)	CFM	CFC	Total	
60 or above	0	2	2 (3%)	Meeting standard
30 to 59	2	17	19 (30%)	Below
29 or below	23	20	43 (67%)	standard
Total	25	39	64 (100%)	

Source: Audit analysis of FEHD records

Note: This refers to the capacity available to each stall in the

CFM/CFC.

3.18 Upon enquiry, the FEHD informed Audit in December 2014 that lower standards for electricity supply might have been adopted prior to 2000, when public cooked food markets were under the purview of the former Urban Council and Regional Council (Note 9 — see para. 1.4). As shown in Table 7, the electricity supply for most CFMs and CFCs had not been upgraded to meet the current standard.

Nowadays, operators in public cooked food markets use more electric appliances which have become generally available. During the site visits to public cooked food markets (see para. 3.8), Audit noted that appliances such as electric fryers and commercial refrigerators were commonly used. Sub-standard electricity supply could lead to overloading of the electricity system (see para. 3.20) and could also cause other problems, such as rendering the stalls unfit for letting (see para. 3.21) and retrofitting of air-conditioning systems not feasible (see paras. 3.26 to 3.28).

Note 9: For example, for public cooked food markets under the purview of the former Regional Council, the standard capacity of electricity supply for a cooked food stall was only 30 amperes.

Overloading of electricity supply

3.20 According to FEHD records, overloading of electricity supply had been noted in individual public cooked food markets, and inadequate electricity supply could be a contributory factor. Case 4 shows an example.

Case 4

Overloading of electricity supply at Kwun Tong Ferry Concourse CFM (2008 to 2014)

- 1. The Kwun Tong Ferry Concourse CFM was built in 1984.
- 2. As at December 2014, the CFM had 29 stalls, which had all been let to operators. Electricity supply for the CFM was inadequate. The capacity available to each stall was only 10 amperes, falling short of the 60-ampere standard.
- 3. Since 2008, electricity outages at the CFM had been noted from time to time. In particular, during the 112-day period from 1 March 2008 to 20 June 2008, electricity outages happened 12 times. Each time, the electricity supply was interrupted for 10 minutes to two hours.
- 4. The FEHD found that the electricity supply system had been overloaded. However, upgrading the electricity system would require the building of an off-site transformer room. The FEHD could not find a suitable site for the transformer room.
- 5. In 2012, the FEHD posted a notice at the CFM to solicit operators' cooperation to limit the use of electricity. However, the electricity supply system was still overloaded occasionally.

Audit comments

6. Inadequate electricity supply had adversely affected the operation of the CFM.

Source: Audit analysis of FEHD records

Stalls could not be let

Another problem caused by inadequate electricity supply was noted in the Cheung Sha Wan CFM. As at December 2014, 16 (57%) of its 28 stalls had been made unavailable for letting for more than 10 years (see para. 2.10). A major reason for not being able to let the stalls was limited electricity supply. Details are in Case 5.

Case 5

16 stalls in Cheung Sha Wan CFM could not be let

- 1. In 2009, the FEHD intended to let out to operators through open auction the 16 stalls in the CFM that had been made unavailable for letting. The FEHD found that the electricity supply could not support the operation of the 16 stalls.
- 2. The FEHD explored with the electricity company different ways to upgrade the electricity supply. In 2010, the electricity company agreed to lay an additional underground power cable for the CFM, so as to upgrade the electricity supply.
- 3. However, up to December 2014, the upgrading works had not been carried out. According to the FEHD, as the future development of the CFM was uncertain, the upgrading work had been suspended. As the electricity supply was only sufficient for the operation of the existing 12 stalls, the 16 stalls continued to be unavailable for letting.

Audit comments

4. The electricity supply actually did not meet the FEHD's standard. Even without letting out the stalls, the capacity available to each of the existing 12 stalls was only 38 amperes, much below the 60-ampere standard.

Source: Audit analysis of FEHD records

Audit recommendations

- 3.22 Audit has *recommended* that the Director of Food and Environmental Hygiene should:
 - (a) review the adequacy of electricity supply for stalls operating in CFMs and CFCs against the FEHD's standard;
 - (b) look into the reasons for sub-standard electricity supply in individual CFMs and CFCs, and assess the feasibility of upgrading the supply having regard to such factors as:
 - (i) technical feasibility and costs of the upgrading works;
 - (ii) future redevelopment plan and possible close-down potential of the CFMs/CFCs;
 - (iii) existing usage and electricity consumption of the CFMs/CFCs; and
 - (iv) risk exposure (e.g. fire risk and power outages from overloading);
 - (c) take prompt actions to enhance the electricity supply for CFMs and CFCs where upgrading works are considered feasible; and
 - (d) for CFMs and CFCs which are not suitable for upgrading works, take measures to:
 - (i) provide guidelines on the use of electric appliances in the CFMs/CFCs, particularly those high-consumption electric appliances (e.g. air-conditioners); and
 - (ii) ensure that the guidelines are properly implemented and updated as necessary.

Response from the Government

- 3.23 The Secretary for Food and Health and the Director of Food and Environmental Hygiene agree with the audit recommendations. They have said that:
 - (a) the FEHD will liaise with the ArchSD to review the adequacy of electricity supply in CFMs and CFCs, and for those with sub-standard electricity supply, assess the reasons and feasibility of upgrading the supply, including the costs of upgrading;
 - (b) for CFMs and CFCs where upgrading works are considered feasible, the FEHD will follow up with relevant departments; and
 - (c) for CFMs and CFCs found not suitable for upgrading works, the FEHD will establish guidelines, in consultation with relevant departments, on the use of electrical appliances and ensure they are properly implemented and updated.

Air-conditioning of markets

Most markets not provided with air-conditioning systems

In Hong Kong, air-conditioning is a significant factor in the operation of cooked food stalls. As at December 2014, of the 75 public cooked food markets, only 22 (29%) were air-conditioned (see Table 8).

Table 8

Air-conditioning in public cooked food markets (December 2014)

	No. of markets			
Market	Air-conditioned (Note)	Not air-conditioned	Total	
CFHBs	0 (0%)	11 (100%)	11	
CFMs	2 (8%)	23 (92%)	25	
CFCs	20 (51%)	19 (49%)	39	
Overall	22 (29%)	53 (71%)	75	

Source: Audit analysis of FEHD records

Note: This refers to air-conditioning by way of a central air-conditioning system. Individual operators might have installed standalone air-conditioners without the FEHD's approval (see para. 3.28).

3.25 According to the 2010 FEHD review of the provision of CFMs and CFCs, poor ventilation was a major concern of operators and patrons. The review also found that, for those who did not patronise CFMs and CFCs, poor ventilation was also a major reason (Note 10).

Retrofitting of air-conditioning systems not always feasible

3.26 To explore whether or not to retrofit a public cooked food market with an air-conditioning system, it is the FEHD's practice to conduct a survey to gauge the intents of the stall operators concerned. If not less than 85% of the stall operators endorse retrofitting an air-conditioning system and agree to bear the recurrent costs (Note 11), the FEHD will conduct a detailed technical feasibility study. Taking into

Note 10: Other reasons for not patronising CFMs and CFCs included "place is not clean", "seating is uncomfortable" and "location is inconvenient".

Note 11: This refers to the electricity charges and costs of daily general maintenance after the installation.

consideration the study findings, the extent of works required, cost effectiveness, length of business disruption and tenants' views, the FEHD will decide whether there is a case for bidding resources for retrofitting an air-conditioning system.

3.27 Audit noted cases in which retrofitting projects could not go ahead despite stall operators having given adequate support. Case 6 shows an example. In the case, there was full support from all stall operators.

Case 6

Air-conditioning system not installed at Shui Wo Street CFC

- 1. The Shui Wo Street CFC, situated within a municipal services building, was built in 1988 and was not air-conditioned. In 2010, upon the request of a stall operator, the FEHD conducted a survey and found that all the 20 operators supported retrofitting the CFC with an air-conditioning system.
- 2. The CFC did not have adequate electricity supply. The retrofitting project would require building an off-site transformer room some 30 metres away from the municipal services building.
- 3. In 2013, the ArchSD informed the FEHD that the project would cost over \$30 million. The construction period would take about 10 to 12 months. During this period, the operation of all the 20 stalls would need to be suspended. The ArchSD advised that the project might not be a practical and worthy one.
- 4. As at December 2014, the retrofitting project had not commenced. Instead, the FEHD had taken interim measures such as installing four evaporative air coolers at the CFC.

Audit comments

5. Given the technical difficulties, the retrofitting project could not be carried out in spite of the full support given by stall operators.

Source: Audit analysis of FEHD records

Installing standalone air-conditioners without prior approval

During the site visits to public cooked food markets (see para. 3.8), Audit noted that it was not unusual for operators in markets not having air-conditioning systems to install standalone air-conditioners for their own stalls. According to FEHD records, some operators had installed standalone air-conditioners without the FEHD's prior approval and without due consideration of the inadequate electricity supply for the public cooked food market concerned (see Case 7).

Case 7

Standalone air-conditioners at Tsun Yip CFM (2008 to 2014)

- 1. The Tsun Yip CFM was built in 1985 with 56 stalls.
- 2. In 2008, the electricity company informed the FEHD that the electricity supply system of the CFM had been overloaded. It advised the FEHD to monitor the loading condition and restrict the load.
- 3. In 2009, the FEHD explored the upgrading of electricity supply for the CFM. In 2010, the ArchSD advised that a new transformer room needed to be built. However, no suitable location could be identified for it.
- 4. In 2011, the FEHD noted that 18 of the 56 stalls had installed standalone air-conditioners without its prior approval. For record purpose, the FEHD required operators of the stalls to apply for covering approval for installing the air-conditioners. Owing to the inadequate electricity supply, the FEHD considered that no further applications for installing air-conditioners should be accepted.
- 5. In December 2014, during the site visit to the CFM, Audit noted that 4 more stalls had installed standalone air-conditioners. The number of stalls with standalone air-conditioners totalled 22.

Audit comments

6. Operators kept installing standalone air-conditioners regardless of the inadequate electricity supply. The FEHD had not taken effective action to curb the unauthorised installation of air-conditioners, which could be a safety concern.

Source: Audit analysis of FEHD records and Audit's site visit in December 2014

Audit recommendations

- 3.29 Audit has *recommended* that the Director of Food and Environmental Hygiene should:
 - (a) keep in view the development in the upgrading of electricity supply for individual CFMs and CFCs (see para. 3.22(c)), with a view to taking forward proposals for retrofitting air-conditioning systems in a timely manner;
 - (b) ascertain the extent of installation of standalone air-conditioners at CFMs and CFCs without the FEHD's approval; and
 - (c) in consultation with the Director of Electrical and Mechanical Services, promptly step up control to curb unauthorised installation of air-conditioners as required, such as:
 - (i) taking measures to remove any unauthorised air-conditioners installed which could pose a threat to safety (e.g. fire safety from overloading);
 - (ii) reminding stall operators of the requirements on installing air-conditioners; and
 - (iii) taking actions to ensure that the FEHD's requirements on installing air-conditioners are followed.

Response from the Government

- 3.30 The Secretary for Food and Health and the Director of Food and Environmental Hygiene agree with the audit recommendations. They have said that:
 - (a) the FEHD will work with relevant departments in upgrading electricity supply for individual CFMs and CFCs and work in close liaison with stakeholders to take forward any proposals for retrofitting of air-conditioning systems;

- (b) the FEHD will step up inspections and remind stall operators to seek prior approval before installing air conditioners; and
- (c) if there is unauthorised installation of air-conditioners, the FEHD will take enforcement action under the Public Markets Regulation (Cap. 132BO) or issue warning letter for breach of tenancy agreement as appropriate to ensure that the irregularities are rectified.
- 3.31 The Director of Electrical and Mechanical Services has said that the EMSD will continue to provide engineering support to the FEHD (see para. 3.14).

PART 4: MANAGEMENT OF MARKET STALLS

- 4.1 This PART examines the FEHD's management of stalls in public cooked food markets. Audit has found room for improvement in the following areas:
 - (a) management of stalls in CFMs and CFCs (paras. 4.2 to 4.9);
 - (b) management of hawkers operating in CFHBs (paras. 4.10 to 4.17); and
 - (c) routine inspections of stalls (paras. 4.18 to 4.26).

Management of stalls in Cooked Food Markets and Centres

Stalls in CFMs and CFCs exempt from obtaining a restaurant licence

4.2 According to the Food Business Regulation (Cap. 132X), the operator of a restaurant (Note 12) is required to hold a restaurant licence from the FEHD. The FEHD will issue a licence only when the operator has complied with the hygiene requirements and safety standards (e.g. number of sanitary fitments and size of food room — Note 13). The purpose of licensing restaurants is to ensure that the premises are suitable for operating restaurant business, to safeguard public health and to ensure the safety of patrons.

Note 12: Under the Regulation, a restaurant means any food business which involves the sale of meals or unbottled non-alcoholic drinks other than Chinese herb tea, for consumption on the premises, but does not include a factory canteen or any business carried on by a hawker who is a holder of a licence under the Hawker Regulation.

Note 13: Food room refers to kitchen, food preparation room and scullery.

- 4.3 According to the tenancy agreements, same as restaurants, stalls in CFMs and CFCs can sell any type of meals (Note 14). However, the stalls are exempt from obtaining a restaurant licence (Note 15). The exemption has the following historical background:
 - (a) *Small scale of operation.* In the past, CFMs and CFCs were built to resite licensed hawkers operating on-street cooked food stalls in the form of Dai Pai Tong (see para. 1.3). According to FEHD records, these on-street Dai Pai Tongs were personally operated businesses and of small scale, both financially and in physical size. Traditionally, an on-street Dai Pai Tong was permitted to place only two tables with eight stools in its hawking area; and
 - (b) Dai Pai Tongs not required to obtain a restaurant licence. Under the Food Business Regulation, the on-street Dai Pai Tongs were not restaurants and therefore not required to obtain a restaurant licence (see Note 12 to para. 4.2). The licensed hawkers operating them were controlled under the Hawker Regulation. However, after surrendering their hawker licences and becoming stall operators in CFMs and CFCs, they are no longer subject to such control.

Therefore, it is important to ensure that operators of stalls in CFMs and CFCs comply with the tenancy agreements in operating their stalls at the intended small scale commensurate with the less stringent control.

Some stalls operating at a scale much larger than intended

Audit's site visits to the 13 public cooked food markets in the period November 2014 to January 2015 (see para. 3.8) revealed that some stalls in CFMs and CFCs were operating at a larger scale than intended. In brief, they operated in a way similar to ordinary restaurants, while not being required to obtain a restaurant licence. Case 8 shows an example.

- **Note 14:** The tenancy agreements also stipulate some requirements on stall operation (e.g. the maximum number of days for which operators could suspend their operations during a month).
- **Note 15:** The Food Business Regulation (Exemption from Section 31(1)) Notice (Cap. 132Z) provides for the exemption.

Case 8

A CFM stall operating in a way similar to a restaurant

- 1. The Queen Street CFM had 11 stalls sharing a communal seating area for patrons. One of the stalls (Stall A) served western cuisine.
- 2. In January 2015, Audit staff visited Stall A at dinner time as normal patrons and found that Stall A reserved tables in the communal seating area for its patrons. About 15 tables in the communal area were set with tablecloths, crockery and cutlery of Stall A. The tables were subsequently filled up with patrons of Stall A. House wine was served, and spirit was also available (see para. 4.6).

Audit comments

3. Stall A was operating at a larger scale than, and in a different mode from, traditional cooked food stalls. Contrary to the tenancy agreement, it has occupied communal seating for the exclusive use of its stalls.

Source: Audit's site visit in January 2015

Need to review facilities provided to stalls operating at a large scale

As mentioned in paragraph 4.3, stalls in CFMs and CFCs are exempt from obtaining a restaurant licence for reasons including their small scale of operation. However, Audit found that some stalls were actually operating at a larger scale than traditional cooked food stalls. This is a cause for concern because although such stalls were similar to ordinary restaurants, they were not subject to the hygiene requirements and safety standards applicable to restaurants. For example, under the Food Business Regulation, restaurants (but not stalls in CFMs and CFCs) are required to be provided with food rooms of a size not less than a specified percentage of the gross floor area of the premises. In Audit's view, the stalls in CFMs and CFCs were intended for small-scale operation and might not be adequate for operating at a large scale, especially from a public health and safety perspective. The FEHD needs to review the issue and explore improvement measures for stalls operating at a large scale.

Using stalls to conduct regulated activities without a licence

- 4.6 **Sale of liquor.** According to Dutiable Commodities (Liquor) Regulations (Cap. 109B), a liquor licence from the Liquor Licensing Board is required for the sale of liquor for consumption on the premises (Note 16). Audit noted that, as at December 2014, none of the stalls in public cooked food markets had a liquor licence (Note 17). However, during the site visits to CFMs and CFCs (see para. 4.4), Audit found some stalls selling liquor (e.g. beer, wine and spirit) to patrons, and cases in which the liquor was sold and consumed in the communal area (see para. 2 of Case 8 in para. 4.4 for example) or inside the stall area.
- 4.7 **Running food factories.** According to the Food Business Regulation, a licence from the FEHD is required for running food factories (Note 18). Audit's site visits to two CFMs with a low patronage revealed that there were stalls suspected to be used as food factories:
 - (a) **Providing delivery catering services.** The Tai Yuen Street CFM was found to have a zero patronage in the FEHD's 2010 review. During Audit's site visit in January 2015, four stalls were in operation. They were all providing delivery catering services (see Photographs 13 and 14). The CFM did not have any patrons nor did it have any tables or seats for dine-in patrons; and

- Note 16: The Board is a statutory body, with executive and secretarial support provided by the FEHD. All applications for liquor licences are referred to the Commissioner of Police and the District Officer concerned for comments. Public opinion is also sought by placing notices in newspapers. Liquor licensees have to observe a set of statutory conditions and any additional licensing conditions as may be imposed by the Board.
- Note 17: According to the information on the website of the Liquor Licensing Board, it is the Board's policy that a liquor licence will only be issued when the premises have been issued with a restaurant licence or a provisional restaurant licence.
- **Note 18:** A food factory means any food business which involves the preparation of food for sale for human consumption off the premises.

(b) *Mass roasting of pigs and poultries*. The Tsun Yip CFM was found to have 12 patrons per day per stall in the FEHD's 2010 review. During Audit's site visit in January 2015, four stalls were used for the roasting of pigs and poultries in bulk, and some being delivered off-site (see Photographs 15 and 16).

Audit examination revealed that the stalls concerned did not have a food factory licence.

Photographs 13 and 14

Providing delivery catering services (Tai Yuen Street CFM)

Photograph 13



Preparing food stuff for delivery

Photograph 14



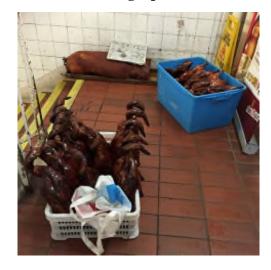
Delivering food stuff off-site

Source: Photographs taken by Audit in January 2015

Photographs 15 and 16

Mass roasting of pigs and poultries (Tsun Yip CFM)

Photograph 15



Roasts waiting for delivery

Photograph 16



Delivering roasts off-site

Source: Photographs taken by Audit in January 2015

Audit recommendations

- 4.8 Audit has *recommended* that the Director of Food and Environmental Hygiene should:
 - (a) review the adequacy of facilities provided to stalls in CFMs and CFCs operating at a much larger scale than traditional cooked food stalls, especially from a public health and safety perspective;
 - (b) based on the review results in (a) above, explore improvement measures for stalls operating at a large scale, with a view to better safeguarding public health and safety;
 - (c) ensure that stalls in CFMs and CFCs comply with the tenancy agreements and do not occupy communal seating;

- (d) critically examine the issue of selling liquor by stalls in CFMs and CFCs without a liquor licence and ascertain whether there are similar cases in CFHBs;
- (e) take necessary follow-up actions on the issue of selling liquor by stalls; and
- (f) follow up the cases involving stalls suspected to be running as food factories identified by Audit in paragraph 4.7 and ascertain whether there are other similar cases.

Response from the Government

- 4.9 The Secretary for Food and Health and the Director of Food and Environmental Hygiene agree with the audit recommendations. They have said that:
 - (a) the FEHD will review the adequacy of facilities in CFMs and CFCs. Although restaurant licences are not required, the operation of stalls in CFMs and CFCs is also subject to stringent health requirements for protecting public health and food safety;
 - (b) the FEHD will step up inspections. If unauthorised occupation/ unauthorised use of stall (e.g. running a food factory type business) is detected, it will take enforcement action or issue warning letter for breach of tenancy agreement as appropriate;
 - under Regulation 25A of the Dutiable Commodities (Liquor) Regulations, sale of liquor at any premises for consumption on those premises is prohibited except under a liquor licence. According to preliminary legal advice in 1999, Regulation 25A did not apply to those FEHD cooked food market stalls provided with communal seating areas. The FEHD will follow up Audit's observations on the sale of liquor in CFMs and CFCs and take appropriate action with the Police as necessary; and

(d) the FEHD has stepped up territory-wide inspections including blitz operations to check against any unauthorised use of stall for other purposes, including the conduct of food factory business. Stern reminders and warnings have been given to operators concerned. Action will continue to stamp out the irregularities.

Management of hawkers operating in Cooked Food Hawker Bazaars

4.10 Stalls in CFHBs are operated by hawkers holding a fixed-pitch hawker licence issued by the FEHD. The stalls are not governed by the Food Business Regulation (see Note 12 to para. 4.2). The FEHD manages these hawkers and their stalls in accordance with the Hawker Regulation. Audit reviewed the FEHD's management of hawkers operating in three CFHBs, comprising the two largest ones (the Ma Kok Street CFHB and the Luen Yan Street CFHB) and one other CFHB (the Lai Yip Street CFHB). The audit findings are in paragraphs 4.11 to 4.15.

Control on appointment of deputies

- 4.11 In accordance with the hawker policy adopted since the early 1970s (see para. 1.2), the FEHD has not issued new licences for hawking in CFHBs. Stringent control has also been placed on the succession and transfer of licences already issued. If a licence is cancelled (e.g. due to ill health, old age or death of the licensed hawker), a replacement licence may be issued only to the hawker's spouse.
- 4.12 A licensed hawker may appoint a deputy to operate his stall under specified circumstances. The relevant provisions of the Hawker Regulation are as follows:
 - (a) **Reasons for appointment.** Where a licensed hawker leaves or intends to leave Hong Kong, or is incapacitated by illness, for a period of more than eight days, he may, with the prior permission of the Director of Food and Environmental Hygiene, appoint a person to be his deputy during the absence or incapacity; and
 - (b) *Maximum duration*. The Director shall not, except in such special circumstances as he thinks fit, grant any permission for any period exceeding six months.

Audit noted that appointing deputies was common in the three CFHBs (Note 19). For the Lai Yip Street CFHB, in processing the applications for appointment of deputies, the FEHD required licensed hawkers to provide medical certificates to support their claimed illness. However, in processing the applications for the Luen Yan Street CFHB and the Ma Kok Street CFHB, medical certificates were not required to support the claimed illness (Note 20). Moreover, for all the three CFHBs, it was not the FEHD's practice to take follow-up action after the expiry of the period during which the deputy was appointed (e.g. conducting visits to ascertain whether the licensed hawker actually resumed operating the stall). There is a need for the FEHD to tighten its control in this regard.

Hawking outside the stall

- 4.14 According to the Hawker Regulation, licensed hawkers in CFHBs shall not hawk outside the stalls specified in their fixed-pitch licences. Audit's site visit to the Ma Kok Street CFHB in January 2015 found two licensed hawkers hawking outside their stalls, contrary to the Hawker Regulation. In addition to their own stalls, the hawkers also operated at adjacent stalls which were vacant. One of them occupied one vacant stall for serving customers, while the other occupied two vacant stalls.
- 4.15 Stalls in CFHBs, similar to those in CFMs and CFCs (see para. 4.5), are not subject to the hygiene requirements and safety standards applicable to restaurants. It is important to ensure that they comply with the Hawker Regulation and operate within their fixed pitches at the intended small scale commensurate with the less stringent control.

Audit recommendations

4.16 Audit has recommended that the Director of Food and Environmental Hygiene should:

- **Note 19:** Of the 22 licensed hawkers in the three CFHBs, 9 (41%) had appointed deputies during the period 2012 to 2014.
- **Note 20:** During the period 2012 to 2014, four applications were made on the grounds of illness, all of which were not supported by medical certificates but were approved by the FEHD.

- (a) tighten the control on the appointment of deputies by licensed hawkers in CFHBs; and
- (b) ensure that licensed hawkers in CFHBs comply with the Hawker Regulation and operate within their fixed pitches.

Response from the Government

- 4.17 The Secretary for Food and Health and the Director of Food and Environmental Hygiene agree with the audit recommendations. They have said that:
 - (a) the FEHD will step up inspections and take enforcement actions/issue warning letter if irregularities such as obstruction are detected; and
 - (b) the FEHD has reminded district staff to act strictly in accordance with the prevailing guidelines which, among other things, require that the licensee should personally operate the business after expiration of the approved period on appointment of deputy. Any extension or repeated applications for appointment of deputy will not be considered unless supported by medical grounds or special justifications.

Routine inspections of stalls

4.18 The FEHD's 19 District Environmental Hygiene Offices (referred to as District Offices hereinafter) manage the public cooked food markets in the districts concerned (Note 21). Staff of the District Offices (referred to as inspection staff hereinafter) carry out routine inspections of the markets. A key objective is to ensure that the various control requirements (e.g. tenancy requirements and conditions, licensing requirements and statutory requirements) are complied with.

Note 21: Each District Office has a Market Section responsible for managing CFMs and CFCs, and a Hawker Section for managing CFHBs. They also carry out other duties. For example, the Market Section manages public markets selling wet and dry goods, and the Hawker Section controls on-street hawking activities.

4.19 During the period November 2014 to January 2015, Audit visited three District Offices, namely Central/Western District Office, Kwun Tong District Office and Tsuen Wan District Office. Audit examined the inspection work of these three Offices, and observed their inspection staff conducting routine inspections of nine public cooked food markets.

Actions not taken on irregularities

- 4.20 During the inspections of the nine public cooked food markets, Audit noted incidents of suspected non-compliance with control requirements. The two most common non-compliant requirements were as follows:
 - (a) *Obstruction of public areas*. According to the tenancy agreements, operators at CFMs and CFCs should not place any goods, utensils or articles outside their stalls. For CFHBs, according to the Hawker Regulation, operators shall not place commodities and equipment outside their stalls. Of the nine public cooked food markets inspected, obstruction of public areas was noted, to varying degrees, in every market; and
 - (b) Use of LPG. The FEHD generally prohibits the use of LPG in CFMs and CFCs, and allows the use of such energy sources as electricity and centralised piped-supply of gas. Such a requirement has been laid down in the tenancy agreements for operators in CFMs and CFCs. For CFHBs, the FEHD only allows limited use of LPG (e.g. no more than three 16-kilogramme LPG cylinders at one place) in accordance with the relevant regulations (Note 22). Of the nine public cooked food markets inspected, the use of disallowed/excessive LPG was noted in 5 (56%) markets (see Photograph 11 in para. 3.9 for example). The use of a large number of LPG cylinders on the premises may pose safety risks.
- 4.21 While the irregularities in paragraph 4.20(a) and (b) were obvious, the inspection staff (with whom Audit accompanied) made no mention of them in the inspection records and did not take any follow-up action.

Note 22: The storage and conveyance of gas (including LPG) are regulated by the EMSD under the Gas Safety Ordinance (Cap. 51) (see para. 3.14).

Routine inspections not thoroughly conducted

4.22 Audit also noted cases in which the inspection was not thoroughly conducted. Case 9 shows an example.

Case 9

Conduct of a routine inspection (Luen Yan Street CFHB)

- 1. On 16 January 2015, Audit accompanied a member of the FEHD inspection staff (Staff A) to conduct a routine inspection of the Luen Yan Street CFHB. The CFHB had 36 stalls, of which 7 had been allocated to operators.
- 2. The inspection started at 2:30 p.m. Of the 7 stalls, 4 had the roller shutter pulled down. The operators of the 4 stalls were still around. All of them were sitting in front of the roller shutter.
- 3. Staff A made an enquiry with each of the 4 operators, and was told that the stalls would not conduct business in the afternoon. Without requiring the operators to open the stalls for inspection, Staff A considered the inspection of the 4 stalls done. Staff A then moved on to inspect the remaining stalls in the CFHB.
- 4. Staff A entered "satisfactory" on the inspection records.

Audit comments

5. Audit noted from FEHD records that 2 of the 4 stalls had a history of engaging in illegal food factory businesses. It was unsatisfactory that Staff A had not carried out the inspection thoroughly to follow up on the previously identified irregularities.

Source: Audit's site visit in January 2015 and FEHD records

Routine inspections not conducted in a timely manner

- 4.23 The FEHD requires routine inspections to be conducted in a timely manner. It has laid down the following requirements:
 - (a) *CFHBs*. Routine inspections are to be conducted fortnightly (once every two weeks) during peak trading hours; and
 - (b) *CFMs and CFCs*. Routine inspections are to be conducted twice daily, generally during peak trading hours.
- 4.24 Audit noted room for improving the timeliness of routine inspections, as follows:
 - (a) Inspections of CFHBs conducted less frequently. Comparing with CFMs and CFCs, CFHBs were inspected much less frequently. According to the records of the three District Offices visited by Audit, irregularities were noted in CFHBs as well as in CFMs and CFCs. For example, when accompanying FEHD staff in conducting routine inspections, Audit noted "obstruction of public areas" in all the three CFHBs being inspected. The FEHD needs to consider inspecting CFHBs more frequently;
 - (b) Number of inspections falling short of requirement. Records of the three District Offices indicated that routine inspections might not have been always conducted in accordance with the FEHD's requirements. For example, there were 13 days in December 2014 during which routine inspections were conducted once daily (instead of twice daily as required) for the Chai Wan Kok CFM. Upon enquiry, a member of the inspection staff informed Audit in January 2015 that the manpower for inspection work had been tight;
 - (c) Inspections not conducted during peak hours. Audit noted that routine inspections were normally not conducted during peak hours (e.g. lunchtime), contrary to the FEHD's requirements. Records of the three District Offices indicated that, for example, no routine inspections were conducted during 1 p.m. to 2 p.m. (lunchtime) for December 2014 in at least five public cooked food markets, namely;

- (i) the three CFHBs mentioned in (a) above; and
- (ii) the Sze Shan Street CFM and the Kwun Tong Ferry Concourse CFM; and
- (d) *Inspection records not maintained*. Audit also noted instances where inspection records had not been adequately maintained. For example, in the Central/Western District, the inspection records for the Centre Street CFC had not been maintained for 10 days in December 2014, casting doubt on whether inspections had been conducted.

Audit recommendations

- 4.25 Audit has *recommended* that the Director of Food and Environmental Hygiene should:
 - (a) take measures to ensure that irregularities at public cooked food markets identified during inspections are properly followed up and rectified;
 - (b) remind staff of the need to adequately record details of the inspections conducted (e.g. date, time and observations) for management review;
 - (c) identify the reasons for individual inspection staff not effectively conducting their work and take measures to enhance their performance (e.g. enhancing supervision and training);
 - (d) review the frequency of inspections of CFHBs, taking account of the irregularities found; and
 - (e) remind staff of the need to conduct adequate and timely inspections (e.g. during peak hours) in accordance with the FEHD's requirements.

Response from the Government

- 4.26 The Secretary for Food and Health and the Director of Food and Environmental Hygiene agree with the audit recommendations. They have said that the FEHD will:
 - (a) conduct inspections and take enforcement actions/issue warning letter if irregularities are detected;
 - (b) remind frontline staff to conduct adequate and timely inspections and record details of inspections properly. Supervisors should also conduct site visits and check on the inspection records at appropriate intervals according to departmental guidelines and Operational Manual; and
 - (c) review the frequency of inspections of CFHBs and consider revising the guidelines on inspections.

PART 5: MANAGEMENT OF STALL RENTALS AND CHARGES

- 5.1 This PART examines the management of stall rentals and charges. Audit has followed up the issues raised in the 2008 audit review relating to market stall rentals and charges, and found room for improvement in the following areas:
 - (a) charging of rentals (paras. 5.2 to 5.13);
 - (b) recovery of rates (paras. 5.14 to 5.19); and
 - (c) recovery of air-conditioning costs (paras. 5.20 to 5.30).

Charging of rentals

- 5.2 Stall operators in CFMs and CFCs are public market stall tenants. They are required to pay rentals for their stalls in accordance with the tenancy agreement (Note 23). The Government's policy on public markets is to charge tenants open market rental (OMR Note 24).
- 5.3 Stalls in CFMs and CFCs are let by auction, as follows:
 - (a) **Restricted auction.** CFMs and CFCs were built mainly to resite on-street hawkers. In past resiting exercises, the FEHD allowed them to bid for stalls by restricted auction, with upset prices set at a level below the OMR
- Note 23: Stall operators in CFHBs are licensed hawkers and do not need to pay rentals or rates for their stalls. They are required to pay an annual fee (currently \$1,980) for licence renewals and another annual fee (currently \$26,514) for using their stalls.
- **Note 24:** The OMR is a reference provided by the Rating and Valuation Department for use in rental assessment. It is based on various factors, such as the latest bid price for a similar stall in the same market, the location of the market, the different rating factors attributed to the unique features of the stall concerned (such as its proximity to escalators), and customer flow.

(e.g. at 75% of the OMR). The restricted auction prices became the rentals for the first tenancy; and

(b) *Open auction.* Other operators acquired their stalls by open auction, with upset prices determined with reference to the OMR. The open auction prices became the rentals for the first tenancy. Open auction is now the norm for letting out vacant stalls arising from time to time.

Market stall tenancy generally has a three-year term. At the end of the term, it has been the FEHD's practice to renew the tenancy with the existing tenant (Note 25). Where the existing tenant chooses not to renew the tenancy, the FEHD will put the stall to open auction.

The 2008 audit review

- In 2008, Audit conducted a review of the FEHD's management of public markets, including public markets selling wet and dry goods, CFMs and CFCs (see para. 1.7). The audit review found that many public market tenants were paying lower-than-market rentals. There were various reasons (see Appendix E), including a 30% across-the-board rental reduction in 1998 and the freezing of stall rentals since 1999. The consequences were that the FEHD incurred a big deficit in the management of public markets (\$160 million for 2007-08) and that some stall tenants were paying extremely low rentals whereas others renting similar stalls through open auction were paying higher rentals. Audit recommended that the FEHD should establish a suitable mechanism for rental adjustment.
- 5.5 In its Report No. 51 of February 2009, the PAC expressed concern that a suitable rental adjustment mechanism had not been devised, and that the disparity in rentals might have discouraged traders to rent market stalls for business.

Note 25: With the freezing of market stall rentals since 1999 (see paras. 5.4 and 5.8), the FEHD has been renewing tenancies with existing tenants without changes in rentals.

FEHD's proposed rental adjustment mechanisms

- After the 2008 audit review, the FEHD had proposed three different rental adjustment mechanisms and consulted the LegCo Panel on Food Safety and Environmental Hygiene in July 2009, December 2010 and January 2013 respectively. Members of the Panel did not give full support to the proposals.
- According to the latest proposal of January 2013, public market stall rentals would be adjusted in accordance with the movement of the average Consumer Price Index (A) of the past three years, with the increase capped at 5% or the OMR, whichever is the lower. At the meeting of the LegCo Panel on Food Safety and Environmental Hygiene in January 2013, Members considered that the Government should conduct a comprehensive review covering the policy and usage of public markets, and improve their operating environment before considering implementing the new rental adjustment mechanism.

Consultancy study

- In October 2013, the Government announced that the rental freeze implemented since 1999 would be further extended until December 2015. In December 2013, the Government commissioned a consultancy study on the function and positioning of public markets and measures to improve their operating environment. At the January 2015 meeting of the Subcommittee on Issues Relating to Public Markets of the LegCo Panel on Food Safety and Environmental Hygiene, the Government briefed Members of the key findings of the consultancy study and the Government's preliminary thinking. In respect of the rental adjustment mechanism (which will affect public markets selling wet and dry goods, CFMs and CFCs), the Government informed the Subcommittee that:
 - (a) the consultant saw the continuously low rental for many of the stalls as an issue that should be duly addressed;
 - (b) deficits had been recorded in the management of public markets. The Government needed a reasonable rental adjustment mechanism which allowed the rent of market stalls to catch up with rents of broadly comparable stalls which were recently allocated through open bidding in

other public markets. The lack of such a mechanism might likely be at a detriment to the vibrancy of the markets (e.g. tenants might lack motivation for running their business in an active manner);

- (c) while agreeing to the consultant's point that markets were intrinsically different from welfare services, the Government was mindful that some tenants were ex-hawkers or ex-tenants of other public markets resited to the existing public markets at a low rent and the Government needed to take into account the arrangement for this group of tenants when considering the rental adjustment mechanism; and
- (d) the Government would explore the rental adjustment mechanism with the Subcommittee.

Rentals of many stalls far below OMR

In the 2008 review, Audit recommended that the FEHD should establish a suitable rental adjustment mechanism (see para. 5.4). In the absence of a rental adjustment mechanism since 1999, rentals for most stalls of CFMs and CFCs (Note 26) were below the OMR. Table 9 shows that, as at December 2014, of the 975 cooked food stalls in CFMs and CFCs (Note 27), the tenants of 846 (87%) stalls were paying less than the OMR. In particular, the tenants of 389 (40%) stalls were paying less than 50% of the OMR. As a result, the FEHD has continued to incur large deficits in the management of public markets (e.g. \$238 million for 2013-14 against \$160 million for 2007-08).

Note 26: As at December 2014, the average rental for stalls of CFMs and CFCs was \$6,050 a month. Rentals of individual stalls ranged from \$294 to \$120,000 a month.

Note 27: As at December 2014, a total of 995 stalls in CFMs and CFCs were let to operators, comprising 975 cooked food stalls and 20 other stalls (e.g. for selling dry goods).

Table 9

Level of stall rentals of CFMs and CFCs
(December 2014)

Level of stall rental	Stall	
	No.	Percentage
Above OMR	47	5%
Equal to OMR	82	8%
70% to 99% of OMR	249	26%
50% to 69% of OMR	208 > 84	6 21% > 87%
30% to 49% of OMR	247 > 389	25% }40%
Lower than 30% of OMR	142	15%
Total	975	100%

Source: Audit analysis of FEHD records

Establishing a suitable rental adjustment mechanism

5.10 The Government's policy on public markets is to charge tenants OMR (see paras. 5.2 and 5.8(b)). In formulating the proposed rental adjustment mechanisms (see para. 5.6), the Government aimed to minimise the financial impact on public market tenants. For example, in the proposal of January 2013 (see para. 5.7), the Government intended to adjust market stall rentals every three years, with the increase capped at 5% or the OMR, whichever is the lower. However, given that rentals of many stalls were far below the OMR (e.g. less than 50% of the OMR — see Table 9), the proposed adjustment is not likely to enable rentals to catch up with the OMR within a short time frame (see Case 10 for example).

Case 10

Long time required for rental of a stall to catch up with OMR (Yue Kwong Road CFC)

- 1. The Yue Kwong Road CFC was built in 1981.
- 2. In 1998, an operator acquired the tenancy of Stall B through an open auction, at a rental of \$5,000 a month. Following a 30% across-the-board rental reduction in the same year (see para. 5.4), the monthly rental reduced to \$3,500. As at December 2014, the FEHD had renewed the tenancy with the operator 13 times at the same rental.
- 3. In 2014, the OMR of Stall B was \$7,000 a month. The monthly rental of \$3,500 was equivalent to only 50% of the OMR.

Audit comments

4. Based on the FEHD's 2013 proposed rental adjustment mechanism (see para. 5.7), Audit estimated that the stall rental would require about 15 increments or 45 years to catch up with the OMR at the 2014 price level.

Source: Audit analysis of FEHD records

5.11 The tenancy agreement entered into with stall operators states that a stall should be vacated and returned to the FEHD at the end of the tenancy. In practice, the FEHD allows the existing tenant to renew the tenancy (see para. 5.3). This might partly be due to the fact that some tenants were ex-hawkers or ex-tenants of other public markets resited to the existing public markets (see para. 5.8(c)). In the absence of rental adjustments since 1999, this practice had resulted in the rentals of many stalls being far below the OMR. This is at variance with the Government's stance that market stalls are basically commercial premises which are let out to traders for business operations, and that recovery of the OMR should remain the long-term objective of the Government. The FEHD needs to review its practice. In this connection, Audit noted that:

- due to the limited number of vacant stalls available for open auction, potential operators might need to pay high rental to acquire a stall to earn a living. For example, through an open auction held in 2012, a vacant stall in Yue Kwong Road CFC (the CFC referred to in Case 10) was let to a new operator at 665% of the OMR (Note 28). In contrast, in Case 10, Stall B, with a comparable OMR, was being let to the operator at 50% of the OMR; and
- (b) as at December 2014, of the 975 cooked food stalls in CFMs and CFCs, the operators of 598 (61%) stalls, including the operator in Case 10, had acquired the first tenancy through open auction. The FEHD particularly needs to review whether it is appropriate to allow such operators to successively renew their tenancies at rentals far below the OMR without open auction.

Audit recommendations

- 5.12 Audit has *recommended* that the Director of Food and Environmental Hygiene should:
 - (a) given that the rentals of most of the public market stalls are far below the OMR and deficits are incurred in the management of public markets, expedite action to establish a suitable rental adjustment mechanism for public markets; and
 - (b) review the practice of allowing stall operators to successively renew their tenancies instead of putting the stalls to open auction upon the expiry of the tenancy agreements, particularly for stall operators who had acquired their stalls through open auction.

Note 28: The monthly rental was \$49,200, as against an OMR of \$7,400.

Response from the Government

- 5.13 The Secretary for Food and Health and the Director of Food and Environmental Hygiene generally agree with the audit recommendations. They have said that:
 - (a) the Government needs a reasonable rental adjustment mechanism which allows the rent of market stalls to catch up with rents of broadly comparable stalls which are recently allocated through open bidding in other public markets;
 - (b) at the meetings on 14 July 2009, 14 December 2010 and 8 January 2013, the Government presented three different proposals on the rental adjustment mechanism to the LegCo Panel on Food Safety and Environmental Hygiene. LegCo Members did not give support to the proposals;
 - (c) the Government has followed up and is about to finalise a consultancy study on the function and positioning of public markets and measures to improve their operating environment (see para. 5.8). At the January 2015 meeting of the Subcommittee on Issues Relating to Public Markets, the Government undertook to finalise the consultancy in the light of the comments received, and to revert to the Subcommittee before June 2015 with the preliminary proposals to implement the improvement plans, and at the same time, the proposals for rental adjustment mechanism; and
 - (d) the FEHD is open to the suggestion of reviewing the existing practice of successively renewing the tenancies of cooked food market stalls, with regards to the pros and cons of putting the stalls to open auction upon expiry of the tenancy agreements. However, it envisages that any material change to the current practice which has become so deeply entrenched over the years will draw fierce resistance and criticism from the tenants. The proposed change will also have read-across implications on the tenancy renewal of over 13,000 public market stalls selling wet and dry goods. Such being the case, it is expected that much persuasion and time would be needed to institute any change.

Recovery of rates

The 2008 audit review

- According to the tenancy agreements, stall tenants in public markets need to pay rates for their stalls. In the 2008 audit review, Audit found that the FEHD had paid rates on behalf of stall tenants to the Rating and Valuation Department (RVD), and that the FEHD had not recovered from them the rates paid. Audit recommended that the FEHD should examine the issue.
- 5.15 In its report of February 2009, the PAC expressed concern that rates had not been recovered from stall tenants, despite stipulation in the tenancy agreements that tenants were responsible for their rates payment.

Rates not recovered

- 5.16 Currently, the FEHD is still paying rates for public market tenants. It has not sorted out the arrangements for recovering rates from them. According to the existing practice, the RVD levies rates on the FEHD instead of on individual public market tenants. For this purpose, the whole public market including the stalls, market offices and common areas is assessed to rates on a block basis (block assessment). There are currently 101 block assessments covering all the public markets (see Note 2 to para. 1.6(a)). This practice has been adopted since 1989.
- 5.17 Audit noted that the FEHD had consulted the RVD about the feasibility of charging public market tenants the rates. In November 2008, the RVD advised the FEHD that:
 - (a) there was strong reservation on the feasibility of levying rates direct on public market tenants (some 15,000 in number). Enormous non-recurrent and recurrent resources would be required; and
 - (b) a practical way might be to charge rentals on an inclusive-of-rates basis, and to collect the rentals with the rates from public market tenants simultaneously.

However, the FEHD had not taken forward the RVD's advice.

Audit recommendation

5.18 Audit has *recommended* that the Director of Food and Environmental Hygiene should explore the feasibility of charging rentals of public market stalls on an inclusive-of-rates basis, in order to recover the rates paid by the FEHD on behalf of stall tenants.

Response from the Government

- 5.19 The Secretary for Food and Health and the Director of Food and Environmental Hygiene agree that the rates should be paid by the stall tenants. They have said that:
 - (a) consultation with public market tenants and trader organisations conducted at the request of the LegCo Panel on Food Safety and Environmental Hygiene in 2009 concluded that they unanimously objected the proposal that the rates should be paid by tenants. Some maintained the view that the Government's current practice of paying rates on behalf of the tenants, which had been adopted for years, should continue;
 - (b) the Panel was not supportive of the idea of recovering rates from the stall tenants in public markets generally. This can be seen from the following motion, which was supported by all the Panel Members present at the meeting on 13 April 2010:
 - "That this Panel urges the Government to continue to pay the rates on behalf of public market stall tenants in the territory, so as to support small business operations in markets."; and
 - (c) in light of the above, the Government considers it pragmatic to focus on the setting up of a rental adjustment mechanism for public markets before exploring the recovery of rates from the stall tenants.

Recovery of air-conditioning costs

- As at December 2014, 2 CFMs and 20 CFCs were air-conditioned (see para. 3.24). The FEHD recovers the recurrent costs of air-conditioning (electricity charges and general maintenance costs) through two different charging arrangements, as follows:
 - (a) Subsumed charging. Air-conditioning costs are factored into the OMR and form part of the rentals; and
 - (b) **Separate charging.** Air-conditioning costs are charged separately from rentals.

The 2008 audit review

- In the 2008 audit review, Audit found that public market air-conditioning charges (whether subsumed within or separated from rentals) had generally not been revised throughout the rental freeze period since 1999 (Note 29), resulting in an under-recovery of air-conditioning costs (about \$11 million not recovered in 2008). Audit recommended that the FEHD should work out an appropriate arrangement to tackle the issue.
- 5.22 In its report of February 2009, the PAC expressed concern that air-conditioning cost had not been recovered, and that air-conditioning charges had not been revised.

Charges under the separate-charging arrangement still not revised

5.23 Under the separate-charging arrangement, air-conditioning charges are levied on stall operators at a predetermined rate (referred to as charge-out rate

Note 29: For public markets under the subsumed-charging arrangement, rentals (which were inclusive of air-conditioning costs) had not been revised throughout the rental freeze period since 1999. For public markets under the separate-charging arrangement, in line with the rental freeze, the charges for air-conditioning costs had generally not been revised.

hereinafter). Each air-conditioned public market (including the air-conditioned CFMs/CFCs) has its own charge-out rate, representing the recurrent cost of air-conditioning per unit area in the market (Note 30). The FEHD conducts specific exercises for compiling the rates.

5.24 Audit noted that:

- (a) the FEHD last compiled the charge-out rates in 2010. As at December 2014, the charge-out rates had not been further updated; and
- (b) as a general practice, the FEHD had all along been using the charge-out rates of 2005 to recover air-conditioning costs from public market tenants.
- 5.25 Upon enquiry, the FEHD informed Audit in December 2014 that:
 - (a) the FEHD had since 2005 adopted the separate-charging arrangement for new tenants of public market stalls (many existing tenants still subject to the subsumed-charging arrangement see para. 5.27);
 - (b) in line with the rental freeze, the FEHD had not subsequently applied an updated (and possibly increased) charge-out rate to these public market tenants; and
 - (c) as regards charge-out rates not being compiled after 2010, it was not worthwhile for the FEHD to compile the rates annually. In fact, the FEHD was still using the rates of 2005 (see para. 5.24(b)).
- Audit has reservation about not revising the charge-out rates because of the rental freeze. Under the separate-charging arrangement, air-conditioning charges are in fact separate from the rentals. Audit also noted that the FEHD informed the FSTB in June 2007 that the charge-out rates would be reviewed

Note 30: In compiling the charge-out rate, reference is made to the estimated electricity charges and maintenance costs, taking account of such factors as pre-set temperature and operating hours.

annually, and that the FEHD would apply the new charge-out rates to all new and renewed tenancies.

Many operators still under subsumed charging

- 5.27 It is the FEHD's intention to replace the subsumed-charging arrangement with the separate-charging arrangement. However, as at December 2014, of the 3,277 stalls in air-conditioned public markets (including CFMs and CFCs), 427 (13%) were still charged under the subsumed-charging arrangement.
- Upon enquiry, the FEHD informed Audit in December 2014 that during the rental freeze period, existing tenants were not willing to alter their tenancy agreements to give effect to the separate-charging arrangement. In this connection, Audit noted that there had been views that air-conditioning charges attributable to public areas of markets should be borne by the Government. The issue had been discussed at meetings of the LegCo Panel on Food Safety and Environmental Hygiene. As at December 2014, the Government had not yet come up with a final decision on the issue. For 2013-14, the amount of air-conditioning costs not recovered from stall operators was about \$16 million.

Audit recommendations

- 5.29 Audit has *recommended* that the Director of Food and Environmental Hygiene should:
 - (a) expedite action to work out an appropriate arrangement to recover air-conditioning costs from public market tenants;
 - (b) in the interim, consider updating the air-conditioning charge-out rates for applying to public market tenancies; and
 - tenancies which still (c) keep in view those are under the subsumed-charging arrangement, and replace it with the separate-charging arrangement when the opportunity arises.

Response from the Government

- 5.30 The Secretary for Food and Health and the Director of Food and Environmental Hygiene agree with the audit recommendations. They have said that:
 - (a) the Government's policy is to have the recurrent expenses, including electricity charges and general maintenance costs, borne by market tenants;
 - (b) the Government had reviewed the arrangements for recovery of air-conditioning charges in public markets and considered that separate charging of rental and air-conditioning charges was more in line with the "user pays" principle. In this connection, the FEHD has adopted separate charging of rental and air-conditioning charges for all tenants in newly completed markets since 2002 and for all new tenants in all air-conditioned markets since July 2005;
 - the former Urban Council subsumed air-conditioning charges into the rents whereas the Regional Council adopted a separate charging arrangement. To-date, different air-conditioning charging arrangements are adopted in parallel, depending on whether the public markets were previously managed by the former Urban Council or Regional Council, the year in which the public markets came into operation and the year in which the tenants entered into tenancy;
 - (d) the Government briefed the LegCo Panel on Food Safety and Environmental Hygiene on its views and proposals on the full recovery of air-conditioning charges in public markets in July 2009 and December 2010. The Panel did not give support to the proposals;
 - the Government made it clear in the paper for discussion on 18 November 2014 with the Subcommittee on Issues Relating to Public Markets that the present situation in which different air-conditioning charging arrangements applied to different tenants was less than fair or satisfactory. The Government intends to conduct a review to align the air-conditioning charging arrangements with regard to the "user pays" and "parity" principles, and amend the tenancy agreements of the relevant tenants

when they are due for renewal by the end of 2015. The Government would also apply the same principles to any existing FEHD markets for which the Government seeks to provide air-conditioning system retrofitting, and would amend the tenancy agreements with the tenants accordingly; and

(f) in view of the audit recommendations, the Government will expedite the review to separate air-conditioning from rental charges while continuing the discussion with LegCo on the rental adjustment mechanism for public markets generally.

PART 6: WAY FORWARD

6.1 This PART explores the way forward for the FEHD's management of public cooked food markets.

Historical background

6.2 It has been the Government's policy since the early 1970s that no new hawker licences should be issued under normal circumstances and on-street licensed hawkers should be put into off-street hawker bazaars or public markets. Public cooked food markets were built in pursuit of this hawker policy, with a view to resiting on-street cooked food stalls. The policy objective has largely been achieved. The Government's current thinking is that there is no need for building new public cooked food markets and it will explore ways to further improve the condition of the existing ones (see para. 1.8(c)).

Areas for improvement

- 6.3 The majority of the public cooked food markets were built in the 1980s and before. The audit review has found room for improvement in the FEHD's management of these markets, including the following:
 - (a) the 11 CFHBs had a high stall vacancy rate of 61% on average, with the largest two having a vacancy rate of 75% and 81%. Of the total of 144 vacant stalls in these markets, 114 (79%) stalls had been vacant for more than 10 years;
 - (b) although viability is a key factor in determining whether a market should continue to operate, the FEHD did not conduct periodic reviews to assess the viability of each market and its alternative use. The last review of CFMs/CFCs conducted in 2010 revealed that there were 12 of them with less than 20 patrons per day per stall, casting doubt on their viability;

- (c) in 2003, the FEHD decided to upgrade the fire safety measures at the markets. However, the progress had been slow and many markets had still not implemented the improvement measures considered by the FEHD as minimum requirements;
- (d) the electricity supply for most CFMs and CFCs had not been upgraded to meet the current standard set by the FEHD. Inadequate electricity had caused problems such as overloading of electricity system, stalls unavailable for letting and retrofitting of air-conditioning systems not feasible;
- (e) none of the stalls in the markets had obtained from the Liquor Licensing Board a liquor licence, which is required for the sale of liquor for consumption on the premises. However, Audit's site visits to 11 CFMs and CFCs revealed some cases in which liquor was sold and consumed in the communal area or inside the stall area;
- (f) there were inadequacies in the FEHD's routine inspections of stalls in the markets, including not taking actions on some irregularities such as obstruction of public areas and improper use of LPG, and failure to conduct inspections in a timely manner in accordance with the FEHD's requirements; and
- (g) the FEHD had not completed its follow-up actions on certain issues identified in the 2008 audit review, including the charging of rentals, recovery of rates and recovery of air-conditioning costs.
- Audit considers that the FEHD needs to take on board the observations and recommendations in this Audit Report in further improving the management of public cooked food markets.

Exploring redevelopment potential or alternative use

In 2012, after reviewing about 4,500 government sites being used for providing various public facilities, the FSTB shortlisted some sites for further study by the Planning Department of their redevelopment potential. The FSTB requested the FEHD to review the possibility of releasing its 17 sites on the shortlist, including 12 sites at which five CFHBs, two CFMs and five CFCs were located.

The FEHD considered that three CFHB sites could be released. The remaining nine sites either needed to be retained to relocate operators in the three CFHBs, or had high occupancy rates.

Progress of releasing three CFHB sites

6.6 In February 2015, the FEHD conveyed to the FSTB the status, work plan and estimated timetable concerning the vacation of the three CFHBs. According to the FEHD, it has started the negotiation with the licensees of two CFHBs on closure and the negotiation concerning the other CFHB will begin soon.

Scope for reviewing other sites

- 0.7 Under the review by the FSTB, only government sites meeting certain criteria, namely sites no less than 600 m² in area with low-rise (two to five storeys) facilities completed in 1980 or before, were shortlisted for further study of their redevelopment potential. Of the 75 public cooked food market sites, 12 (16%) sites meeting these criteria were shortlisted for further study. The other 63 (84%) public cooked food market sites did not meet the criteria and were not covered by the further study.
- In Audit's view, the FEHD needs to explore the redevelopment potential or alternative use of the 63 public cooked food market sites as well, particularly those in prime areas, with high vacancy rates and viability problems, and having limitations in improving the facilities. In this connection, it is worth noting that the FEHD has in the past successfully undertaken projects to redevelop public market sites and achieved better use of the land (see Appendix F for example).

Audit recommendations

- 6.9 Audit has recommended that the Director of Food and Environmental Hygiene should:
 - (a) take on board the observations and recommendations in this Audit Report in further improving the management of public cooked food markets;

- (b) expedite actions, with a view to releasing the three CFHB sites mentioned in paragraph 6.5 for redevelopment as soon as possible; and
- (c) explore the redevelopment potential or alternative use of other public cooked food market sites, particularly those in prime areas, with high vacancy rates and viability problems, and having limitations in improving the facilities.

Response from the Government

- 6.10 The Secretary for Food and Health and the Director of Food and Environmental Hygiene agree with the audit recommendations. They have said that the FEHD will:
 - (a) continue to step up its efforts in enhancing the overall management of public cooked food markets, with due regard to the historical background of CFHBs and the interests of stakeholders;
 - (b) expedite actions, with a view to releasing some of its CFHB sites for redevelopment as soon as possible, while giving due consideration to the interests of hawkers and other stakeholders who will be affected by the closure of the CFHBs; and
 - (c) explore the redevelopment potential of other public cooked food market sites, particularly those that are located in prime areas, bear high vacancy rates and viability problems, and have limitations in improving the facilities.

Cooked Food Hawker Bazaars (31 December 2014)

Serial no.	Name	Year of commissioning	Area (m²)	No. of stalls		
Hong	Hong Kong and Islands					
1	Stanley Market Open Space Hawker Bazaar	1972	250	28 (Note 1)		
Kowlo	on					
2	Woosung Street Temporary CFHB	1984	761	24		
3	Yu Chau West Street CFHB	1977	757	26		
4	Lai Yip Street CFHB	1973	425	10		
5	Haiphong Road Temporary CFHB	1978	367	20		
6	Reclamation Street CFHB	1973	270	12		
New T	New Territories					
7	Ma Kok Street CFHB	1977	2,360	36		
8	Luen Yan Street CFHB	1985	1,673	36		
9	Tai Lin Pai Road CFHB	1976	1,208	22		
10	Kwai Wing Road CFHB	1972	515	20		
11	Lam Tei Market cum Hawker Bazaar	1969	160	4 (Note 2)		
Total 8,746				238		

Source: FEHD records

Note 1: The 28 stalls comprised 2 selling cooked food and 26 selling dry goods.

Note 2: The 4 stalls comprised 1 selling cooked food and 3 selling vegetables/dry goods.

Cooked Food Markets (31 December 2014)

Serial no.	Name	Year of commissioning	Area (m²)	No. of stalls		
Hong	Hong Kong and Islands					
1	Cheung Chau CFM	1991	1,524	17		
2	Nam Long Shan Road CFM	1987	1,476	28		
3	Queen Street CFM	2004	967	11		
4	Kut Shing Street CFM	1986	726	11		
5	Mui Wo CFM	1985	642	20		
Kowlo	on					
6	Tsun Yip CFM	1985	2,720	56		
7	Cheung Sha Wan CFM	1982	1,400	28		
8	Mong Kok CFM	2005	1,265	14		
9	Kwun Tong Ferry Concourse CFM	1984	1,000	29		
10	Sze Shan Street CFM	1980	370	17		
11	Tung Yuen Street CFM	1983	370	8		
New T	New Territories					
12	Chai Wan Kok CFM	1979	2,572	32		
13	Kwai Shun Street CFM	1990	1,400	12		
14	Cheung Tat Road CFM	1987	993	12		
15	Tai Yuen Street CFM	1984	950	20		
16	Tsing Yeung CFM	1983	922	18		
17	Wo Yi Hop Road CFM	1984	850	18		
18	Kin Yip Street CFM	1985	800	14		
19	Kin Wing CFM	1979	715	20		
20	Tai Tong Road CFM	1985	700	18		
21	Ka Ting CFM	1983	648	16		
22	Fo Tan CFM (East)	1982	645	24		
23	Fo Tan CFM (West)	1982	544	15		
24	Kik Yeung Road CFM	1981	337	14		
25	Hung Cheung CFM	1979	313	11		
		Total	24,849	483		

Source: FEHD records

Cooked Food Centres (31 December 2014)

Serial no.	Name	Year of commissioning	Area (m²)	No. of stalls			
Hong Kong and Islands							
1	Sheung Wan CFC	1989	2,300	20			
2	Lockhart Road CFC	1987	1,727	19			
3	Java Road CFC	1993	1,500	15			
4	Yue Kwong Road CFC	1981	1,472	16			
5	Tin Wan CFC	1979	1,386	10			
6	Aberdeen CFC	1983	1,288	10			
7	Smithfield CFC	1996	1,180	12			
8	Yue Wan CFC	1979	1,100	20			
9	Bowrington Road CFC	1979	1,049	12			
10	Apleichau CFC	1998	992	6			
11	Wong Nai Chung CFC	1996	955	6			
12	Shek Tong Tsui CFC	1991	884	15			
13	Sai Wan Ho CFC	1984	630	8			
14	Quarry Bay CFC	1988	360	5			
15	Centre Street CFC	1976	350	2			
16	Electric Road CFC	1993	350	5			
17	Chai Wan CFC	2001	340	6			
18	Aldrich Bay CFC	2008	150	4			
Kowlo	on						
19	Kwun Chung CFC	1991	3,260	19			
20	Po On Road CFC	1988	3,248	19			
21	Choi Hung Road CFC	1988	2,502	19			
22	Pei Ho Street CFC	1995	2,265	20			
23	Tai Kok Tsui CFC	2005	2,244	12			
24	Tai Shing Street CFC	1998	1,661	11			
25	Shui Wo Street CFC	1988	1,570	20			
26	Ngau Tau Kok CFC	1991	1,500	21			
27	Fa Yuen Street CFC	1988	1,086	15			

Serial	NI	Year of	A	NI - C - 4 - H -
no.	Name	commissioning	Area (m²)	No. of stalls
			(m ²)	
28	Ngau Chi Wan CFC	1986	900	15
29	To Kwa Wan CFC	1984	520	8
30	Hung Hom CFC	1996	520	18
31	Kowloon City CFC	1988	340	10
New T	Serritories			
32	Shek Wu Hui CFC	1994	4,030	28
33	Luen Wo Hui CFC	2002	3,985	22
34	Tai Po Hui CFC	2004	3,555	40
35	Heung Che Street CFC	1972	2,640	40
36	Kwu Tung Market Shopping Centre CFC	1985	393	12
37	Sham Tseng Temporary CFC	1984	250	8
38	Kam Tin CFC	1964	176	5
39	Sha Tau Kok CFC	1998	166	8
		Total	54,824	561

Source: FEHD records

– 79 **–**

Public cooked food markets located at temporary sites (31 December 2014)

Serial no.	Name	Year of commissioning	Area (m²)	
CFH.	Bs			
1	Woosung Street Temporary CFHB	1984	761	
2	Yu Chau West Street CFHB	1977	757	
3	Lai Yip Street CFHB	1973	425	
4	Haiphong Road Temporary CFHB	1978	367	
5	Reclamation Street CFHB	1973	270	
6	Stanley Market Open Space Hawker Bazaar	1972	250	
CFM	S			
7	Cheung Sha Wan CFM	1982	1,400	
8	Tung Yuen Street CFM	1983	370	
CFC				
9	Sham Tseng Temporary CFC	1984	250	
		Total	4,850	

Source: FEHD records

Reasons for public market tenants paying lower-than-market rentals

As noted in the 2008 audit review, the reasons for many public market tenants paying lower-than-market rentals included:

- (a) Concessionary rentals for old market ex-tenants and ex-licensed fixed-pitch hawkers. When stall tenants of an old market or licensed fixed-pitch hawkers were to be resited to a new market, they were allowed to bid for stalls in the new market through a restricted auction at a lower upset price (which was normally set at 75% of the OMR);
- (b) Different rental adjustment mechanisms upon tenancy renewal. Although both the former Provisional Urban Council and Provisional Regional Council used the OMR as the basis for assessment of renewal rentals, they adopted different rental adjustment mechanisms when renewing stall tenancies with rentals below the OMR. For stalls under the former Provisional Urban Council, rental adjustment was made with reference to the difference between the contractual rental (i.e. the last rental specified in the tenancy agreement) and the prevailing OMR. The increase in renewal rental would be capped by the prevailing increase in consumer price index plus a pre-set percentage. The Provisional Regional Council had a different practice. It did not have a similar cap and would increase the renewal rentals gradually by phases to achieve a certain pre-set percentage of the OMR;
- (c) 1998 rental reduction and subsequent rental freezes. In 1998, owing to the poor economic climate, the rentals of all public market stalls were reduced across-the-board by 30%. Since 1999, market stall rentals had been frozen nine times at the reduced level, with the rental freeze period expiring on 30 June 2009 (Note). As a result, stall rentals for former licensed hawkers and market tenants had remained substantially below the OMR; and
- (d) **Reduced rentals for long-standing vacant stalls.** To attract potential tenants, since August 2003, the FEHD had also instituted the measure of lowering the upset auction prices of long-standing vacant stalls in selected markets.

Source: FEHD records

Note: The freeze of market stall rentals had been further extended five times, with the current rental freeze period expiring on 31 December 2015.

Redevelopment of the Tai Po Temporary Market

- 1. In the early 1980s, the Tai Po Temporary Market was built to resite on-street hawkers. The Temporary Market was located at a temporary site of about 4,900 m².
- 2. The facilities of the Tai Po Temporary Market were crude. In order to provide a modern and permanent market for the local community and to better use the site, it was decided in 1998 that a redevelopment project would be undertaken as follows:
 - (a) an eight-storey municipal services building would be built at another site. A floor of the building would be used as a CFC (Note);
 - (b) tenants of cooked food stalls at the Temporary Market would be relocated to the new CFC; and
 - (c) the temporary site would then be released for other uses.
- 3. In 2004, the new CFC was commissioned (i.e. the Tai Po Hui Market CFC). The temporary site was released for constructing a new public housing estate.

Source: FEHD records

Note: The municipal services building also houses other facilities, including a sports centre, a library and a public market (the Tai Po Hui Market).

Appendix G

Acronyms and abbreviations

ArchSD Architectural Services Department

Audit Audit Commission

CFCs Cooked Food Centres

CFHBs Cooked Food Hawker Bazaars

CFMs Cooked Food Markets

EMSD Electrical and Mechanical Services Department

FEHD Food and Environmental Hygiene Department

FSD Fire Services Department

FSTB Financial Services and the Treasury Bureau

LegCo Legislative Council

LPG Liquefied petroleum gas

m² Square metres

OMR Open market rental

PAC Public Accounts Committee

RVD Rating and Valuation Department

CHAPTER 4

Water Supplies Department

Management of water supply and demand

Audit Commission Hong Kong 1 April 2015 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. 64 of the Director of Audit contains 8 Chapters which are available on our website at http://www.aud.gov.hk

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MANAGEMENT OF WATER SUPPLY AND DEMAND

Contents

	Paragraph
EXECUTIVE SUMMARY	
PART 1: INTRODUCTION	1.1
Background	1.2 - 1.13
Audit review	1.14
Acknowledgement	1.15
PART 2: WATER SUPPLY MANAGEMENT	2.1
Total Water Management Strategy	2.2 - 2.3
Use of reclaimed water	2.4 - 2.12
Protecting existing water resources	2.13 - 2.22
Developing seawater desalination	2.23 - 2.32
Audit recommendations	2.33 - 2.34
Response from the Government	2.35 - 2.36
PART 3: WATER DEMAND MANAGEMENT	3.1
Total Water Management Strategy	3.2 - 3.3
Enhancing public education on water conservation	3.4 - 3.8

			Pa	ragraph
	Re	trofitting water-saving devices at government facilities	3.9	- 3.14
	Conducting water-efficiency audits		3.15	5 - 3.19
	Ex	tending the use of seawater for flushing	3.20	0 - 3.24
		Audit recommendations	3.25	5 - 3.26
		Response from the Government	3.27	7 - 3.28
PART	4:	IMPLEMENTATION OF GOVERNMENT POLICY ON WATER CHARGES		4.1
	Go	vernment's policy on water charges	4.2	- 4.30
		Audit recommendations		4.31
		Response from the Government	4.32	2 - 4.33
PART	5:	WAY FORWARD		5.1
	Wa	iter supply management		5.2
	Wa	iter demand management		5.3
	Im	plementation of government policy on water charges		5.4
	Wa	ay forward	5.5	- 5.7
		Audit recommendations		5.8
		Response from the Government		5.9

Appendices	Page
A: Water Supplies Department: Organisation chart (February 2015)	55
B: Water-demand forecasts (2021 to 2029)	56
C: Water conservation education programmes and promo campaigns (September 2009 to December 2014)	stion 57 – 58
D: Major best-practice guidelines for achieving water efficiency at LCSD facilities	59
E: Waterworks Operating Accounts (2009-10 to 2012-13)	60
F: Fresh water net and full unit production costs (2013-14)	4) 61
G: Rates contribution per unit of fresh water supply (2013)	3-14) 62
H: Acronyms and abbreviations	63



MANAGEMENT OF WATER SUPPLY AND DEMAND

Executive Summary

- 1. The Water Supplies Department (WSD) is responsible for supplying fresh water and seawater (for flushing) for consumption by Hong Kong's population of seven million for domestic and non-domestic use. In 2013, the WSD supplied 933 million cubic metres (Mm³) of fresh water, of which 611 Mm³ (65%) were supplied from Guangdong (GD) Province under Dongjiang Water Supply Agreement (Supply Agreement), and the remaining 322 Mm³ (35%) were collected from local catchments. In the same year, the WSD supplied 278 Mm³ of seawater for flushing by 80% of the local population, while the remaining 20% used fresh water for the purpose. In 2013-14, the WSD received \$2,556 million water charges. As of December 2014, the WSD administered 2.87 million water accounts, comprising 2.59 million domestic accounts and 0.28 million non-domestic accounts.
- 2. In 2008, with a view to ensuring sustainable use of water in Hong Kong, the WSD promulgated the Total Water Management (TWM) Strategy which covered five main areas, namely water conservation, active leakage control, extending use of seawater for flushing, using new water resources (including water reclamation) and protection of water resources. The Audit Commission (Audit) has recently conducted a review of the WSD's management of water supply and demand.

Water supply management

3. Under the 2008 TWM Strategy, for the purpose of strengthening its supply management, the WSD has implemented a number of initiatives, including carrying out pilot schemes and studies on using reclaimed water from treated sewage, protecting existing water resources, and developing seawater desalination (para. 2.3).

- 4. Need to expedite using reclaimed water for flushing. Under the 2008 TWM Strategy, the WSD had planned to make use of reclaimed water from Shek Wu Hui Sewage Treatment Works, after going through additional treatment processes, for toilet flushing in the Northeast New Territories (NENT) region. According to the WSD, the proposed project would help save 21 Mm³ of fresh water a year and that the cost of using reclaimed water (at \$3.8 per cubic metre (m³)) was lower than that of using fresh water (at marginal cost of \$5.6 per m³) and seawater (at \$10.4 per m³) for flushing. However, the WSD only commenced planning for the related infrastructure works in 2012 which was targeted for completion by 2022. In Audit's view, the WSD needs to expedite using reclaimed water for flushing. This would save around 3% of fresh water (paras. 2.4 to 2.12).
- 5. Delay in implementing Inter-reservoirs Transfer Scheme (IRTS). In 2004, the WSD and the Drainage Services Department (DSD) planned to implement the IRTS which would serve the dual purposes of flood control in the West Kowloon area and generating 2.5 Mm³ of water a year. Under the IRTS, overflow from the Kowloon Group of Reservoirs (comprising Kowloon Reservoir, Shek Lei Pui Reservoir, Kowloon Reception Reservoir and Kowloon Byewash Reservoir) would be channelled to Lower Shing Mun Reservoir. In 2005, the DSD informed the Panel on Development of the Legislative Council (LegCo) that the construction works for the IRTS would commence in 2010 and was targeted for completion in 2012. However, up to December 2014, the WSD and the DSD had yet to seek funding for carrying out the IRTS construction works. In 2014, the estimated cost of the construction works was \$868 million (paras. 2.13 to 2.17).
- 6. **Delay in improving priority catchwater systems.** A catchwater system comprises catchwater channels which intercept surface water in water gathering ground and carry the water to reservoirs for storage. In October 2008, the Government informed the Panel on Development that the WSD would commence improvement works for four catchwater systems (namely Shing Mun, Beacon Hill, Golden Hill and Tai Lam Chung catchwater systems) by 2011. However, up to December 2014, the WSD had yet to seek funding for carrying out the construction works (paras. 2.18 to 2.22).

- Need to closely monitor the supply of fresh water. In June 2012, the LegCo Finance Committee approved funding of \$34.3 million for the WSD to carry out a planning and investigation study for the construction of a desalination plant at Tseung Kwan O. According to the WSD, the estimated cost of the desalination plant project was \$9.3 billion, which would produce 50 Mm³ of fresh water a year, accounting for 5% of the total fresh water supply, and the plant capacity could be expanded to produce an ultimate quantity of 100 Mm³ of fresh water a year. The first stage of the plant is expected to be commissioned in 2020. According to the WSD, the cost of desalinated water would be \$12 per m³, of which \$7 per m³ and \$5 per m³ were operation cost and capital depreciation cost respectively (paras. 2.24 to 2.27).
- According to information provided to LegCo in May 2012, one of the 8. justifications for constructing the desalination plant was that, based on a risk assessment of water resource adequacy under adverse scenarios (e.g. the occurrence of consecutive droughts and increase in water demand), the water shortage risk after 2020 would increase with a deficit of fresh water resources of up to 39 Mm³ a year. Audit noted that this estimated water deficit was based on the WSD's Long-term Demand Forecast (2010) and an annual supply of Dongjiang (DJ) water of 820 Mm³, whereas only 611 Mm³ of DJ water was actually supplied to Hong Kong in 2013. In the subsequent Long-term Demand Forecast (2013), and again assuming 820 Mm³ of annual DJ water supply, the estimated water deficit in 2021 would be 33 Mm³ for the upper-bound water demand and 7 Mm³ for the lower-bound water demand. Audit notes that, under the Supply Agreement, GD Province has agreed to allocate up to an ultimate annual quantity of 1,100 Mm³ of fresh water to Hong Kong, albeit the level of charges for the supply in excess of 820 Mm³ is subject to future negotiation. Therefore, the occurrence of water deficits in future is subject to GD Province not being able to supply an annual quantity of fresh water in excess of 820 Mm³. In view of the significant capital and recurrent costs of adopting desalination to supply fresh water locally, the WSD needs to closely monitor the supply of fresh water from GD Province and the proposed desalination plant (paras. 2.23, and 2.27 to 2.32).

Water demand management

- 9. Initiatives to reduce water demand under the 2008 TWM Strategy included retrofitting water-saving devices at government facilities, conducting water-efficiency audits at government departments and extending the use of seawater for flushing (para. 3.3).
- 10. Some government facilities consumed more water after retrofitting with water-saving devices. In December 2009, the WSD implemented a pilot scheme on retrofitting water-saving devices at 421 government buildings and schools at a total cost of \$104 million. The WSD's review conducted in 2011 found that the water-saving devices would generate an annual saving of \$21.43 million and the average payback period of the retrofitting works was 5.1 years. However, Audit examination revealed that, of the 421 government buildings/schools, 119 (28%) had recorded increases in fresh water consumption after being retrofitted with water-saving devices, with increases ranging from 0.4% to more than 100% (paras. 3.9 to 3.14).
- 11. Some Leisure and Cultural Services Department (LCSD) venues consumed more water after implementing related best-practice guidelines. In September 2012, after conducting a water-efficiency audit for the LCSD, the WSD issued the best-practice guidelines on water conservation to the LCSD. According to the LCSD and the WSD, after implementing the best-practice guidelines at six parks and five swimming pools, the water consumption at these 11 venues in 2014 had decreased by 7.2% when compared to that in 2011. However, Audit examination revealed that water consumption at 4 of the 11 venues had in fact increased from 2011 to 2014, with increases ranging from 5% to 63% (paras. 3.15 to 3.19).
- 12. Many buildings at Pok Fu Lam not yet connected to seawater supply network. Under the 2008 TWM Strategy, for the purpose of converting from using fresh water to seawater for flushing, a seawater supply system at Pok Fu Lam was substantially completed in July 2013. However, as of February 2015, of the total 570 buildings at Pok Fu Lam covered under the seawater supply system, the related conversion works for 378 buildings (66%) had not yet commenced (paras. 3.20 to 3.24).

Implementation of government policy on water charges

- 13. Under the WSD's tariff structure, fresh water supply for domestic use is charged by adopting a four-tier system. For the first tier, the first 12 m³ of fresh water should be supplied free of charge for a domestic household in a four-month period, and the related net production cost should be met by the Government. For the second tier, water tariff for the next 31 m³ of related fresh water consumed should be approximately in line with the net production cost (Note). For the third tier, water tariff for the next 19 m³ of related fresh water consumed should be approximately in line with the full production cost. Lastly, for the fourth tier, water tariff for the remaining fresh water consumed should be approximately 40% above the third tier (para. 4.3).
- 14. Target rates of return on Average Net Fixed Assets (ANFA) not met since 1998-99. Pursuant to the Government's policy, water tariff was set to recover production cost and achieve a target return on ANFA. Since 1996, water charges had not been revised, and the Waterworks Operating Accounts had reported a deficit each year from 1998-99 to 2013-14. Accordingly, the waterworks operation had achieved negative returns on ANFA during the period. Notwithstanding such negative returns, the Government had continued to adopt positive target rates of return on ANFA of 6.5% from 1998-99 to 2011-12 and 3.4% from 2012-13 to 2013-14 (paras. 4.10 to 4.13).

Note: For the purpose of compiling the Waterworks Operating Accounts, in general, 15% of rates receivable in a year is accounted for as revenue in the Accounts. The net production cost represents the full production cost less the relevant contribution from rates.

- No disclosure of target return on ANFA included in the unit production cost. Audit noted from a LegCo document that the net production cost of fresh water supply in 1994-95 was \$4.86 per m³. According to the WSD, owing to the need to achieve a target return on ANFA under the Government's policy, the net unit production cost had included such a target return. The net production cost (inclusive of target return on ANFA of \$2.61 per m³) in 2013-14 was \$10.76 per m³. Notwithstanding that the net and full unit production costs were significant factors in determining water tariffs (see para. 13), the WSD had not disclosed the amount of the target return on ANFA which had been included in the production costs. The WSD needs to publish in its annual reports the above cost information (paras. 4.14 to 4.20).
- 16. No disclosure of quantity of water supply for calculating unit production cost. In April 2014, in relation to the proposed construction of a desalination plant (see para. 7), the WSD informed LegCo that the estimated unit costs of fresh water produced from locally collected fresh water and DJ water were \$4.2 per m³ and \$8.8 per m³ respectively, compared to water produced from desalination of \$12 per m³. Audit noted that these unit costs were calculated based on the total quantity of fresh water supply before treatment (totalled 933 Mm³ in 2013). However, the WSD had used the lower metered-water quantity (totalled 638 Mm³ in 2013) to calculate net and full unit production costs for water-tariff setting purposes. The 32% difference ((933 - 638) \div 933 \times 100%) between the water quantity before treatment and the metered quantity was mainly attributable to water losses due to water mains leakages, water consumed during water treatment processes, unauthorised water consumption and inaccurate metering. In Audit's view, the WSD needs to publish in its annual reports the different bases of calculating unit water production costs (paras. 1.3, 4.21 to 4.23).

Way forward

17. *High per capita domestic water consumption*. Audit noted that, despite the implementation of various water-saving initiatives by the WSD in recent years, the daily per capita domestic water consumption had been around 130 litres from 2009 to 2014, which was 18% higher than the world average of 110 litres. Notwithstanding that the WSD has set a target of achieving 10 litres of water saving per capita per day, no target date has been set for achieving this water-saving target (para. 5.5).

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 Government should:

Water supply management

- (a) expedite actions to:
 - (i) implement the project for supplying reclaimed water for flushing in NENT (para. 2.33(a));
 - (ii) improve the four priority catchwater systems in Shing Mun, Beacon Hill, Golden Hill and Tai Lam Chung (para. 2.33(c)); and
 - (iii) implement the IRTS (para. 2.34);
- (b) closely monitor the supply of fresh water from GD Province and the proposed desalination plant (para. 2.33(e));

Water demand management

- (c) conduct a review to ascertain the reasons for water-consumption increases at:
 - (i) 119 government buildings and schools after being retrofitted with water-saving devices and take remedial actions where necessary (para. 3.25(c)); and
 - (ii) the four LCSD venues after implementing the related best-practice guidelines (para. 3.26(a));

(d) take measures with a view to completing works for supplying seawater for flushing to the remaining 378 buildings at Pok Fu Lam at an early time (para. 3.25(e));

Implementation of government policy on water charges

- (e) publish information in WSD annual reports showing that:
 - (i) the net and full fresh-water unit production costs have included a target return on ANFA; and
 - (ii) the calculation of the net and full fresh-water unit production costs for charging purposes is based on the quantity of metered fresh water consumed (para. 4.31(a)); and

Way forward

(f) consider setting a target date for achieving 10 litres of water saving per capita per day (para. 5.8(a)).

Response from the Government

19. The Government agrees with the audit recommendations.

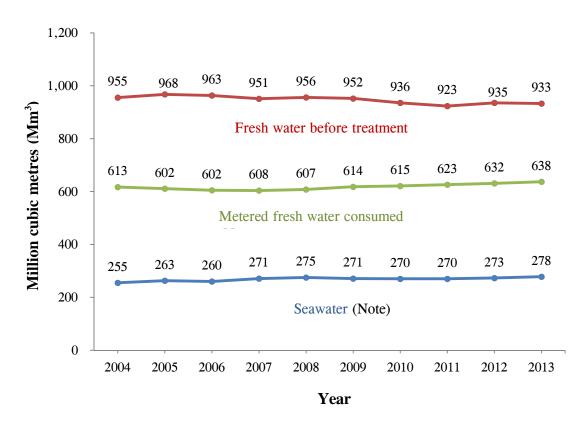
PART 1: INTRODUCTION

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

Background

1.2 The Water Supplies Department (WSD) is responsible for supplying fresh water and seawater (for flushing) for consumption by Hong Kong's population of seven million for domestic and non-domestic use (see Figure 1).

Figure 1
Water supplied by WSD
(2004 to 2013)



Source: WSD records

Note: Seawater supply is not metered, and the quantities of seawater supply shown are those recorded by WSD pumping stations.

Remarks: The data for 2014 were not available from the WSD up to the completion of audit in February 2015.

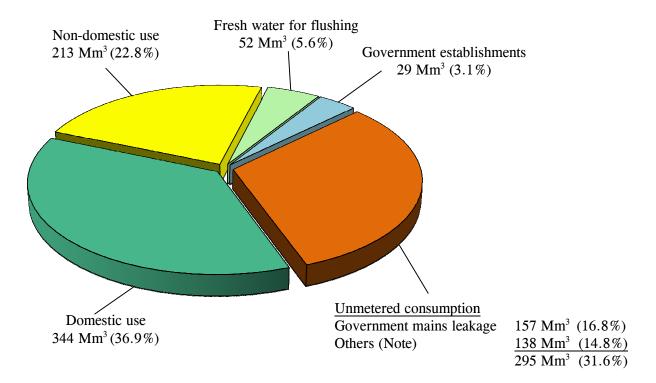
Unmetered water consumption

- 1.3 As shown in Figure 1, the quantities of metered fresh water consumed by users were substantially less than those of raw fresh water before treatment at WSD water treatment plants. The 32% ((933 638) \div 933 \times 100%) difference between the water quantity before treatment and the metered quantity is known as the unmetered water consumption, which included:
 - (a) water losses due to water mains leakages (Note 1);
 - (b) water consumed during water treatment processes and for operational purposes, such as water mains flushing, testing of new mains and fire fighting by the Fire Services Department;
 - (c) water consumed by users but not metered due to unauthorised water consumption (see para. 1.6); and
 - (d) water consumed by users but not metered due to inaccurate metering (see para. 1.6).
- 1.4 Figure 2 shows an analysis of fresh water consumed in 2013.

Note 1: Water mains include both government mains and private mains. Private mains are water mains laid between government water mains and water meters of consumers.

Figure 2

Analysis of fresh water consumed (2013)



Source: WSD records and Audit analyses

Note: Other unmetered consumption included leakage in private mains and those mentioned in paragraph 1.3(b) to (d). According to the WSD, it was conducting a review of the quantities of different nature of unmetered water consumption and did not have the breakdown information for the time being.

Water losses due to water mains leakages

In 2010, the Audit Commission (Audit) conducted a review of "Managing and reducing water mains bursts and leaks", the results of which were included in Chapter 8 of the Director of Audit's Report No. 55 of October 2010. The main audit observations included inadequacies in managing WSD term contractors in repairing water mains bursts, addressing the causes of water mains bursts, implementing the Water Mains Replacement and Rehabilitation Programme, implementing water pressure management schemes, and reducing fresh-water leakage inside residential developments. The WSD accepted all audit recommendations and took actions to make improvement. As a result, fresh water losses due to leakage in government mains had reduced from 173 Mm³ in 2010 to

157 Mm³ in 2013 (a 9% decrease). Furthermore, as of December 2014, the WSD had installed 136 bulk meters in residential developments to monitor private mains leakage.

Water losses due to unauthorised consumption and inaccurate metering

1.6 In 2011, Audit conducted a review of "Water losses from unauthorised consumption and inaccurate metering", the results of which were included in Chapter 12 of the Director of Audit's Report No. 57 of October 2011. The main audit observations included inadequacies in taking enforcement action against unlawful water taking, carrying out inspections of unauthorised water consumption, and implementing water-meter replacement programmes. The WSD accepted all audit recommendations and took actions to make improvement. According to the WSD, it has strengthened actions on detection, prosecution, promotion and education on unauthorised water consumption. In this connection, the number of surprise inspections in 2014 had increased by 74% to 1,235 as compared to that in 2013, whereas the number of convictions had increased by 41% to 113 cases during Regarding inaccurate metering, the WSD had continued its meter replacement programme and had replaced 770,000 water meters from 2011 to 2014 with the overall water-meter accuracy improved from 95.3% in 2011 to 96.7% in 2014.

Water supplies in Hong Kong

- 1.7 In 2013, 65% of fresh water in Hong Kong was supplied from Dongjiang (DJ) in Guangdong (GD) Province under Dongjiang Water Supply Agreements (hereinafter referred to as Supply Agreements), supplemented by rainwater collected from catchments in the territory. Furthermore, seawater is supplied to 80% of the local population for flushing, while the remaining 20% of the population use fresh water for the purpose.
- 1.8 For a domestic water account, the first 12 cubic metres (m³) of water used in a four-month period is supplied free of charge with remaining water consumption being charged based on a four-tier charging system (see para. 4.3(a)). For non-domestic water accounts, different water charging schemes apply to different trade sectors (see para. 4.3(b)). For flushing purposes, seawater is supplied free of charge whereas the first 30 m³ of fresh water used in a four-month period is

supplied free of charge, with remaining fresh water used for flushing being charged at a flat rate of \$4.58 per m³. The costs of supplying free seawater and fresh water for flushing are met wholly from government rates (see para. 4.3(c) and (d)(i)). For billing purposes, readings of all domestic water meters and most non-domestic meters are taken by WSD meter readers (Note 2) every four months using hand-held computers. For about 5,000 large-consumption non-domestic meters, their readings are taken on a monthly basis. For the supply of fresh water for flushing, normally only one meter is installed for a building and the cost is met by management fees.

Water purchased from GD Province

- 1.9 Since 1960, the Government of the Hong Kong Special Administrative Region has entered into a number of Supply Agreements with GD Provincial Government for supplying water from GD to meet water demand in Hong Kong. According to the Supply Agreement finalised in 2014 covering 2015, 2016 and 2017, GD Province would:
 - supply an annual quantity of up to 820 Mm³ of DJ water to Hong Kong at the costs of \$4,223 million, \$4,492 million and \$4,778 million respectively; and
 - (b) allocate up to an ultimate annual quantity of 1,100 Mm³ of fresh water to Hong Kong for future use. The timing of the supply in excess of 820 Mm³ and the price for such quantity is subject to future negotiation.
- In 1999, Audit conducted a review of "Water purchased from Guangdong Province", the results of which were included in Chapter 12 of the Director of Audit's Report No. 33 of October 1999. The main audit observations included the lack of provisions in the Supply Agreements for: (a) reducing the water supply quantities where necessary, resulting in substantial overflow of both DJ water and local rain water; and (b) meeting the latest Mainland water quality standards. The WSD accepted all audit recommendations and took actions to make improvement. Since the Supply Agreement finalised in 2006, DJ water supply to Hong Kong has been adjusted on a monthly basis depending on the actual water demand. In 2014, the overflow of water from reservoirs was 23 Mm³ comparing to 120 Mm³ in 1999.

Note 2: As of December 2014, the WSD had 157 meter readers.

Furthermore, both GD Province and the WSD have taken actions to improve the quality of DJ water supply to Hong Kong, which has met the latest Mainland standards.

Total Water Management Strategy

- 1.11 In the 2003 Policy Address, the Government pledged to implement a Total Water Management (TWM) programme to enhance water conservation and water resource protection, and to explore new water sources. In October 2005, the WSD commissioned a study to examine the fresh water supply and demand situations in Hong Kong and to evaluate major options of water supply and demand management measures. In 2008, the WSD promulgated the TWM Strategy for the period up to 2030, which aims to achieve an optimal balance between water demand and supply in order to ensure sustainable use of water in Hong Kong.
- 1.12 The TWM Strategy covers five main areas, namely water conservation, active leakage control, extending use of seawater for flushing, using new water resources (including water reclamation) and protection of water resources. The WSD's key initiatives in water demand management include stepping up public education on water conservation, promoting the use of water-saving devices, enhancing water leakage control and extending the use of seawater for flushing to more areas. Regarding supply management, the WSD has implemented pilot schemes and studies to take forward the seawater desalination and water reclamation projects and measures to strengthen protection of existing water resources.

WSD's water charges, expenditure and staff resources

According to the 2013-14 Waterworks Operating Accounts, the water charges collected and expenditures were \$2,556 million and \$8,562 million respectively, and the latter comprised the costs of DJ water of \$3,802 million, staff cost of \$1,529 million, operating and administration expenses of \$1,748 million, and depreciation of \$1,483 million. As of December 2014, the WSD administered 2.87 million water accounts (comprising 2.59 million domestic accounts and 0.28 million non-domestic accounts). As at 31 March 2014, the WSD had 4,028 staff, comprising 3,913 civil servants and 115 non-civil service contract staff. A WSD organisation chart is at Appendix A. In 2013-14, the WSD's recurrent expenditure for the planning and distribution of water supply amounted to \$6,261 million. For the five years between 2009 and 2013, financed by the Capital

Works Reserve Fund (CWRF — Note 3), the WSD spent an average of about \$3.4 billion per annum on capital works, mainly related to the Water Mains Replacement and Rehabilitation Programme and the improvement of existing treatment plants.

Audit review

- 1.14 In October 2014, Audit commenced a review to examine the WSD's management of the water supply and demand. The review focused on the implementation of initiatives promulgated under the TWM Strategy and government policy on water charges, covering the following areas:
 - (a) water supply management (PART 2);
 - (b) water demand management (PART 3);
 - (c) implementation of government policy on water charges (PART 4); and
 - (d) way forward (PART 5).

Audit has identified areas where improvements can be made by the Government in the above areas, and has made recommendations to address the issues.

Acknowledgement

1.15 Audit would like to acknowledge with gratitude the full cooperation of the staff of the Development Bureau (DEVB), the Financial Services and the Treasury Bureau (FSTB), the WSD, the Drainage Services Department (DSD), the Architectural Services Department (ArchSD), the Leisure and Cultural Services Department (LCSD), the Food and Environmental Hygiene Department (FEHD) and the Correctional Services Department (CSD) during the course of the audit review.

Note 3: According to Financial Circular No. 3/2011, waterworks with a value not exceeding \$30 million can be funded under a CWRF block vote.

PART 2: WATER SUPPLY MANAGEMENT

2.1 This PART examines the WSD's implementation of water supply management initiatives promulgated under the 2008 TWM Strategy.

Total Water Management Strategy

- 2.2 In 2013, the total fresh water supplied by the WSD was 933 Mm³, of which 611 Mm³ (65%) and 322 Mm³ (35%) were supplied from DJ water and collected from catchments in the territory respectively.
- 2.3 In accordance with the TWM Strategy, in order to safeguard against the risk of fresh water shortage in the long term, the WSD has taken actions to strengthen its water supply management through implementation of the following three initiatives:
 - (a) carrying out pilot schemes and studies on using reclaimed water (Note 4) as a new source of water for non-potable purposes such as flushing, cleansing and irrigation (paras. 2.4 to 2.12);
 - (b) protecting existing water resources (paras. 2.13 to 2.22); and
 - (c) developing seawater desalination (paras. 2.23 to 2.32).

Use of reclaimed water

2.4 Under the 2008 TWM Strategy, the Government pledged to actively consider implementing initiatives for water reclamation and using reclaimed water for non-potable purposes such as toilet flushing and landscape irrigation.

Note 4: Reclaimed water is recycled water mainly reclaimed from treated sewage effluent.

- According to the WSD, due to geographic constraints, high costs would be incurred in installing seawater-supply networks for supplying seawater for flushing in Northeast New Territories (NENT). Based on a consultancy study commenced in 2005, the WSD proposed under the 2008 TWM Strategy that reclaimed water from Shek Wu Hui Sewage Treatment Works in NENT could be used for toilet flushing in the region after going through additional treatment processes. At that time, the estimated capital cost for installing additional treatment plants and a reclaimed-water distribution system for the purpose was \$634 million. According to WSD consultant, the estimated unit cost of producing reclaimed water would be \$3.2 per m³, and that the initiative would save 21 Mm³ of fresh water a year (representing 40% of the fresh water used for flushing in 2013).
- In 2009, the WSD set up an inter-departmental working group to take forward the initiative to supply reclaimed water to NENT for non-potable purposes. From 2009 to 2011, the WSD engaged a consultant to formulate water quality standards for using reclaimed water for non-potable purposes. In 2012, the working group endorsed a set of reclaimed water quality standards for use in Hong Kong and the financial viability of supplying reclaimed water to NENT. The working group also endorsed the implementation strategy for supplying reclaimed water to NENT in 2022.

2.7 According to the WSD:

- (a) since 2012, the WSD has commenced planning for the infrastructure for supplying reclaimed water to NENT under the public works programme which is targeted for completion in 2022. This would match the forecast first population intake in NENT new development areas starting from 2023; and
- (b) concurrently, the WSD has also planned to engage a consultant to study the related legal and financial framework for supply of reclaimed water. The study is targeted for completion by early 2016.
- 2.8 According to the result of the economic assessment conducted by the WSD in 2012, the costs of providing the following three water sources for flushing in Sheung Shui and Fanling were:

- (a) reclaimed water at \$3.8 per m³;
- (b) fresh water at \$5.6 per m³ (Note 5); and
- (c) seawater at \$10.4 per m³ (Note 6).

Need to expedite using reclaimed water for flushing

Audit noted that the WSD, since 2008, had planned to provide reclaimed water for flushing in NENT. However, the planning work for the related infrastructure only commenced in 2012 which was targeted for completion by 2022. According to the WSD, the proposed project would help save 21 Mm³ of fresh water a year and that the cost of using reclaimed water is lower than that of using fresh water and seawater for flushing. Furthermore, this project would also help lessen the risk of fresh water shortage in the adverse situation. Audit considers that the WSD needs to expedite actions to implement the proposed project.

Need to explore extending the use of grey water and rainwater for non-potable purposes

Under the 2008 TWM Strategy, the Government pledged to conduct trial schemes on using recycled water from baths, showers, wash basins and kitchens (known as grey water) and rainwater for non-potable purposes (such as irrigation and flushing). In 2009, the DEVB and the Environment Bureau issued a joint technical circular on green government buildings which set out guiding principles for using grey water and rainwater for non-potable purposes at government buildings. From 2009 to 2011, the WSD conducted a review of the technical and water-quality standards for using grey water and rainwater for non-potable purposes. In 2011, the WSD sought comments from relevant stakeholders and fine-tuned the technical and water-quality standards.

- **Note 5:** According to the WSD, this unit cost was calculated based on the marginal cost and quantity of supplying fresh water for flushing in Sheung Shui and Fanling.
- **Note 6:** According to the WSD, the high unit cost was due to the long distance involved in pumping seawater from the sea to the service areas in Sheung Shui and Fanling.

- 2.11 From April 2005 to November 2014, under the trial schemes, rainwater harvesting systems had been installed by the ArchSD and the DSD in 59 government/school buildings, and grey-water recycling systems in 3 other government buildings (namely Headquarters Building of the Electrical and Mechanical Services Department (EMSD) at Kai Tak (Note 7), Big Wave Bay Beach Building of the LCSD at Shek O, and recreation facilities of the LCSD at Jordan Valley), and rainwater harvesting systems in other 26 government buildings/schools would be completed from December 2014 to November 2019. In October 2014, the WSD commenced a post-implementation review of the trial schemes.
- 2.12 In Audit's view, in collaboration with the ArchSD and the DSD, based on the results of the post-implementation review, the WSD needs to formulate a strategy for rolling out the schemes to other government/school buildings and promoting implementation of the schemes in private buildings.

Protecting existing water resources

2.13 Heavy rainfall in West Kowloon sometimes leads to water overflow in the Kowloon Reservoir, Shek Lei Pui Reservoir, Kowloon Reception Reservoir and Kowloon Byewash Reservoir (collectively known as Kowloon Group of Reservoirs) and such water overflow will increase the flooding risk in the area. In early 2000, the DSD formulated the Lai Chi Kok Transfer Scheme to alleviate the flooding risk. The Scheme comprised the construction of a drainage tunnel to intercept surface run-off from the West Kowloon hinterland at the upstream and the overflow from the Kowloon Group of Reservoirs for discharge directly to Victoria Harbour. In 2004, the WSD and the DSD planned to optimise water conservation by implementing the Lai Chi Kok Transfer Scheme (with reduced tunnel size) which included the Inter-reservoirs Transfer Scheme (IRTS) that would serve the dual purposes of flood control and achieving water conservation in West Kowloon. Under the IRTS, a drainage tunnel would be constructed to connect Kowloon Group of Reservoirs with Lower Shing Mun Reservoir and convey overflow water from the former to the latter. Upon completion of the IRTS, water resource of about 2.5 Mm³ a year would be generated.

Note 7: The system at EMSD Headquarters building commenced operation in 2005 while the other systems have been put into service from 2010.

- 2.14 In 2005, the DSD informed the Panel on Development of the Legislative Council (LegCo) that:
 - (a) the Lai Chi Kok Transfer Scheme (with reduced tunnel size) and the IRTS would bring up the flood protection standard in stages and achieve water conservation; and
 - (b) the construction works for the IRTS would commence in 2010 and was targeted for completion in 2012.

In April 2007, the LegCo Finance Committee (FC) approved funding of \$26 million for conducting site investigation, design and environmental impact assessment of the IRTS project. The WSD was the works agent. From May 2007 to February 2008, the WSD engaged two consultants and a contractor for the project, as follows:

Date	Nature of consultancy/contract	Cost (\$ million)
May 2007	Consultancy for the design and works supervision	5.5
August 2007	Consultancy for environmental impact assessment	0.9
February 2008	Contract for site investigation	20.9
	Total	27.3

- 2.15 In August 2009, in view of the substantial tunnel construction works being carried out in the territory in the forthcoming years, and for the purpose of reducing the project cost, the DSD proposed, and the DEVB endorsed, that commencement of the construction works for the project (at an estimated cost of \$350 million at that time) should be deferred by five years to 2015. In the same month, the DSD informed the DEVB that:
 - (a) the IRTS and the drainage tunnel to be constructed under the Lai Chi Kok Transfer Scheme were designed to cater for a 1-in-200-year storm; and
 - (b) with the proposed reduced tunnel size and temporary reservoir management, the drainage system could still serve to maintain the flood protection standard to cater for a 1-in-50-year storm even if the implementation of the IRTS was deferred.

Delay in implementing IRTS

- Audit noted that, up to December 2014, the WSD and the DSD had yet to seek funding for carrying out the IRTS construction works. According to the WSD and the DSD, the estimated cost of the construction works had increased from \$350 million in 2009 to \$868 million in 2014 (a 148% increase).
- 2.17 In Audit's view, in the light of the need to reduce the risk of flooding in West Kowloon during heavy rainfall and the benefit of generating 2.5 Mm³ of additional fresh water a year by implementing the IRTS, the DSD, in collaboration with the WSD and the DEVB, needs to expedite actions to implement the IRTS. The WSD and the DSD also need to inform the Panel on Development of the implementation progress of the IRTS.

Delay in improving priority catchwater systems

- 2.18 A catchwater system comprises catchwater channels which intercept surface water in the water gathering ground and carry the water to reservoirs for storage. As of December 2014, the WSD maintained 45 catchwater systems having a total length of 120 kilometres (km), of which 57 km (48%) were constructed before 1941. According to the WSD, blockage of catchwater systems resulting from slope failure would lead to flooding in the downstream areas.
- Using a systematic approach (Note 8), the WSD identified the need to improve four catchwater systems, namely Shing Mun, Beacon Hill, Golden Hill and Tai Lam Chung catchwater systems (having a total length of 26 km). In February 2007, the WSD commissioned a consultancy (Consultancy A) at a fee of \$4 million to carry out, among other tasks, a pilot and preliminary feasibility study for improving these four catchwater systems. The study was funded by a block vote of the CWRF. The study recommended the carrying out of improvement works at a total cost of \$607 million.

Note 8: The approach takes into account the catchwater channel and its associated operation facilities, the adjoining natural and man-made slopes, and the nearby stream courses and storm drainage systems.

- 2.20 In October 2008, in informing the Panel on Development of the TWM in Hong Kong, the Government said that the WSD would commence the improvement project by 2011. In December 2009, the WSD commissioned another consultancy (Consultancy B) to carry out the investigation, design and construction works supervision for the project at a cost of \$17.9 million, which was funded by a block vote of the CWRF. According to the works programme included in the consultancy brief of Consultancy B, construction works for:
 - (a) Package A of the project covering Shing Mun, Golden Hill and Tai Lam Chung catchwater systems would commence in June 2011 and was targeted for completion in December 2012; and
 - (b) Package B of the project covering the remaining improvement works would commence in July 2012 and was targeted for completion in January 2016.
- 2.21 Audit noted that, up to December 2014, the WSD had yet to seek funding for carrying out the project construction works. In January 2015, the WSD informed Audit that in the short term the WSD would:
 - (a) repackage the related works with a view to implementing the priority works using CWRF block vote funding in the near future; and
 - (b) enhance regular inspections and maintenance to keep the normal functioning of the related catchwater systems.
- 2.22 In Audit's view, in order to protect the local fresh water resources and minimise flooding in the downstream areas, the WSD needs to expedite actions to improve the four priority catchwater systems and to keep the Panel on Development informed of the implementation progress.

Developing seawater desalination

- 2.23 In 2008, the Government informed the LegCo Panel on Development that the WSD had completed a pilot study on seawater desalination by adopting the reverse osmosis technology (Note 9). In May 2012, the WSD informed the Panel on Development that:
 - (a) with the fast pace of economic development of cities in GD Province, the demand for water resources from DJ continuously increased. In view of this, the Government of GD Province promulgated in 2008 the "Water Resources Allocation Plan in the DJ River Basin of GD Province" setting out the maximum amount of water that cities in GD Province and Hong Kong could draw from DJ. The water consumption of some areas in GD like Shenzhen and Dongguan had already exceeded their allocated quantities in the Plan even under normal yield condition;
 - (b) under the Supply Agreement, the Government of GD Province agreed to supply up to an ultimate annual quantity of 1,100 Mm³ of fresh water to Hong Kong. However, when a severe drought happened, the whole region of DJ River Basin would likely face water shortage. To better prepare Hong Kong for water shortage arising from severe droughts, there was a genuine need to study in good time and develop new water sources to safeguard the sustainable development of Hong Kong;
 - climate change would bring about more frequent extremely dry weather and increase the likelihood of the occurrence of consecutive droughts. Being one of the responsible partners to other economic zones in the Pearl River Delta, Hong Kong should investigate and explore alternative water resources in order to mitigate difficulties encountered by its neighbours in GD Province when they faced a drought, noting that Hong Kong would also encounter drought at that moment;

Note 9: Reverse osmosis is a process in which relatively pure water is separated from seawater through a semi-permeable membrane by applying hydraulic pressure.

- (d) due to projected increase in population of about 700,000 from 2010 to 2020, the WSD anticipated that the annual water consumption in 2020 would grow by 42 Mm³, after accounting for a predicted saving of 41 Mm³ brought about by the achievements under various water demand management initiatives;
- (e) based on the past record of local yield collected in the water gathering ground, and risk assessment of water resource adequacy under adverse scenarios (e.g. the average long-term yield collected would decrease, the occurrence of consecutive droughts and the increase in water demand associated with population increase), the water shortage risk after 2020 would increase with a deficit of fresh water resources of up to 39 Mm³ a year under an adverse scenario;
- (f) to relieve the ever-increasing shortage of fresh water resources in coastal areas and on islands, General Office of the State Council of the People's Republic of China published "Vision on Expediting Seawater Desalination Industry Development" on 13 February 2012, where it put forward a proposal to expedite the seawater desalination industry development. The target was attaining a total desalination capacity of 2.2 to 2.6 Mm³ per day by 2015; particularly on islands, with desalinated water exceeding 50% of the total additional water resources. As a coastal and well-developed city with scarce fresh water resources, Hong Kong had unlimited supply of seawater from the ocean that was not affected by the acute climate changes. Building a desalination plant to provide potable water would be an appropriate solution to alleviate the shortage of its fresh water resources; and
- (g) based on the predicted demand for fresh water in 2020 and the time required for delivery of a desalination plant, it was time to commence the preliminary design, environmental impact assessment and site investigation. The proposed implementation programme was as follows:

2012 to 2014: planning and investigation study of the desalination

plant;

2015 to 2017: detailed design and inviting tender for construction;

and

2018 to 2020: construction of the desalination plant.

- In June 2012, the FC approved funding of \$34.3 million for the WSD to carry out a planning and investigation study for the construction of a desalination plant at Tseung Kwan O. The study commenced in December 2012. According to the WSD, as of February 2015, the study had been largely completed, and the study affirmed that the project was technically feasible and cost-effective.
- 2.25 In January 2015, the WSD advised the Sai Kung District Council that:
 - (a) the estimated cost of the project on seawater desalination was \$9.3 billion; and
 - (b) it had planned to seek funding from the FC in the first quarter of 2015 for employing consultants to take forward the design and site investigation of the project.
- 2.26 In March 2015, the WSD informed the Panel on Development that:
 - (a) the output capacity of the desalination plant would be 50 Mm³ of fresh water a year, accounting for 5% of the total fresh water supply in Hong Kong. There were provisions in the plant for future expansion to an ultimate capacity of 100 Mm³ of fresh water a year;
 - (b) the construction works of the plant would take place between 2018 and 2020. The first stage of the plant was expected to be commissioned in 2020; and
 - (c) the estimated cost of seawater desalination at the plant would be \$12 per m³, vis-a-vis \$4 per m³ and \$8 per m³ for drinking water produced from local catchwater and DJ water respectively. Of the estimated cost of \$12 per m³, \$7 per m³ and \$5 per m³ were operation cost and capital depreciation cost respectively.

Need to closely monitor the supply of fresh water

2.27 According to the WSD, it had adopted a complex computer model for risk assessment to arrive at the estimated 39 Mm³ of annual shortage of water supply after 2020 (see para. 2.23(e)), which in simple terms can be summarised as follows:

	Quantity (Mm³)
Estimated water demand in 2021 (based on forecast made in 2010 — Note 1)	991
Less: Supply of DJ water	820
Local water resources in severe drought situation (Note 2)	132
Estimated water shortfall	39

Note 1: This estimate had taken into account the predicted saving brought about by implementing various water demand management initiatives.

Note 2: This represented the sum of water collected during the year and the usable reservoir storage at the beginning of the year.

- In May 2012, the WSD informed the Panel on Development that, under adverse scenarios and based on the Long-term Demand Forecast (2010), the water shortage risk after 2020 would increase with a deficit of fresh water resources of up to 39 Mm³ a year (see para. 2.23(e)). In February 2014, the WSD updated the water-demand forecasts under Long-term Demand Forecast (2013) by adopting upper- and lower- bound demand scenarios. Compared to the 2010 forecast, the 2013 forecast revised the projected annual water demand downward for the period 2021 to 2029 (see Appendix B).
- 2.29 According to the WSD, the decreases in water-demand forecasts between those in Long-term Demand Forecast (2010) and Long-term Demand Forecast (2013) were mainly attributable to decreases in the projected annual growth rates of:

- (a) population from 0.9% to 0.7% (based on projections of the Census and Statistics Department);
- (b) domestic per capita water consumption from 1% to 0.5% (for upper-bound water-demand forecasts Note 10); and
- (c) the trade water consumption from 1.5% to 1.1%.
- Audit noted that one of the justifications for implementing a desalination plant was that, based on Long-term Demand Forecast (2010), the water shortage risk after 2020 would increase with a deficit of fresh water resources of up to 39 Mm³ under an adverse scenario (see para. 2.23(e)). However, owing to decreases in the projected annual growth rates of population, and domestic and trade water demand, the Long-term Demand Forecast (2013) shows decreases in water demand ranging from 6 Mm³ to 76 Mm³ vis-à-vis those stated in Long-term Demand Forecast (2010) (see columns (d) and (e) in Appendix B).
- 2.31 In March 2015, the WSD informed Audit that, in considering the desalination plant project together with the DEVB, it had carried out a preliminary review in respect of the decrease in water demand and an assessment of GD Province, under severe drought situation and assuming upper-bound water demand, to supply an annual water quantity exceeding 820 Mm³ to Hong Kong before 2030. The findings were as follows:
 - (a) the estimated water deficit in 2021 would decrease by 15% from 39 Mm³ (see Long-term Demand Forecast (2010) in para. 2.27) to 33 Mm³;
 - (b) however, in recent years, cities dependent on the DJ water resources had already consumed 10,000 Mm³ of water annually from DJ, nearing the allocation limit of 10,183 Mm³ under a drought year. In a severe drought year, which would affect both DJ River Basin of GD Province and Hong Kong, the flow in DJ would be substantially reduced. For example, in the severe drought year of 1963, the annual flow of DJ mainstream was only 5,050 Mm³. With climate change, there would be more frequent

Note 10: For the lower-bound water-demand forecasts, the WSD assumed a zero growth rate for the domestic per capita water consumption.

occurrences of such severe droughts. In such events, the available water resources in the DJ would be much affected and the supply of DJ water of another 142 Mm³ on top of 820 Mm³ to meet the water deficit in 2029 (see column (f) in Appendix B) would be at the great expenses of other cities in the region;

- (c) according to a WSD consultant's report, the production cost per m³ of desalinated water using the reverse osmosis desalination technology was inversely proportional to the design capacity of desalination plants. The increase in unit production cost was becoming apparent when the design capacity was less than 50 Mm³ per year. Amongst the 16 overseas plants studied by the consultant, half of them were designed with output capacity between 48 Mm³ and 73 Mm³. After making reference to the above factors, the WSD had set 50 Mm³ as the annual output capacity of the first stage of the desalination plant, which accounted for about 5% of potable water consumption in Hong Kong; and
- (d) to prepare for the impact of climate change and safeguard water security in Hong Kong, the DEVB and the WSD considered it time to take forward the development of an alternative water source by seawater desalination which was not susceptible to climate change.
- Audit noted that, under the Supply Agreement, GD Province has agreed to allocate up to an annual quantity of 1,100 Mm³ of fresh water to Hong Kong for future use. Therefore, the occurrence of water deficits in future is subject to GD Province not being able to supply an annual quantity in excess of 820 Mm³. In Audit's view, the WSD needs to closely monitor the supply of fresh water from GD Province and the proposed desalination plant.

Audit recommendations

2.33 Audit has recommended that the Director of Water Supplies should:

Use of reclaimed water

(a) expedite actions to implement the project for supplying reclaimed water for flushing in NENT;

(b) in collaboration with the Director of Architectural Services and the Director of Drainage Services, based on the results of the post-implementation review of the trial schemes on using grey water for flushing and rainwater for non-potable purposes at government/school buildings, formulate a strategy for rolling out the schemes to other government/school buildings and promoting implementation of the schemes in private buildings;

Protecting existing water resources

- (c) expedite actions to improve the four priority catchwater systems;
- (d) keep the Panel on Development informed of the implementation progress of the IRTS and the project for improving the four priority catchwater systems; and

Developing seawater desalination

- (e) closely monitor the supply of fresh water from GD Province and the proposed desalination plant.
- 2.34 Audit has also *recommended* that the Director of Drainage Services should, in collaboration with the Secretary for Development and the Director of Water Supplies, expedite actions to implement the IRTS.

Response from the Government

- 2.35 The Director of Water Supplies agrees with the audit recommendations in paragraphs 2.33 and 2.34. He has said that:
 - (a) regarding paragraph 2.33(a), an inter-departmental steering committee chaired by the DEVB will be set up and it will closely monitor the progress of implementing the project for supplying reclaimed water for flushing in NENT;

- (b) regarding paragraph 2.33(b), the DEVB and the Environment Bureau are reviewing their joint technical circular on green government buildings (see para. 2.10) and the WSD has made a proposal to them that the joint circular should highlight the policy on using recycled water in government buildings. Furthermore, to promote wider use of recycled water in the private sector, the WSD has also made a proposal to the Hong Kong Green Building Council that, in the Council's current review of the Building Environmental Assessment Method Plus standard, it should put higher weightings on those assessment criteria related to use of recycled water in buildings. The WSD will continue to take forward the above proposal in government and private buildings;
- (c) regarding paragraph 2.33(d), when an opportunity arises, the WSD will inform the Panel on Development of the implementation progress of the IRTS (in conjunction with the DSD) and the project for improving the four priority catchwater systems; and
- (d) regarding paragraph 2.33(e), the WSD will work in collaboration with the parties concerned, including GD Province, to closely monitor the situation of future demand and supply of DJ water.
- 2.36 The Secretary for Development and the Director of Drainage Services agree with the audit recommendation in paragraph 2.34.

PART 3: WATER DEMAND MANAGEMENT

3.1 This PART examines the WSD's implementation of water demand management initiatives promulgated under the 2008 TWM Strategy.

Total Water Management Strategy

- 3.2 As shown in Figure 2 in paragraph 1.4, of the 933 Mm³ of fresh water consumed in 2013, 344 Mm³ (36.9%) was for domestic uses, 213 Mm³ (22.8%) for non-domestic uses, 52 Mm³ (5.6%) for flushing, 29 Mm³ (3.1%) for government establishments and the remaining 295 Mm³ (31.6%) was unmetered consumption.
- 3.3 Under the 2008 TWM Strategy, the WSD pledged the following initiatives to reduce water demand:
 - (a) enhancing public education on water conservation (paras. 3.4 to 3.8);
 - (b) retrofitting water-saving devices at government facilities (paras. 3.9 to 3.14);
 - (c) conducting water-efficiency audits (paras. 3.15 to 3.19);
 - (d) extending the use of seawater for flushing (paras. 3.20 to 3.24); and
 - (e) implementing programmes to replace and rehabilitate aged water mains, and apply new technologies to improve water pressure management and detection of water mains leakage (these programmes were covered in a previous audit review conducted in 2010 see para. 1.5)

Enhancing public education on water conservation

- In a water bill sent to a customer, the WSD states the daily water consumption of his household, and suggests that the customer could divide the amount by the number of water users during the period to arrive at the daily per capita water consumption of his household. The WSD also states that the daily per capita domestic water consumption in Hong Kong is 130 litres, and the world average is 110 litres.
- 3.5 To encourage the young generation to appreciate the need for water conservation, develop water-saving habits and share the knowledge and good water-saving habits with their families, since 2009 the WSD has organised various education programmes and promotion campaigns on water conservation (see Appendix C).

Need to evaluate effectiveness of measures to promote water conservation

- 3.6 In 2011, the WSD appointed a consultant to conduct a Domestic Water Consumption Survey. According to the Survey results:
 - (a) 86% of the households knew that the Government was promoting water conservation and 98.8% of the households supported water conservation;
 - (b) 39.7% of primary students had heard of water conservation;
 - (c) 32.5% of respondents considered the Government's work on public education and promotion activities on water conservation "very effective/effective"; and
 - (d) 19.9% of respondents considered the activities in (c) not effective, and 82.2% of these respondents recommended that the WSD should strengthen promotion on television.

3.7 Notwithstanding the efforts made by the WSD in organising various education programmes and promotion campaigns since 2009, Audit noted that the daily per capita domestic water consumption in Hong Kong had been around 130 litres from 2009 to 2014. In Audit's view, the WSD needs to take measures to evaluate the effectiveness of its public education and promotion activities on water conservation with a view to identifying areas for improvement.

No performance indicators for public education programmes

3.8 In March 2013, the WSD set a target of saving at least 10 litres of fresh water per capita per day. However, the WSD had not set any performance indicators on education programmes and promotion campaigns on water conservation and published such performance indicators in its Controlling Officer's Reports (CORs). The WSD needs to make improvement in this area.

Retrofitting water-saving devices at government facilities

- 3.9 In 2009, the WSD engaged the EMSD as its consultant for retrofitting water-saving devices (including water-saving taps, showers, urinals and flushing cisterns) at government buildings and schools. In December 2009, EMSD survey found that 3,277 government buildings and schools could achieve water saving by retrofitting with water-saving devices.
- 3.10 In 2011, the WSD conducted a review to evaluate the cost-effectiveness of a pilot scheme on retrofitting water-saving devices at 421 government buildings and schools at a total cost of \$104 million (Phase 1 retrofitting works implemented in December 2009). The review found that the retrofitting works would generate an annual saving of \$21.43 million, and the average payback period of the works was 5.1 years.
- 3.11 In view of the cost-effectiveness of retrofitting water-saving devices as revealed in the pilot scheme, the WSD commenced Phase 2 retrofitting works in April 2012 and completed the works in February 2014, in which 19,600 water saving devices were retrofitted in 177 venues. Up to mid-January 2015, the capital cost involved was \$73 million.

3.12 In September 2014, the WSD commenced Phase 3 retrofitting works to install flow controllers for water taps and showers at all government buildings and schools, which was targeted for completion by August 2016. As of January 2015, 53,000 water-saving devices had been installed at 633 government buildings and schools. According to the WSD, it would commence Phase 4 retrofitting works to replace urinals and flushing cisterns installed at 800 government venues (using fresh water for flushing) with water-saving ones in September 2015, which was targeted for completion by September 2017.

Some government facilities consumed more water after retrofitting with water-saving devices

- 3.13 According to the WSD's review of the pilot scheme on retrofitting water-saving devices at 421 government buildings/schools (see para. 3.10), after implementation of the scheme, fresh water consumption had:
 - (a) decreased at 300 (71%) venues. The decreases ranged from 0.3% to 99.5%;
 - (b) remained unchanged at 2 (1%) venues; and
 - (c) increased at 119 (28%) venues. The increases ranged from 0.4% to more than 100% (see Table 1).

Table 1

Government buildings and schools consuming more fresh water after retrofitting with water-saving devices

Percentage increase	Number of government buildings and schools
5% or below	14
More than 5% to 10%	12
More than 10% to 50%	54
More than 50% to 100%	14
Over 100% (Note)	25
Total	119

Source: Audit analyses of WSD records

Note: The two largest increases occurred at the Tsing Yi North Pumping Station

(3,983%) and the Sheung Wan Seawater Pumping Station (1,454%).

3.14 In Audit's view, the WSD needs to conduct a review to ascertain the reasons for the water-consumption increases and take remedial actions where necessary.

Conducting water-efficiency audits

3.15 In 2013, government facilities consumed 29 Mm³ of water, accounting for 3.1% of the total fresh water consumed (see Figure 2 in para. 1.4). The WSD had, from June 2010 to June 2013, engaged a consultant to conduct water-efficiency audits for the LCSD, the CSD and the FEHD (Note 11) at a total cost of \$2.9 million, which were targeted for completion by May 2012, March 2014 and June 2012 respectively. Table 2 shows the water consumption of these three government departments.

Table 2
Water consumption of the LCSD, the CSD and the FEHD (2011-12 to 2013-14)

C	Water consu		er consum	nption	
Government department	Major use of fresh water	2011-12 (Mm³)	2012-13 (Mm³)	2013-14 (Mm³)	
LCSD	irrigation and park cleansingswimming pool replenishment and cleaning	12.1	12.4	12.8	
CSD	 domestic water consumption by persons in custody laundry services for Hospital Authority and Department of Health environmental and intensive cleansing programmes of correctional institutions/facilities 	4.5	4.6	5.0	
FEHD	 water replenishment for street-washing vehicles public-toilet use water consumption in FEHD markets 	3.6	3.7	3.6	

Source: WSD records

Note 11: According to the WSD, these three government departments were selected for conducting water-efficiency audits because they had been the largest government water consumers from 2009-10 to 2012-13.

- 3.16 In September 2012, the WSD issued the best-practice guidelines on water conservation to the LCSD (see examples of the best practices in Appendix D). According to the LCSD and the WSD:
 - (a) the best-practice guidelines have been implemented at six parks and five swimming pools (Note 12); and
 - (b) the overall water consumption at these 11 venues in 2014 had decreased by 7.2% when compared to that in 2011.
- 3.17 According to the WSD, as of February 2015, the water-efficiency audit for the FEHD had been completed, and that for the CSD was still in progress. In Audit's view, the WSD needs to take measures with a view to ensuring the early completion of the audit for the CSD and thereafter issue related best-practice guidelines on water conservation to it.

Some LCSD venues consumed more water after implementing related best-practice guidelines

3.18 Notwithstanding the overall 7.2% water reduction at 11 LCSD venues from 2011 to 2014, Audit examination revealed that water consumption at 4 (namely Kowloon Park, Shatin Park, Tsuen Wan Park and Kowloon Park Swimming Pool) of the 11 venues had in fact increased from 2011 to 2014, with increases ranging from 5% to 63% (see Table 3).

Note 12: The six parks were Hong Kong Park, Kowloon Park, Shatin Park, Tai Po Waterfront Park, Tsuen Wan Park and Tuen Mun Park and the five swimming pools were Fanling Swimming Pool, Kowloon Park Swimming Pool, Kowloon Tsai Swimming Pool, Morrison Hill Swimming Pool and Shatin Jockey Club Swimming Pool.

Table 3

Four LCSD venues with increase in water consumption (2011 and 2014)

	Water consumption		Increase in water	
	2011	2014	consumption	
Venue	(a)	(b)	(c) = (b) - (a)	
	(m ³)	(m ³)	(m ³)	
Kowloon Park	176,923	185,666	8,743 (5%)	
Shatin Park	204,372	332,403	128,031 (63%)	
Tsuen Wan Park	30,305	34,799	4,494 (15%)	
Kowloon Park Swimming Pool	368,191	467,411	99,220 (27%)	

Source: WSD records

3.19 In Audit's view, the LCSD, in collaboration with the WSD, needs to conduct a review to ascertain the reasons for water-consumption increases at the four venues and, taking into account experience gained in implementing the best-practice guidelines at the 11 LCSD venues, take actions to roll out the implementation of the guidelines to other LCSD venues.

Extending the use of seawater for flushing

3.20 For the purpose of saving fresh water, the WSD has provided seawater for flushing since the 1950s. Areas not yet covered by the seawater networks are provided with fresh water for flushing. In 2013, 52 Mm³ of fresh water was used for flushing, accounting for 5.6% of the total fresh water consumed (see Figure 2 in para. 1.4).

3.21 Under the 2008 TWM Strategy, seawater for flushing would be extended to areas wherever it was economically justified to do so (Note 13). The WSD has formulated a programme for implementation (see Table 4). After the commissioning of the seawater supply systems in Pok Fu Lam and Northwest New Territories, the coverage of the seawater network would increase to about 85% of the total population.

Table 4

Implementation programme for extending seawater supply network

Expansion Area	Number of residents	Actual completion date	Estimated quantity of fresh water saved a year (Mm³)
Northwest New Territories	600,000	December 2014	21.9
Pok Fu Lam	98,000	July 2013	5.5

Source: WSD records

Many buildings at Pok Fu Lam not yet connected to seawater supply network

3.22 The seawater supply system at Pok Fu Lam was substantially completed in July 2013. As of February 2015, of the total 570 buildings at Pok Fu Lam covered under the seawater supply system, works to convert the supply of fresh water to seawater for flushing for:

Note 13: The reasons for not supplying seawater to some areas include: (a) the population is sparse and scattered; (b) the areas are located far from the sea; and (c) the areas are located in high level requiring high capital and operation cost for providing a seawater supply system.

- (a) 111 buildings (20%) had been completed;
- (b) 81 buildings (14%) were in progress; and
- (c) 378 buildings (66%) had not yet commenced.
- 3.23 Under the flushing-water conversion scheme, related water consumers are invited to apply to the WSD for conversion and to pay for the associated connection fee. They are also required to carry out necessary works to facilitate the facilities conversion. According to the WSD:
 - (a) some water consumers are unwilling to convert their flushing by using seawater for the following reasons:
 - (i) buildings might be redeveloped in the near future;
 - (ii) the lack of management offices or owners' corporations to coordinate among the consumers to apply for seawater conversion and to carry out the necessary modification works; and
 - (iii) they need to pay for costs of the connection works and modification of the internal flushing systems; and
 - (b) for water consumers willing to convert their flushing facilities by using seawater, they need time to apply for road-excavation permits for carrying out the works.
- 3.24 In Audit's view, the WSD needs to take measures with a view to completing works for supplying seawater for flushing to the remaining 378 buildings at Pok Fu Lam at an early time.

Audit recommendations

- 3.25 Audit has recommended that the Director of Water Supplies should:
 - (a) take measures to evaluate the effectiveness of WSD public education and promotion campaigns with a view to identifying areas for improvement;
 - (b) set performance indicators on education programmes and promotion campaigns on water conservation and publish such indicators in the WSD's COR;
 - (c) conduct a review to ascertain the reasons for water-consumption increases at 119 government buildings and schools after being retrofitted with water-saving devices and take remedial actions where necessary;
 - (d) take measures with a view to ensuring the early completion of water-efficiency audit for the CSD and thereafter issue best-practice guidelines on water conservation to it; and
 - (e) take measures with a view to completing works for supplying seawater for flushing to the remaining 378 buildings at Pok Fu Lam at an early time.
- 3.26 Audit has also *recommended* that the Director of Leisure and Cultural Services should, in collaboration with the Director of Water Supplies:
 - (a) conduct a review to ascertain the reasons for the water-consumption increases at the four LCSD venues after implementing the related best-practice guidelines; and
 - (b) take actions to roll out the implementation of the guidelines to other LCSD venues, taking into account experience gained in implementing the best-practice guidelines on water conservation at 11 LCSD venues.

Response from the Government

- 3.27 The Director of Water Supplies agrees with the audit recommendations in paragraphs 3.25 and 3.26. He has said that:
 - (a) regarding paragraph 3.25(a), the WSD will conduct a customer survey in 2015-16 to evaluate the effectiveness of its public education and promotion activities on water conservation;
 - (b) regarding paragraph 3.25(c), among the 25 cases with increases in water consumption of over 100% (see Table 1 in para. 3.13), about half are WSD installations, and most of them are pumping stations. As far as the WSD's facilities are concerned, the majority of the increase in water consumption was due to operation needs, maintenance and improvement works. For the two cases with the largest increases at Tsing Yi North Pumping Station and Sheung Wan Seawater Pumping Station, the increase in water consumption was due to construction of green roofs and cleansing of additional silt screens installed for preventing possible intake of silt generated by the construction works of the Central and Wan Chai Bypass. The WSD will conduct a review of the remaining facilities to ascertain the reasons for the water-consumption increases;
 - (c) regarding paragraph 3.25(d), the WSD will expedite the water-efficiency audit for the CSD for completion within 2015-16; and
 - (d) regarding paragraph 3.25(e), the WSD will take more proactive measures to expedite the seawater conversion at Pok Fu Lam. In this connection, it will provide advice and technical support to the consumers/agents for inspecting their internal plumbing systems and carry out the necessary modification works to facilitate the conversion. It will also seek support from the related District Council and District Office to help the consumers/agents expedite the conversion.

- 3.28 The Director of Leisure and Cultural Services agrees with the audit recommendations in paragraph 3.26. She has said that:
 - (a) regarding paragraph 3.26(a), the LCSD will, in collaboration with the WSD, re-examine the water consumption of the four LCSD venues and identify the reasons for the water-consumption increases at these venues; and
 - (b) regarding paragraph 3.26(b), the LCSD has implemented the Best Practice Guidelines on water conservation at the 11 selected LCSD venues as far as practicable. Based on its operational experience, it has provided comments and suggestions to the WSD for further refinement of the guidelines. It will take action to roll out the implementation of the refined guidelines to other LCSD venues taking into account the operational experience gained.

PART 4: IMPLEMENTATION OF GOVERNMENT POLICY ON WATER CHARGES

4.1 This PART examines the WSD's implementation of government policy on water charges.

Government's policy on water charges

Tariff structure for water charges

- 4.2 In 1979, the Government introduced a tariff structure for water charges which was designed with regard to:
 - (a) the minimum water requirements to sustain a healthy/hygienic life;
 - (b) the need to take into account the impact of increased water charges on industry and on domestic consumers;
 - (c) the need to encourage the conservation of water and to discourage extravagant use and waste; and
 - (d) the need to put the waterworks accounts into balance.

Pursuant to the Government's policy, water tariff should be set to recover the net production cost (Note 14), and achieve a target return on Average Net Fixed Assets (ANFA — Note 15). Moreover, in setting the water tariffs, the Government also took into account the affordability, financial performance of the waterworks operation, the prevailing economic situation and the views of LegCo Members.

- Note 14: In June 1992, the WSD informed the Executive Council that: (a) full production cost represented the average gross cost per unit of potable water; and (b) net production cost represented the average net cost per unit of water supply after deducting from the full production cost the relevant contribution from rates (the contribution from rates (see paras. 4.4 and 4.5) was first applied to meet the deficit in respect of flushing water supply).
- **Note 15:** ANFA is the average of the values of the net fixed assets (i.e. net of depreciation) at the beginning and end of a financial year.

- 4.3 The tariff structure for supplying fresh water and seawater is as follows:
 - (a) fresh water supply for domestic uses should be charged through a four-tier system, as follows:

(i) First tier	12 m³ of fresh water (effective from February 1995) should be supplied free of charge for a domestic household in a four-month period. This was to provide the minimum quantity of water required for health and hygiene. The quantity was determined by reference to the average household size in public housing, and the related net production cost should be met by the Government.
(ii) Second tier	Water tariff for the next 31 m³ of fresh water (effective from February 1995) consumed by a domestic household in a four-month period should be approximately in line with the net production cost.
(iii) Third tier	Water tariff for the next 19 m³ of fresh water (effective from February 1995) consumed by a domestic household in a four-month period should be approximately in line with the full production cost.
(iv) Fourth tier	Water tariff for the remaining fresh water consumed by a domestic household in a four-month period should be approximately 40% above the third tier (i.e. 40% above the full production cost). The purpose was to discourage extravagant and wasteful use of water above the level necessary to maintain a reasonable standard of living.

(b) fresh water supply for non-domestic uses should be charged dependent on the nature of trades, as follows:

(i) General trade purposes	Water tariff should be approximately in line with the net production cost (i.e. at the same rate of charge as the second tier of domestic water supply (see (a)(ii)).
(ii) Non-ocean- going vessels	Water tariff should be linked to the second tier rate of charge for domestic uses.
(iii) Construction purposes	Water tariff should be approximately in line with full production cost (i.e. at the same rate of charge as the third tier of domestic water supply (see (a)(iii)).
(iv) Ocean-going vessels	Water tariff should be linked to the fourth tier rate of charge of domestic supplies (see (a)(iv)). The purpose was to discourage shipping liners from taking on water in Hong Kong.

- seawater for flushing should be supplied free of charge, the cost of which should be met wholly from contribution from government rates; and
- (d) for fresh water supply for flushing:

(i) The first 30 m³ of fresh water supply (effective from 1981) in a four-month period	The water should be supplied free of charge, the cost of which should be met wholly from contribution from government rates.
(ii) Remaining fresh water supply	The water tariff should be linked to the rate of charges for general trade purposes (see (b)(i)).

Rates contributions to meet water cost

- According to the Rating Ordinance (Cap. 116), the amount of government rates payable by a tenement having no fresh water supply is to be reduced by such a percentage as prescribed by resolution of LegCo. With effect from April 1984, by resolution of LegCo, the reduction rates have been set at 15% for a tenement having no fresh water supply and 7.5% for a tenement having unfiltered water supply.
- 4.5 The Rating and Valuation Department provides the WSD with the information on the rates collected, concessions granted, water supply status for the past year and the projected estimates of rates revenue for the next five years for the latter to prepare the Waterworks Operating Accounts. In general, 15% of rates paid by a household or an entity having fresh water supply and rate concessions granted (Note 16) are accounted for as revenue in the Waterworks Operating Accounts. In 2013-14, the total waterworks revenue generated from contribution from government rates and from the Government due to rates concessions was \$3,971 million.

Waterworks Operating Accounts

- 4.6 Every year, the WSD prepares the Waterworks Operating Accounts for the immediate past financial year for submission to the Waterworks Accounts Committee (WAC Note 17) for vetting and endorsement.
- 4.7 Table 5 shows the 2013-14 Waterworks Operating Accounts (see Appendix E for the Accounts of 2009-10 to 2012-13).

- **Note 16:** This was to cover the shortfall in contribution from rates resulting from the rates concessions granted by the Government in the past years.
- **Note 17:** The WAC is chaired by the Permanent Secretary for the Financial Services and the Treasury (Treasury), with members including the Director of Water Supplies and representatives from the FSTB, the DEVB, the Treasury and the WSD.

Table 5 **Waterworks Operating Accounts** (2013-14)

Particulars	\$ million
Revenue	
Water charges	2,555.8
Contribution from rates	2,236.4
Government contribution to cover rates concessions	1,734.2
Government contribution relating to free water allowance to consumers (Note)	918.7
Water supply to government establishments	159.0
Fees, licences and reimbursable works	22.7
Interest from deposits	3.8
Total revenue (a)	7,630.6
Expenditure	
Cost of DJ water	3,802.2
Operating and administration expenses	1,747.9
Staff costs	1,528.7
Depreciation	1,482.7
Total expenditure (b)	8,561.5
Deficit $ (c) = (a) - (b) $	(930.9)
Return on ANFA	
ANFA (d)	\$50,086.9 million
Target rate of return on ANFA (e)	3.4%
Actual rate of return on ANFA (f) = (c) \div (d) \times 100%	(1.86%)

Source: WSD records

The first 12 m^3 of fresh water was supplied free of charge for a domestic household in a four-month period, the net production cost of which was met by Note:

the Government.

4.8 Summaries of the Waterworks Operating Accounts are included in WSD annual reports which are uploaded onto WSD website for public information.

Waterworks Accounts Committee

4.9 Every year, the WSD prepares and submits to the WAC water-tariff-revision proposals and a set of five-year projections on forecasts of income and expenditures, capital spending, outlays and growth of water consumption. The WAC usually meets once a year (or by circulation) to examine the above-mentioned submissions. In the event that the WAC endorses proposed revisions to the water tariffs, the proposal would be submitted to the Executive Council (ExCo) for approval.

Target rate of return on ANFA

4.10 Following a review of government utilities, ExCo decided in 1995 that a target rate of return should be set for each government utility to reflect the cost of capital employed in setting up, maintaining and enhancing the services, and the target rate of return should be measured on the basis of ANFA which broadly represented the level of capital employed by the utilities, and that the target rates of return should be reviewed at five-year intervals taking into account changes in policy and economic and investment market conditions. For 2012-13 and 2013-14, the target rate of return on waterworks operation had been set at 3.4%.

Water tariffs

- 4.11 Water tariffs for supplying fresh water had remained unchanged from 1995 to 2014 (Note 18). Table 6 shows the water tariffs and water consumption for 2013-14. According to the WSD, in reviewing the water tariffs:
 - (a) the overriding principle was to comply with the policy on achieving the target rate of return for the waterworks operation as a whole; and
 - (b) the Government will take into consideration the affordability, the financial performance of the waterworks operation, the prevailing economic situation and the views of LegCo Members.

Note 18: With the exception of the water tariff for the supply of fresh water for ocean-going vessels which was last revised in 1996.

Table 6
Water tariffs and water consumption (2013-14)

Particular	Water tariff (\$/m³)	Water consumption (Mm³)
Domestic water supplies		
First Tier (first 12 m ³)	Free	84.7
Second Tier (next 31 m ³)	4.16	156.0
Third Tier (next 19 m ³)	6.45	49.0
Fourth Tier (remaining)	9.05	53.7
	Sub-total (A)	343.4
Non-domestic water supplies		
General trade purposes	4.58	197.1
Non-ocean-going vessels	4.58	0.6
Construction purposes	7.11	13.1
Ocean-going vessels	10.93	0.6
	Sub-total (B)	211.4
Flushing water supplies		
Seawater for flushing	Free	276.4
Fresh water for flushing — first 30 m³ in a four-month period	Free	31.4
Fresh water for flushing — exceeding 30 m³ in a four-month period	4.58	16.1
	Sub-total (C)	323.9

Source: WSD records

Remarks: The data in this Table are slightly different from those in Figure 2 in paragraph 1.4 because the former related to April 2013 to March 2014 whereas the latter related to January to December 2014.

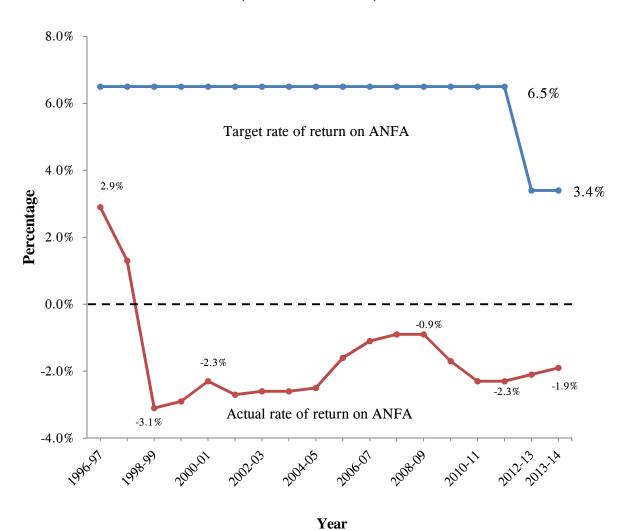
4.12 In 1996, the Government proposed tariff increases of 8.5% for domestic water supply and of 9.3% for non-domestic water supply. In the event, with the exception of tariff for supply of fresh water for ocean-going vessels, LegCo did not approve the proposed increases in water charges on the grounds that, although not being able to achieve prescribed return on ANFA, the waterworks operations could still achieve an operating surplus. In 1999, the Government submitted a consultation paper to the then LegCo Panel on Financial Affairs proposing an increase of water tariff by 5%. In the event, the LegCo Panel did not support the proposed increase on the grounds that the economy at that time had not recovered.

Target rates of return on ANFA not met since 1998-99

4.13 The target and actual rates of return on ANFA are included in the Waterworks Operating Accounts and published in WSD annual reports. Owing to deficits in the Waterworks Operating Accounts from 1998-99 to 2013-14, the waterworks operation had achieved negative returns on ANFA during the period. Notwithstanding such negative returns, the Government had continued to adopt positive target rates of return on ANFA from 1998-99 to 2013-14 (see Figure 3).

Figure 3

Target and actual rates of return on ANFA (1996-97 to 2013-14)



Source: WSD records

No disclosure of target return on ANFA included in the unit production cost

4.14 Audit examination revealed that the WSD had adopted the following computation in arriving at the full and net unit production costs of fresh water:

(a) Full unit production cost:

Operating expenses of supply of fresh water plus target return on ANFA then divided by units of metered-water consumption

(b) Net unit production cost:

Full unit production cost *less* unit contribution from rates

- 4.15 In 1992, the WSD informed ExCo that net unit production cost of \$4.29 at that time represented the average net cost per unit of water supply after deducting the relevant contribution from rates (see Note 14 to para. 4.2). Audit noted that the net unit production cost of \$4.29 had included a target return on ANFA.
- 4.16 Furthermore, in the Report of the Subcommittee to study the Waterworks (Amendment) Regulation 1995 compiled by LegCo Secretariat, it was stated that the net production cost in 1994-95 was \$4.86 per m³ of fresh water supply. Audit also noted that this net unit production cost had included a target return on ANFA.
- 4.17 Audit noted that, under the Government's policy, the waterworks operation should achieve a target return on ANFA (see para. 4.10). Accordingly, the WSD had included such a target return in the computation of the net unit production cost.
- 4.18 Moreover, Audit noted that the WSD had not disclosed the amount of target return on ANFA included in the production costs. As revealed in WSD records, for 2013-14:

Implementation of government policy on water charges

- (a) the full unit production cost (inclusive of target return on ANFA of \$2.61) was \$14.53 (see Appendix F); and
- (b) the net unit production cost (inclusive of target return on ANFA of \$2.61) was \$10.76 (after deducting unit rates contribution of \$3.77 see Appendix G).
- 4.19 In March 2015, the WSD informed Audit that:
 - (a) the Government's policy was to assess the financial performance of the waterworks operation as a whole, including the overall cost recovery rate and rate of return on ANFA in the waterworks operating accounts;
 - (b) since 1979, with a view to achieving the target rate of return on ANFA for the Waterworks Operating Accounts as a whole in accordance with the Government's policy, the water tariffs for domestic consumers in different tiers had been proposed to increase on a uniform rate basis. With the passage of time and change of situations, the water tariffs would be different from the net and full unit production costs; and
 - (c) in 1986, the WAC agreed that, following a change in the capital financing structure (from loan capital to equity capital), the notional revenue from the Government in respect of free water allowance to domestic consumers would be more realistically assessed on the basis of production cost plus an expected return on ANFA rather than on production cost plus interest on government loan. Accordingly, the WSD had included the target return on ANFA in calculating the net unit production cost in the submission to ExCo.
- 4.20 In Audit's view, as the net unit production cost and full unit production cost are significant factors in determining the water tariffs (see para. 4.3(a)(ii) and (iii), and (b)(i) and (iii)), the WSD needs to publish such cost information in its annual reports and inform the public that the costs have included a target return on ANFA.

No disclosure of quantity of water supply for calculating unit production cost

- 4.21 In April 2014, in response to a question of a LegCo Member during examination of the Estimates of Expenditure 2014-15 relating to the proposed construction of a desalination plant (see paras. 2.23 to 2.32), the WSD said that the estimated unit cost of fresh water produced (Note 19):
 - (a) at 2012-13 price level from desalination was \$12; and
 - (b) at 2013-14 price level from:
 - (i) locally collected fresh water was \$4.2; and
 - (ii) DJ water was \$8.8.
- 4.22 Audit noted that the \$4.2 and \$8.8 unit costs were calculated based on the quantity of total fresh water supply before treatment (933 Mm³ in 2013 see Figure 1 in para. 1.2). In March 2015, the WSD informed Audit that:
 - (a) the unit costs were calculated based on the total quantity of fresh water before treatment because they represented the resources consumed in producing one unit of fresh water; and
 - (b) to be consistent with its methodology adopted since 1979, the WSD had used the metered-water quantity for calculating the net and full unit costs.

Note 19: The WSD provided similar information to the Panel on Development in April 2012 and March 2013.

4.23 However, Audit noted that the WSD had used the lower metered-water quantity for calculating the net and full unit production costs for water-tariff setting purposes. Given the 32% difference (see para. 1.3) in water quantities between that of fresh water before treatment and the metered-water quantity, the WSD needs to publish in its annual reports the different bases of calculating unit water production costs.

Government's policy to discourage extravagant and wasteful water use not achieved

- 4.24 According to the Government's charging basis submitted to ExCo in 1992, the charging rate for the fourth tier for domestic consumers in the water tariff review proposal should be approximately 40% above the third tier (i.e. 40% above the full production cost). The purpose was to discourage extravagant and wasteful use of water above the level necessary to maintain a reasonable standard of living.
- 4.25 According to the WSD's records, the full unit production cost in 2013-14 was \$14.53 (see Appendix F). Accordingly, if the "40% above the full production cost" charging basis was to be adopted for the fourth tier for domestic consumers, the water tariff should have been \$20.34 $/m^3$ vis-à-vis the current tariff of \$9.05 $/m^3$.
- 4.26 In this connection, Audit noted that the per capita domestic water consumption in Hong Kong is around 130 litres per day, which is 18% higher than the world average of 110 litres per day (Note 20). In Audit's view, the WSD needs to take into account the Government's policy on discouraging extravagant and wasteful use of water in reviewing water tariffs in future.

Note 20: The world daily per capita water consumption is published in the WSD's annual reports and water bills.

No revision of free water quantity to account for reduction in average household size

- 4.27 Under the four-tier water tariff system, to provide the minimum quantity of water required for health and hygiene, and by reference to the average household size in public housing, since 1995, the first 12 m³ of fresh water has been supplied free of charge for a domestic water account in a four-month period, the net production cost of which is met by the Government (see para. 4.3(a)(i)). Similarly, since 1981, the first 30 m³ of fresh water supply for flushing in a four-month period has also been supplied free of charge, the cost of which is met wholly from contribution from government rates (see para. 4.3(d)(i)).
- 4.28 However, Audit noted that, according to the Housing Department, the average household size in public housing had decreased from 4.6 persons in 1981 to 3.7 persons in 1995, and further decreased to 2.8 persons in 2013. Taking into account the reduction in the average household size, in 2013, the quantity of free fresh water (First tier) for a domestic water account in a four-month period should have been 9.1 m³ (12 m³ \times 2.8 \div 3.7), which is 24% less than 12 m³, and the quantity of free fresh water for flushing in a four-month period should have been 18.3 m³ (30 m³ \times 2.8 \div 4.6), which is 39% less than 30 m³.
- 4.29 In Audit's view, the WSD needs to take into account the reduction in the average household size in public housing, and the latest minimum quantity of water required for meeting the health and hygiene standard, in reviewing the water-tariff system in future.

LegCo Members' views on water tariffs

4.30 In examining the Waterworks (Amendment) Regulation 1995 in February 1995, some LegCo Members expressed the view that water charges levied on the commercial sector should be calculated on a commercial basis (i.e. based on cost recovery and a reasonable return rate), and any future increases in domestic water charges should be fixed on the basis of not exceeding the operating cost (i.e. without a commercial return). In Audit's view, the WSD needs to take into account LegCo Members' above views in reviewing water tariffs in future.

Audit recommendations

- 4.31 Audit has recommended that the Director of Water Supplies should:
 - (a) publish information in WSD annual reports showing that:
 - (i) the net and full fresh-water unit production costs have included a target return on ANFA; and
 - (ii) the calculation of the net and full fresh-water unit production costs for charging purposes is based on the quantity of metered fresh water consumed; and
 - (b) in reviewing water tariffs in future, in collaboration with the Secretary for Development, take into account:
 - (i) the Government's policy on discouraging extravagant and wasteful use of water;
 - (ii) the reduction in the average household size in public housing and the latest minimum quantity of water required for meeting the health and hygiene standard; and
 - (iii) some LegCo Members' views that water charges levied on the commercial sector should be calculated on a commercial basis, and any future increases in domestic water charges should be fixed on the basis of not exceeding the operating cost.

Response from the Government

- 4.32 The Director of Water Supplies agrees with the audit recommendations in paragraph 4.31. He has said that:
 - (a) regarding paragraph 4.31(a), the WSD has stated the quantities of fresh water before treatment and metered fresh water consumed in the annual reports. The WSD will make clear in the annual reports the relevance of the net and full fresh-water unit production costs in setting water charges; and
 - (b) regarding paragraph 4.31(b), the WSD commenced a review of water tariffs in 2014. The review will take into account the factors stated in (i) to (iii) of the paragraph.
- 4.33 The Secretary for Development agrees with the audit recommendations in paragraph 4.31(b).

PART 5: WAY FORWARD

5.1 This PART outlines the major audit observations and examines the way forward.

Water supply management

This audit reveals that the WSD needs to expedite actions in using reclaimed water for flushing, and in implementing the IRTS and the project for improving four high-priority catchwater systems. Early completion of these initiatives would contribute to an increase in supply of fresh water locally. Audit also notes that, owing to decreases in water-demand forecasts in coming years up to 2029, the WSD needs to closely monitor the supply of fresh water from GD Province and the proposed desalination plant.

Water demand management

This audit also reveals that the WSD needs to expedite actions to complete the water-efficiency audit on the CSD and issue related best-practice guidelines to it, and to complete works for supplying seawater for flushing to buildings at Pok Fu Lam. Early completion of these initiatives would also contribute to a reduction in demand for fresh water.

Implementation of government policy on water charges

5.4 The waterworks operating accounts had shown deficits averaging \$988 million per year for the period from 2011-12 to 2013-14. The WSD needs to conduct a review of water tariffs, and in particular taking into account the Government's policy of discouraging extravagant and wasteful water use, and some LegCo Members' view that domestic water charges should be fixed on the basis of not exceeding the operating cost.

Way forward

High per capita domestic water consumption

Audit noted that, despite the implementation of various water-saving initiatives by the WSD in recent years, metered fresh water consumption had increased from 613 Mm³ in 2004 to 638 Mm³ in 2013 (a 4.1% increase), and the daily per capita domestic water consumption had been around 130 litres from 2009 to 2014, which was 18% higher than the world average of 110 litres. In this connection, the WSD has set a target of achieving 10 litres of water saving per capita per day. However, no target date has been set for achieving the water-saving target. In Audit's view, the WSD needs to consider setting a target date for the purpose.

Government's policy not achieved due to freezing of water tariffs

- 5.6 Since the freezing of water tariffs in 1995, the waterworks operating cost has increased significantly, albeit being compensated partly by the increase in contribution from rates. Consequently, the Government's policy objectives on the waterworks operation to recover the cost and achieve a target return on ANFA have not been achieved.
- 5.7 In Audit's view, the WSD, in collaboration with the DEVB, needs to formulate a water-tariff-revision plan for achieving the Government's policy objectives on water charges.

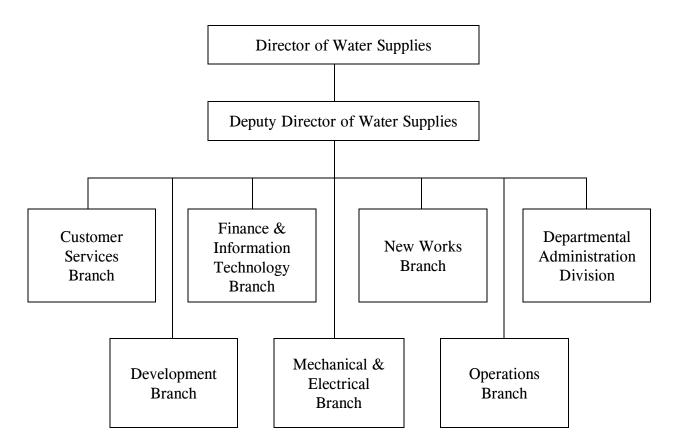
Audit recommendations

- 5.8 Audit has *recommended* that the Director of Water Supplies should:
 - (a) consider setting a target date for achieving 10 litres of water saving per capita per day; and
 - (b) in collaboration with the Secretary for Development, formulate a water-tariff-revision plan for achieving the Government's policy objectives on water charges.

Response from the Government

5.9 The Director of Water Supplies agrees with the audit recommendations in paragraph 5.8 and the Secretary for Development agrees with the audit recommendation in paragraph 5.8 (b).

Water Supplies Department Organisation chart (February 2015)



Source: WSD records

(paras. 2.28, 2.30 and 2.31(b) refer)

Water-demand forecasts (2021 to 2029)

	Water-demand forecasts 2010 2013			Decreases in water-demand forecasts between 2010 and 2013		Estimated water deficit based on 2013 water-demand forecasts (Note 3)	
Year		Upper- bound (Note 1)	Lower- bound (Note 2)	Upper- bound	Lower- bound	Upper- bound	Lower- bound
	(a)	(b)	(c)	$(\mathbf{d}) = (\mathbf{a}) - (\mathbf{b})$	(e) = (a) - (c)	(f)	(g)
	(Mm ³)	(Mm ³)	(Mm ³)	(Mm ³)	(Mm³)	(Mm ³)	(Mm ³)
2021	991	985	959	6	32	33	7
2022	1,007	999	970	8	37	47	18
2023	1,022	1,013	981	9	41	61	29
2024	1,040	1,029	993	11	47	77	41
2025	1,053	1,040	1,001	13	52	88	49
2026	1,069	1,053	1,012	16	57	101	60
2027	1,085	1,067	1,022	18	63	115	70
2028	1,105	1,084	1,035	21	70	132	83
2029	1,118	1,094	1,042	24	76	142	90

Source: WSD records and Audit analysis

Note 1: The upper-bound demand estimate was based on the assumption that the per capita consumption would grow at an annual rate of 0.5%.

Note 2: The lower-bound demand estimate was based on the assumption that the growth of the per capita consumption would be contained by water conservation measures and other factors such as the decreasing trend of household size.

Note 3: The calculation of estimated water deficit is based on annual local water resources of 132 Mm³ and DJ water supply of 820 Mm³. Under the Supply Agreement, GD Province would allocate up to an ultimate annual quantity of 1,100 Mm³ of fresh water to Hong Kong. However, according to the WSD, the timing of the supply in excess of 820 Mm³ and the price of such quantity are subject to future negotiation.

Water conservation education programmes and promotion campaigns (September 2009 to December 2014)

	Programme/campaign	No. of organisations participated	No. of participants
1.	School Roadshow	443	134,970
2.	Water Conservation Ambassadors Selection Scheme (Note 1)	180	20,661
3.	Visit to Water Resources Education Centre	512	16,034
4.	School Water Audit (Note 2)	62	2,799
5.	Water Conservation Design Competition	25	55
6.	Distribution of multi-lingual Posters and Leaflets for Domestic Helpers	295	N/A
7.	Distribution of Teaching Kit for Liberal Studies "Water: Learn and Conserve"	About 500	N/A
8.	Water Conservation Competition — Creative Water Saving Ideas to Share with Every Home	28	785
9.	"Let's Save Water" Cap Design Competition	159	10,889
10.	"Save Water • Cherish the World" (a) Roving Exhibition	(a) 77	(a) around 400,000 households
	(b) Mobile Showroom	(b) 183	(b) around 51,000 visitors
11.	"All About H ₂ O" Lecture Series	12	2,097
12.	"Cherish Water Resources" Waterworks Installations Drawing Competition	102	809

	Programme/campaign	No. of organisations participated	No. of participants
13.	"Let's Save 10L Water" Campaign	240	126,178 households
14.	Installation of Flow Controllers at Selected Housing Estates	16	13,388 households
15.	Water Conservation Forum for Hotel and Catering Industry	78	200

Source: WSD records

Note 1: The WSD appoints students as Water Conservation Ambassadors to help promote water conservation. As of December 2014, there were 2,200 Water Conservation Ambassadors.

Note 2: The WSD provides teaching kits to schools for conducting school water audits to promote water conservation. Participating students are tasked to find out water consumption in their schools and propose suitable means to save water.

Major best-practice guidelines for achieving water efficiency at LCSD facilities

Best practice guidelines (general) Enhance staff awareness on water conservation (b) Appoint designated staff to manage and oversee efficient use of water (c) Conduct regular water-efficiency audits (d) Promote the water-saving message to visitors through prominent posters (e) Replace aged devices with Water Efficiency Labelling Scheme accredited appliances (f) Switch from fresh water supply to seawater for flushing (g) Replace cyclic urinals by sensor-flush type (h) Use high-pressure and low-flow jet instead of hose for cleansing Best practice guidelines for parks *Irrigation* Use automatic timer or moisture-sensor-controlled system (j) Select vegetation requiring less water (k) Consider rainwater harvesting as an alternative source of water for irrigation Water features Check for and rectify equipment failure to avoid continuous water replenishment (m) Control water quality by using appropriate filter system instead of regular water replenishment Best practice guidelines for swimming pools Pool replenishment and filtration (n) Review the effectiveness of filtration plant and backwash frequency to enhance water efficiency (o) Install pool water circulation system where appropriate to avoid direct discharge of overflow to the sewerage system

Source: LCSD records

(p) Reuse of backwash water for flushing

Waterworks Operating Accounts (2009-10 to 2012-13)

Particulars	2009-10 \$ million	2010-11 \$ million	2011-12 \$ million	2012-13 \$ million
Revenue				
Water charges	2,475.8	2,463.9	2,502.6	2,527.2
Contribution from rates	1,493.3	1,343.2	1,458.1	1,680.4
Government contribution to cover rates concessions	1,277.7	1,349.1	1,489.3	1,880.6
Government contribution relating to free water allowance to consumers	1,025.5	1,112.8	1,173.4	912.4
Water supply to government establishments	150.0	163.2	154.5	156.2
Fees, licences and reimbursable works	18.6	18.8	24.2	25.1
Interest from deposits	2.1	3.5	4.8	5.9
Total revenue (a)	6,443.0	6,454.5	6,806.9	7,187.8
Expenditure				
Cost of DJ water	3,010.0	3,200.0	3,397.1	3,594.5
Operating and administration expenses	1,589.3	1,635.6	1,680.3	1,698.3
Staff costs	1,303.2	1,300.4	1,401.3	1,486.0
Depreciation	1,189.6	1,273.8	1,353.5	1,416.7
Total expenditure (b)	7,092.1	7,409.8	7,832.2	8,195.5
Deficit $(c) = (a) - (b)$	(649.1)	(955.3)	(1,025.3)	(1,007.7)
Return on ANFA				
ANFA (d)	\$38,464.1 million	\$41,352.8 million	\$44,235.0 million	\$46,941.6 million
Target rate of return on ANFA (e)	6.5%	6.5%	6.5%	3.4%
Actual rate of return on ANFA $(f) = (c) \div (d) \times 100\%$	(1.7%)	(2.3%)	(2.3%)	(2.1%)

Source: WSD records

Fresh water net and full unit production costs (2013-14)

(a)	Total	operating expenditure	\$8,561.5 million
	Less:	Expenditure not related to fresh water production	
		Seawater	\$942.3 million
		Others	\$22.7 million
(b)	Expen	diture of fresh water production	\$7,596.5 million
(c)	Meter	ed water consumption (Note)	637.3 Mm ³
(d)	Full u	nit production cost (d) = (b) \div (c)	\$11.92 /m ³
(e)	Target	t return on ANFA	\$2.61 /m ³
(f)		nit production cost $(f) = (d) + (e)$ sive of target return on ANFA)	\$14.53 /m ³
	Less:	Unit contribution from rates	$3.77 / m^3$
(g)	Net ur	nit production cost	\$10.76 /m ³

Source: WSD records

Note: This sum is slightly different from the related sum in Figure 1 in paragraph 1.2 because the former related to April 2013 to March 2014 whereas the latter related to January to December 2014.

Rates contribution per unit of fresh water supply (2013-14)

Particulars	
Total amount of rates contribution and government contribution to cover rates concessions	\$3,970.6 million
Less:	
Seawater processing cost	\$942.3 million
Target return on ANFA for supplying seawater	\$375.7 million
Amount of rates contribution to meet financial deficit of supplying fresh water for flushing (Note 1)	\$492.3 million
Target return on ANFA for supplying fresh water for flushing	\$124.0 million
Balance (a)	\$2,036.3 million
Related water consumption for calculating amount of rates contribution per m³ of water supply	
Water consumption for domestic uses	343.4 Mm ³
Water consumption for general trade purposes (Note 2)	197.1 Mm³
Sub-total (b)	540.5 Mm ³
Amount of rates contribution per m^3 of water supply (c) = (a) \div (b)	\$3.77 /m ³

Source: WSD records

Note 1: As approved by ExCo, for determining the water tariff purposes, the financial deficit of supplying fresh water for flushing (related water supply cost less related income received) should be met wholly from contribution from government rates.

Note 2: According to the WSD, water consumption by the other non-domestic sectors is not included in the calculation because they do not pay any government rates.

Appendix H

Acronyms and abbreviations

ANFA Average Net Fixed Assets

ArchSD Architectural Services Department

Audit Audit Commission

CORs Controlling Officer's Reports

CSD Correctional Services Department

CWRF Capital Works Reserve Fund

DEVB Development Bureau

DJ Dongjiang

DSD Drainage Services Department

EMSD Electrical and Mechanical Services Department

ExCo Executive Council

FC Finance Committee

FEHD Food and Environmental Hygiene Department

FSTB Financial Services and the Treasury Bureau

GD Guangdong

IRTS Inter-reservoirs Transfer Scheme

km kilometres

LCSD Leisure and Cultural Services Department

LegCo Legislative Council

m³ Cubic metres

Mm³ Million cubic metres

NENT Northeast New Territories

TWM Total Water Management

WAC Waterworks Accounts Committee

WSD Water Supplies Department

CHAPTER 5

Home Affairs Bureau

Hong Kong Sports Institute Limited

Audit Commission Hong Kong 1 April 2015 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. 64 of the Director of Audit contains 8 Chapters which are available on our website at http://www.aud.gov.hk

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HONG KONG SPORTS INSTITUTE LIMITED

Contents

	Paragraph
EXECUTIVE SUMMARY	
PART 1: INTRODUCTION	1.1 - 1.12
Audit review	1.13
Acknowledgement	1.14
PART 2: ELITE ATHLETE TRAINING AND SUPPORT	2.1 - 2.10
Athletes' training attendance	2.11 - 2.16
Audit recommendations	2.17
Response from the HKSI	2.18
Provision of coaches	2.19 - 2.22
Audit recommendations	2.23
Response from the HKSI	2.24
PART 3: GOVERNANCE AND GOVERNMENT MONITORING	3.1 - 3.5
Board and committee proceedings	3.6 - 3.24
Audit recommendations	3.25 - 3.26
Response from the HKSI	3.27
Response from the Government	3.28 - 3.29

	Paragraph
Internal audit and audit committee	3.30 - 3.32
Audit recommendation	3.33
Response from the HKSI	3.34
Government monitoring	3.35 - 3.44
Audit recommendations	3.45
Response from the Government	3.46
PART 4: ADMINISTRATIVE ISSUES	4.1
Utilisation of sports facilities	4.2 - 4.4
Audit recommendations	4.5 - 4.6
Response from the Government	4.7
Response from the HKSI	4.8
Utilisation of other facilities	4.9 - 4.15
Audit recommendations	4.16
Response from the HKSI	4.17
Electricity charges and energy management	4.18 - 4.21
Audit recommendations	4.22
Response from the HKSI	4.23
Shuttle bus services	4.24 - 4.26
Audit recommendation	4.27
Response from the HKSI	4.28

	Paragraph
Procurement and management of fixed assets	4.29 - 4.34
Audit recommendations	4.35
Response from the HKSI	4.36
Guidelines on official entertainment	4.37 - 4.39
Audit recommendation	4.40
Response from the HKSI	4.41
PART 5: REDEVELOPMENT PROJECT	5.1 - 5.4
Implementation of the project	5.5 - 5.17
Audit recommendations	5.18
Response from the HKSI	5.19
Government provision of land for use by the HKSI	5.20 - 5.29
Audit recommendation	5.30
Response from the Government	5.31 - 5.32
Appendices	Page
A: HKSI: Organisation chart (December 2014)	65
B: Eligibility criteria for direct financial support grants (December 2014)	66
C: Case 2: Handling of conflict of interest in Board/committee meetings	67 - 72
D: Sports facilities of the HKSI (December 2014)	73
E: Other facilities of the HKSI (December 2014)	74
F: Acronyms and abbreviations	75



HONG KONG SPORTS INSTITUTE LIMITED

Executive Summary

1. The Hong Kong Sports Institute Limited (HKSI) is a company limited by guarantee, with all directors nominated by the Secretary for Home Affairs. It is the Government's agent for delivering elite sports training and support under the policy direction of the Home Affairs Bureau (HAB). Before 2012, the HAB provided the HKSI with funding from the Government's General Revenue Account. With effect from 2012, the funding support has been allocated by the HAB from the Elite Athletes Development Fund, which is a Government fund set up with a \$7 billion injection. In 2013-14, the funding support amounted to \$325 million, accounting for 84% of the HKSI's total revenue of \$387 million. The HKSI's total expenditure in 2013-14 was \$369 million. As at 31 December 2014, the HKSI had 328 staff (62 coaching and 266 other staff), providing training and support to 1,051 athletes (279 full-time and 772 part-time athletes). The Audit Commission (Audit) has recently conducted a review of the operation of the HKSI and related issues.

Elite athlete training and support

- 2. Need to improve training attendance records. Elite athletes provided with monthly grants are required to meet the specified minimum training hour requirements. For some HKSI coaching departments, the forms used for recording athletes' training attendance did not include certain essential elements (e.g. the number of hours attended) required under the HKSI's guidelines. The HKSI also needs a more systematic recording system for producing useful training attendance information and identifying athletes with insufficient attendance (paras. 2.13 to 2.16).
- 3. **Difficulties in recruiting coaches.** In determining the required coaching resources, the HKSI is guided by a coach-to-athlete ratio of 1:6, which is the international benchmark for elite training. As at 31 December 2014, it had a permanent establishment of 72 coaches and employed 62 coaches with 10 coach vacancies. This was equivalent to a coach-to-athlete ratio of 1:7, after taking into account coaches not under the permanent establishment (e.g. part-time coaches).

The HKSI had difficulties in recruiting coaches. Audit analysis of the 10 coach vacancies revealed that they had lasted for 1 to 30 months, averaging 15 months (paras. 2.19 to 2.22).

Government monitoring

- 4. Low attendance rates of some directors. The Board is responsible for the management of the HKSI's affairs and business. It has established five standing committees. As at December 2014, there were 19 directors, including a representative each from the HAB and the Leisure and Cultural Services Department (LCSD). Audit analysis of individual directors' attendance at Board/committee meetings from 2010-11 to 2013-14 revealed that the attendance rates of four directors were low, including the two HAB and LCSD representatives. In 2014, there were two cases of inquorate committee meetings (paras. 3.2, 3.3, 3.8 and 3.10).
- 5. Need to improve management of conflicts of interest. The HKSI has adopted a one-tier system for declaration of interests, requiring a director to declare a conflict of interest as and when it arises. As it meets the criteria set in the HAB guidelines, the HKSI needs to consider adopting a two-tier system to also require a director to declare general interests upon joining the Board and annually thereafter. The HKSI's Articles of Association specify strict rules on preventing conflicts of interest, including that a director or officer shall not attend or vote in any meetings or engage in any discussion whereby matters that he is interested in would be considered or discussed. At the Board/committee meetings of 2013 and 2014 when the proposed Secondary Education Programme was discussed, the rules were not strictly followed (paras. 3.14 to 3.19).
- 6. **Need to set up an internal audit function.** Since its establishment in October 2004, the HKSI's annual expenditure had increased significantly from \$160 million in 2005-06 to an estimated amount of \$430 million in 2014-15. However, the HKSI has not established an internal audit function or an audit committee. The setting up of an internal audit function will help the HKSI strengthen its internal control on financial and administrative matters (para. 3.32).

7. Need to enhance Government monitoring of HKSI performance. The HKSI signs a Deed of Undertaking with the HAB annually, accompanied by a budget and a programme of activities, prescribing the performance levels and requirements to be met by the HKSI. According to the Deed of Undertaking, the HKSI undertakes to submit to the HAB a monthly statement of management accounts and a report on the implementation of the programme of activities for each financial year. However, the HKSI submitted the statements of management accounts to the HAB only bi-monthly. It had not submitted reports on the implementation of the programme of activities in recent years. In response to Audit enquiry, the HKSI submitted in January 2015 the relevant reports to the HAB for the four years 2010-11 to 2013-14 in one go (paras. 3.37 to 3.39).

Administrative issues

- 8. Need to enhance monitoring of utilisation of sports facilities. The HKSI's sports facilities are provided mainly for training elite athletes. When there are residual timeslots, other users including National Sports Associations may use some of the facilities for a fee. In 2014, the utilisation rates of the sports facilities ranged from 18% to 83%. The HKSI indicated that the lower utilisation rates were attributed to the redevelopment project. As the redevelopment project is close to completion, Audit considers that the HKSI needs to more closely monitor the utilisation rates of its sports facilities to ensure that they are optimally utilised (paras. 4.2 and 4.3).
- 9. *Electricity accounts not using the most economical tariff.* The HKSI had three high-consumption electricity accounts. Only one account was using the more economical bulk tariff. If the bulk tariff had been selected for the other two accounts, the HKSI could have saved electricity charges of \$1.3 million in 2014. Furthermore, by merging the three accounts into one, the HKSI may be entitled to select the large power tariff with further savings (paras. 4.18 to 4.20).
- 10. Low usage of shuttle bus services. The HKSI engaged a contractor to provide free shuttle bus services for its staff and athletes between its Fo Tan venue and the MTR Tai Wai Station, or the Sha Tin downtown (for lunch). In 2014, the cost was \$0.5 million. With a low usage (2 to 16 users per trip), the average costs per user per trip ranged from \$14 to \$127. Given that it takes five to six minutes to walk from the HKSI to the MTR Fo Tan Station, the HKSI needs to re-examine the justifications and cost-effectiveness of providing the services (paras. 4.24 to 4.26).

Redevelopment project

- 11. **Delay in project completion.** In 2007 and 2008, the Finance Committee of the Legislative Council approved a total funding of \$1,760 million for a redevelopment project to upgrade and provide additional facilities at the HKSI's Fo Tan venue, targeted for completion in the third quarter of 2011. The HKSI's estimate in February 2015 indicated that the overall cost of the project would be within the approved project estimate. The project was substantially completed in December 2014, but the rowing boat launching facilities had not been constructed and there was no timetable for completion. The delay of over three years in project completion resulted in a delay in the HKSI's resumption of normal operations (paras. 5.3 to 5.13).
- 12. Need to review lease arrangements for the HKSI. For the site presently used by the HKSI, the LCSD charges a rent (currently at \$3.96 million a year) based on the commercial income generated by the HKSI from its facilities. This arrangement involves considerable administrative efforts in renewing the tenancy agreement and reviewing the rent level regularly. It is also not commensurate with the Government's long-term support to elite sports through the HKSI. There is merit in exploring other options (paras. 5.26 to 5.29).

Audit recommendations

- 13. Audit recommendations are made in the respective sections of the Audit Report. Only the key ones are highlighted in this Executive Summary. Audit has *recommended* that the HKSI should:
 - (a) improve the attendance recording forms of different coaching departments and develop a more systematic attendance recording system to record and summarise attendance data (para. 2.17);
 - (b) continue to closely monitor the coach vacancies and take effective measures to address the difficulties in recruiting coaches (para. 2.23);

- (c) closely monitor the meeting attendance rates of directors/committee members and liaise with those with low attendance rates or long absence to take appropriate actions (para. 3.25(a) and (b));
- (d) consider adopting a two-tier system for declaration of interests and remind directors/committee members regularly to strictly comply with the rules on prevention of conflicts of interest provided in the HKSI's Articles of Association (para. 3.25(d) and (f));
- (e) set up an internal audit function and an audit committee under the Board to help discharge its functions and duties effectively (para. 3.33);
- (f) continue to monitor the utilisation of its sports facilities to ensure that they are optimally utilised (para. 4.6(a));
- (g) review the charging arrangements of its electricity accounts and select the most economical tariff (para. 4.22(a));
- (h) continue to keep under review the provision of shuttle bus services to its staff and athletes (para. 4.27);
- (i) complete the outstanding works of the redevelopment project as soon as possible, particularly the rowing boat launching facilities (para. 5.18(a)); and
- (j) conduct a post-implementation review of the project to identify lessons learnt for application to future projects (para. 5.18(b)).
- 14. Audit has recommended that the Secretary for Home Affairs should:
 - (a) in conjunction with the Director of Leisure and Cultural Services, ensure that their representatives attend all Board/committee meetings as far as possible (para. 3.26(c));
 - (b) remind the HKSI to comply with the requirements of submitting an annual report on the implementation of the programme of activities and monthly statements of management accounts (para. 3.45(a));

- (c) in consultation with the HKSI, work out performance targets on the utilisation rates of the HKSI's sports facilities (para. 4.5); and
- (d) subject to the result of the HAB's review of private recreational lease policy, consider whether there is merit in granting the Fo Tan site to the HKSI for its long-term operations under a private recreational lease at a nominal premium (para. 5.30).

Response from the Government and the HKSI

15. The Secretary for Home Affairs and the Chief Executive, HKSI generally accept the audit recommendations.

PART 1: INTRODUCTION

- 1.1 This PART describes the background to the audit and outlines the audit objectives and scope.
- 1.2 Government's policy and objectives. In 2002, the Government completed a review of its sports development policy and established three core objectives, namely to promote greater community participation in sport, to develop sport at the elite level, and to raise Hong Kong's profile as a centre for international sports events. Underlying these objectives is the view that participation in sport contributes significantly to sound physical and psychological health and provides a basis for social interaction and a sense of belonging to the community.
- 1.3 *Sports Commission.* In 2003, the Government announced its decision to establish a new administrative structure for sports promotion and development. Under the new structure, the then Hong Kong Sports Development Board (Note 1) was dissolved in 2004. In 2005, a new Sports Commission chaired by the Secretary for Home Affairs was established to advise the Government on all matters pertaining to sports development. It is underpinned by three committees, namely the Community Sports Committee, the Elite Sports Committee and the Major Sports Events Committee. The Home Affairs Bureau (HAB) is responsible for formulating and coordinating policies for sports promotion and development in Hong Kong.

Hong Kong Sports Institute Limited

Back in 1982, the former Jubilee Sports Centre was established by the Hong Kong Jockey Club (HKJC). The Centre was initially managed by the HKJC and then by an independent board. It was renamed as the Hong Kong Sports Institute in 1991. In 1994, the Institute was integrated with the Hong Kong Sports Development Board. In 2004, after the dissolution of the Board (see para. 1.3), the

Note 1: The Board was established in 1990 under the Hong Kong Sports Development Board Ordinance (Cap. 1149) for the promotion and development of sports and physical recreation.

Hong Kong Sports Institute Limited (HKSI) was incorporated in Hong Kong under the Companies Ordinance (Cap. 622) as a company limited by guarantee to manage the Institute.

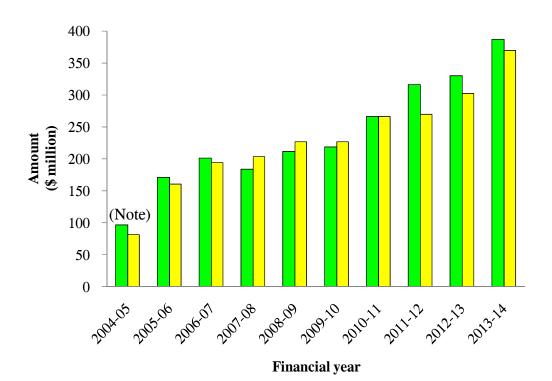
- 1.5 The HKSI is the Government's agent responsible for delivering elite sports training and support under the policy direction of the HAB. Its aim is to provide an environment in which sport talent can be identified, nurtured and developed to pursue excellence in sport. It aspires to become the region's elite training systems delivery leader by providing state-of-the-art, evidence-based, elite sports training and athlete support systems resulting in sustainable world-class sports results.
- In order to achieve its aims, the HKSI works in partnership with the Government, the Sports Federation and Olympic Committee of Hong Kong, China (SF&OC) and National Sports Associations (NSAs). The SF&OC is the Olympic Committee for Hong Kong, and is responsible for coordinating the development of local sports organisations and leading the Hong Kong, China Delegation to participate in major international Games (such as the Olympic Games and the Asian Games). NSAs are the local sports governing organisations in their respective disciplines, and are affiliated to the SF&OC and their respective international or Asian federations. NSAs have the objectives of promoting and developing their sports in Hong Kong through different means including organising training programmes and competitions, and fielding athletes to take part in international competitions.
- Before January 2012, the HAB provided the HKSI with funding support allocated from the Government's General Revenue Account. With effect from January 2012, the funding support has been allocated by the HAB from the Elite Athletes Development Fund (EADF). The EADF was established by the Government with the Secretary for Home Affairs Incorporated as the trustee. With the approval of the Finance Committee (FC) of the Legislative Council (LegCo) in July 2011, \$7 billion was injected to the EADF to serve as seed money to generate investment return for providing recurrent funding support to the HKSI. Allocation from the EADF is made after the endorsement of the HKSI's annual plan and budget by the Elite Sports Committee and the Sports Commission. In 2013-14, \$325 million was allocated from the EADF to the HKSI, representing a major portion (84%) of the HKSI's total revenue of \$387 million for the year.

- 1.8 The HKSI is also the trustee of the Hong Kong Jockey Club Elite Athletes Fund. The Fund was established in 1992 with an endowment of \$200 million (contributed by the HKJC) for providing funding support to the HKSI. In 2013-14, \$10 million was provided by the Fund to the HKSI (Note 2).
- The HKSI's governing body is its Board. Directors of the Board are nominated by the Secretary for Home Affairs and appointed for a two-year term. The Board is supported by five standing committees. The Chief Executive of the HKSI is appointed by the Board and is responsible for the day-to-day operation of the HKSI. Under the Chief Executive, there are four divisions and 16 coaching departments. Appendix A shows the organisation structure of the HKSI. As at 31 December 2014, the HKSI had 328 staff, comprising 62 coaching staff and 266 other staff. There were 1,051 scholarship athletes (see para. 2.10), comprising 279 (27%) full-time athletes and 772 (73%) part-time athletes. The total expenditure in 2013-14 was \$369 million, comprising \$285 million (77%) on elite athlete training and \$84 million (23%) on administrative expenses.
- 1.10 Figure 1 shows the HKSI's total income and expenditure for the 10-year period from 2004-05 to 2013-14.

Note 2: The HKSI's other revenue in 2013-14 included a one-off funding of \$21 million from the Sports Aid Foundation Fund administered by the HAB, revenue of \$11 million from Government capital subvention for redevelopment, and revenue of \$10 million from sports courses and letting of sports and meeting facilities.

Figure 1

Total income and expenditure of the HKSI (2004-05 to 2013-14)



Legend: Total income

Total expenditure

Source: HKSI records

Note: The 2004-05 financial year covered the six-month period from 1 October 2004 (date of commencement of

operation) to 31 March 2005.

1.11 The HKSI is currently undertaking a redevelopment project. The project was started in 2008 and is at its final stage. It aims to provide world class facilities to elite athletes in Hong Kong. It is a public works project funded by the Government involving a capital subvention of about \$1,760 million.

Recent sports achievements

1.12 In 2014, Hong Kong athletes won 42 medals at the Asian Games and 44 medals at the Asian Para Games, both breaking records. The remarkable achievements of the athletes have won praises from the Chief Executive of the Hong Kong Special Administrative Region and the community. Table 1 shows the medals won by Hong Kong athletes at major multi-sport Games between 2008 and 2014.

Table 1

Medals won at major multi-sport Games (2008 to 2014)

Multi sport Comes	No. of medals					
Multi-sport Games	Gold	Silver	Bronze	Total		
2008 Olympic Games	0	0	0	0		
2008 Paralympics	5	3	3	11		
2009 East Asian Games (Note)	26	31	53	110		
2010 Asian Games	8	15	17	40		
2010 Asian Para Games	5	9	14	28		
2012 Olympic Games	0	0	1	1		
2012 Paralympics	3	3	6	12		
2013 East Asian Games	10	16	30	56		
2014 Asian Games	6	12	24	42		
2014 Asian Para Games	10	15	19	44		

Source: HKSI and HAB records

Note: The 2009 East Asian Games was hosted by Hong Kong.

Audit review

- 1.13 In November 2014, the Audit Commission (Audit) commenced a review of the operation of the HKSI and related issues. The review focused on the following areas:
 - (a) elite athlete training and support (PART 2);
 - (b) governance and Government monitoring (PART 3);
 - (c) administrative issues (PART 4); and
 - (d) redevelopment project (PART 5).

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 the HKSI and the HAB during the course of the audit review.

PART 2: ELITE ATHLETE TRAINING AND SUPPORT

- 2.1 This PART examines the HKSI's systems for delivering elite athlete training and support. Audit has identified room for improvement in the following areas:
 - (a) athletes' training attendance (paras. 2.11 to 2.18); and
 - (b) provision of coaches (paras. 2.19 to 2.24).

Elite Vote Support System

- 2.2 The HKSI is the Government's agent for delivering elite athlete training and support. The Government makes use of the Elite Vote Support System (EVSS) in evaluating and selecting high performance sports for support (Note 3). The key elements of the EVSS are as follows:
 - (a) *Four-year support cycle*. Reviews for selecting high performance sports for support are conducted at two-year intervals. Support under the EVSS is for a period of four years. The four-year support cycle aligns with the Olympic Games and the Asian Games cycles, and provides for stable support over a suitable period of time. The support cycle arising from the 2013 review is from April 2013 to March 2017;
 - (b) Generic Scoring Table. The EVSS score is the criterion for selecting high performance sports. The Generic Scoring Table provides an objective base for calculating the EVSS score of a sport, based on the best results of two senior and two junior athletes submitted by the NSA of the sport. The mechanism of including two senior and two junior athletes is to ensure that selected high performance sports can continue to develop; and
 - (c) *Three-tier structure*. The EVSS provides for a three-tier structure, and the three tiers have been renamed Tier A*, Tier A and Tier B since April 2013.
- **Note 3:** The EVSS has been formulated with the advice of the Elite Sports Committee under the Sports Commission and implemented since 2005, and was reviewed in 2013.

2.3 Table 2 shows the three-tier structure and the high performance sports in different tiers as at December 2014.

Table 2

Three-tier structure of EVSS and high performance sports (December 2014)

Tier	Criteria	Level of support provided by HKSI	High performance sports	
A* (Elite sports — Note)	Tier A sports with athletes who consistently perform at the highest level, with potential to achieve medals at Olympic Games	Enhanced support (additional resources for enhancing preparedness for major Games in addition to full support)	1 2 3 4	Badminton Cycling Table tennis Windsurfing
A (Elite sports — Note)	Sports with score of 9 points or above and that are current or recent Olympic or Asian Games sports	1 0		Athletics Billiard sports Fencing Gymnastics Karatedo Rowing Rugby sevens Squash Swimming Tenpin bowling Triathlon Wushu
B (Non-elite sports)	Sports with score of 6.5 points or above and that are not Tier A sports	Basic support (worked out by HKSI with respective NSAs depending on individual circumstances)	1 2 3 4 5 6 7 8 9 10	Dance sports Equestrian Judo Lawn bowls Mountaineering Orienteering Roller sports Sailing Skating Tennis

Source: HKSI records

Note: Tier A* sports are Tier A sports with enhanced support. As at December 2014, there were

16 Tier A sports (including 4 Tier A* sports), which are commonly known as elite sports.

Elite athlete training system

- In Hong Kong, it is mainly the responsibility of NSAs to identify and train young athletes with the potential to reach the highest level. The HKSI is primarily responsible for providing elite sports training and systematic support to elite athletes admitted to its Elite Training Programme (see para. 2.5). The HKSI's elite athlete training system is an athlete-centred system that recognises the interaction of biological, psychological and socio-cultural factors impacting athlete development. It aims to provide centralised, integrated support systems targeting all aspects of the athletes' physiological, psychological, social support and personal development needs.
- The HKSI's Elite Training Programme covers all Tier A sports. Under the Programme, the HKSI provides training to elite athletes and potential athletes (see para. 2.10) of Tier A sports. For each Tier A sport, a coaching department is set up. Each coaching department is headed by a Head Coach, assisted by a number of coaches and assistant coaches. The High Performance Management Division is responsible for overseeing the coaching departments' performance in conducting their training programmes. The Division is also responsible for providing other support to athletes (e.g. educational support and personal development programmes). The Elite Training Science and Technology Division is responsible for providing support relating to sports nutrition, medicine, psychology, etc.
- 2.6 For each financial year, the coaching departments compile annual training programmes (consisting of training camps and competitions) and budgets for their sports. They are submitted to the High Performance Management Division for coordinating and incorporating into an annual plan and budget for approval by the Board.

Direct financial support to athletes

2.7 The HKSI provides direct financial support grants to elite athletes. The purpose is for them to have a more financially stable environment to undergo training and compete in major Games. Appendix B shows the eligibility criteria for the grants. There are four types of grants, as follows:

- (a) *Elite Training Grants*. The grants are provided to elite athletes of Tier A sports under the HKSI's Elite Training Programme, and elite athletes of secondary disciplines (see Note 2 to Appendix B) of Tier A sports or non-Tier A sports under the Individual Athletes Support Scheme (see (b) below);
- (b) *Individual Athletes Support Scheme grants*. The grants are programme grants. They are provided to the NSAs concerned to conduct training programmes for elite athletes (receiving Elite Training Grants) of secondary disciplines of Tier A sports or non-Tier A sports (see (a));
- (c) *Sports Aid Grants*. The grants are provided to elite athletes not under the HKSI's Elite Training Programme or Individual Athletes Support Scheme; and
- (d) Sports Aid Grants for Athletes with Disabilities. The grants are provided to elite athletes under the training programmes of the two NSAs concerned, i.e. the Hong Kong Paralympic Committee and Sports Association for the Physically Disabled, and the Hong Kong Sports Association for the Mentally Handicapped.
- The HKSI invites NSAs to nominate elite athletes for the four types of grants once a year around October/November. Existing grant recipients have to make new applications each year, which have to be endorsed by the NSAs concerned. The High Performance Management Division processes applications according to laid-down eligibility criteria (mainly based on achievements in international/local competitions), and makes grant recommendations for approval by the Board. Grant recipients are required to enter into grant agreements with the HKSI, which include terms such as the required number of training hours a week. Table 3 shows a summary of direct financial support grants paid in 2013-14. Figure 2 shows the number of grant recipients and the amount of grants paid during the seven-year period from 2007-08 to 2013-14.

Table 3

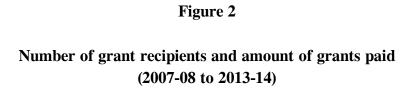
Direct financial support grants paid (2013-14)

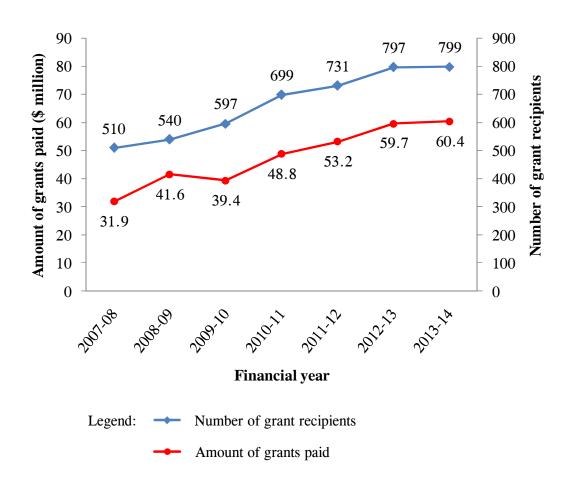
Type of grant	No. of athletes	Grant payment (\$ million)
Elite Training Grants	693	49.0 (81%)
Sports Aid Grants	59	2.7 (5%)
Sports Aid Grants for Athletes with Disabilities	47	2.5 (4%)
Sub-total	799	54.2 (90%)
Individual Athletes Support Scheme grants	(Note)	6.2 (10%)
Total	799	60.4 (100%)

Source: HKSI records

Note: The grants were paid to NSAs for providing training to 68 athletes (receiving Elite

Training Grants) of secondary disciplines of Tier A sports or non-Tier A sports.





Source: HKSI records

- 2.9 The HKSI also provides various types of support to grant recipients, e.g. hostel, meals, education subsidies, tutorial support, and personal development programmes. The types of support available to grant recipients vary according to their types of grants.
- 2.10 In addition to elite athletes who have attained recognised sports achievements, the HKSI also trains athletes who have been recommended for enrolment as potential athletes by Head Coaches. Such athletes are identified and selected by NSAs. The HKSI also provides, on request, a screening service to NSAs and assist them in their talent identification process using scientific methods.

Potential athletes (of Tier A sports) receive training under the HKSI's Elite Training Programme, though they are not given grants. Recipients of Elite Training Grants, recipients of Sports Aid Grants for Athletes with Disabilities, and potential athletes under the HKSI's Elite Training Programme are collectively referred to as the HKSI's scholarship athletes.

Athletes' training attendance

- Athletes enhance their performance through attending training and participating in competitions. Attendance at training sessions is important to improve their skills and enhance their chance of winning medals in competitions. For each Tier A sport, the coaching department concerned is required to keep proper attendance records of athletes under the Elite Training Programme (i.e. athletes receiving Elite Training Grants and potential athletes). Generally speaking:
 - (a) sport-specific training is normally a group or individual activity under the direction of coaches;
 - (b) full-time athletes and part-time athletes of different sports have different training schedules; and
 - (c) sport-specific training schedules are generally preset. However, different sports and different athletes within those sports have differing individual needs and receive tailor-made specific training as necessary.
- 2.12 According to the HKSI, training of athletes comprises not just the sport-specific elements, but also other modalities such as strength and conditioning, sports science (e.g. biochemistry, biomechanics, psychology, nutrition and physiology), sports medicine, prehabilitation, rehabilitation and recovery. All these form part of the overall training.
- 2.13 For Elite Training Grant recipients, a minimum training requirement in terms of the required number of training hours a week is specified in their grant agreements. The minimum requirement is 25 hours a week for full-time athletes, and 15 hours a week for part-time athletes. In case an athlete cannot fulfil his training requirement of a month, the coaching department has to inform the High Performance Management Division and the athlete's monthly grant may be forfeited.

Need to improve training attendance records

According to the HKSI's laid-down guidelines, coaching departments are allowed to design their forms for recording the sport-specific training. Nevertheless, such forms are required to include a number of essential elements (e.g. the date and time of training). Audit examined the attendance recording forms of seven selected departments to see whether three essential elements (i.e. the time of training, the number of hours attended and the athlete's signature) had been duly included. Audit noted that some of the three elements were missing (see Table 4), and the extent of details recorded varied among the seven selected departments.

Table 4

Audit examination of attendance recording forms
(December 2014)

Coaching department selected for examination	Athlete's signature	Time of training	No. of hours attended	Remarks
Fencing	Yes	Yes	Yes	_
Karatedo	Yes	Yes	Yes	_
Tenpin bowling	Yes	Yes	No	_
Table tennis	Yes	No	No	_
Cycling	No	No	No	Only a "tick" to
Badminton	No	No	No	indicate an athlete's presence on a
Wushu	No	No	No	training day

Source: Audit analysis of HKSI records

- 2.15 Upon enquiry, the HKSI informed Audit in March 2015 that:
 - (a) training records existed in multiple documents, as each training modality (see para. 2.12) kept athletes' records; and

- (b) coaches used the sport-specific training schedule documents, in addition to the other records from the other training modalities, to create the summary attendance records.
- 2.16 In Audit's view, the HKSI needs to consider:
 - (a) improving the attendance recording forms of different coaching departments to ensure that they include the essential elements, particularly the number of training hours attended, which is essential for determining whether an athlete has fulfilled his training requirement for his monthly grants; and
 - (b) developing a more systematic attendance recording system to record and summarise attendance data for management review. Such a system can calculate the weekly and monthly totals of training hours, produce useful attendance information and identify athletes with insufficient attendance for early follow-up actions.

Audit recommendations

- 2.17 Audit has recommended that the HKSI should:
 - (a) improve the attendance recording forms of different coaching departments to ensure that they include the essential elements, particularly the number of training hours attended; and
 - (b) develop a more systematic attendance recording system to record and summarise attendance data.

Response from the HKSI

2.18 The Chief Executive, HKSI accepts the audit recommendations. She has said that the HKSI will improve the attendance recording forms and attendance recording system, where appropriate.

Provision of coaches

- 2.19 The HKSI is guided by the following principles in determining the required coaching resources:
 - (a) in general, the coach-to-athlete ratio needs to be maintained at approximately 1:6, which is the international benchmark for elite training. For certain sports like water sports (rowing and windsurfing), cycling, triathlon and gymnastics, to ensure training safety, the ratio may need to be enhanced to approximately 1:4;
 - (b) the Head Coach of a coaching department functions as the programme director to oversee the planning, implementation and evaluation of the training programme of the department, in collaboration with the NSA concerned;
 - (c) the three-grade structure, comprising Head Coaches, Coaches and Assistant Coaches, provides a structure which can facilitate succession planning and ensures a pipeline of local high performance coaches;
 - (d) besides coaches under the permanent establishment, programme coaches funded by the Elite Training Programme budget can also be used. The use of programme coaches allows for strategic focusing and fine-tuning as necessary (e.g. when preparing for major Games, strengthening specific sports disciplines, and responding to changes in international sports environment). Programme coaches are employed on a one-year contract basis (while coaches under the permanent establishment are on a two-year contract basis), and the posts are subject to annual review; and
 - (e) part-time coaches may also be employed to supplement the coaching resources.
- 2.20 Table 5 shows the provision of coaches under the permanent establishment as at 31 December 2014.

Table 5

Provision of coaches under permanent establishment
(31 December 2014)

Grade	Establishment	Strength	Vacancy
	(a)	(b)	(c) = (a) - (b)
	(No.)	(No.)	(No.)
Head Coach	16	14	2
Coach	28	27	1
Assistant Coach	28	21	7
Total	72	62	10

Source: HKSI records

Remarks: There were 629 athletes under the Elite Training Programme (excluding 224 potential athletes).

As shown in Table 5, as at 31 December 2014, the HKSI had a permanent establishment of 72 coaches and actually employed 62 coaches (i.e. 10 coach vacancies). Including programme coaches (a total of 15) and part-time coaches (equivalent to 12 full-time coaches), the total number of coaches actually employed was 89, equivalent to an average coach-to-athlete ratio of 1:7. If the HKSI is able to recruit 10 coaches to fill up the vacancies, it will have a total of 99 coaches, achieving an average coach-to-athlete ratio of 1:6 (see para. 2.19(a)).

Difficulties in recruiting coaches

Audit conducted an analysis on how long the 10 vacant coach posts had been vacant. It was noted that 2 posts had been vacant for 1 month and the other 8 posts up to 30 months, with an overall average of 15 months. In response to enquiry, the HKSI explained to Audit in January and March 2015 that:

Elite athlete training and support

- (a) among the 10 vacant coach posts, four were strategically deferred because of the scheduling of the major Games;
- (b) it was not easy to recruit Assistant Coaches for sports like badminton, cycling, table tennis and windsurfing since the market demand for them was high;
- (c) in the past few years, the "weak Dollar" against Euro and Asian currencies had reduced the competitiveness of the HKSI's coach remuneration packages for Assistant Coaches;
- (d) the HKSI was very closely monitoring the coaching situation, and had an annual salary scale review system. The Human Resources Department worked extremely hard to recruit suitable coaches, but elite sport was a highly specialised market and therefore sometimes it was difficult to find best fit candidates; and
- (e) the HKSI recruited coaches in full partnership with the Tier A sport NSAs, which were involved at all stages of recruitment. Ensuring the effective delivery and monitoring of the elite training programmes was a joint effort between the HKSI and the Tier A sport NSAs.

Audit recommendations

- 2.23 Audit has recommended that the HKSI should continue to:
 - (a) closely monitor the coach vacancies; and
 - (b) take effective measures to address the difficulties in recruiting coaches.

Response from the HKSI

2.24 The Chief Executive, HKSI accepts the audit recommendations.

PART 3: GOVERNANCE AND GOVERNMENT MONITORING

- 3.1 This PART examines the following issues relating to the governance and the Government's monitoring of the HKSI. Audit has found room for improvement in the following areas:
 - (a) Board and committee proceedings (paras. 3.6 to 3.29);
 - (b) internal audit and audit committee (paras. 3.30 to 3.34); and
 - (c) Government monitoring (paras. 3.35 to 3.46).

Governance structure

- 3.2 *Membership.* According to the HKSI's Articles of Association:
 - (a) **HKSI Members.** The maximum number of HKSI members is 20. As at December 2014, the HKSI had 12 members nominated by the Secretary for Home Affairs. HKSI members have the right to attend general meetings (both annual and extraordinary); and
 - (b) **Board Directors.** The Board consists of not less than 2 or more than 20 directors. All directors, including the Chairman, are nominated by the Secretary for Home Affairs and appointed by members in general meetings. The directors are appointed initially for two years and are eligible for re-appointment. As at December 2014, there were 19 directors. They included a representative each from the HAB and the Leisure and Cultural Services Department (LCSD), both having one alternate director.
- 3.3 **Board and committees.** The Board as the governing body is responsible for the overall management of the affairs and business of the HKSI. The Board has established five standing committees and two working committees (see Table 6). Members of these committees include directors and non-directors (e.g. sports sector

representatives). The operation of the HKSI's Board/committees is governed by the HKSI's Articles of Association. The Board has appointed a Chief Executive to carry out the day-to-day management of the HKSI.

Table 6

HKSI's committees
(December 2014)

Name of committee	Function				
Standing committees					
Corporate Management Committee	Endorses annual budget and annual financial accounts, and approves/recommends tenders to the Board for approval				
Elite Training and Athletes Affairs Committee	Oversees strategic development and monitors progress of sports programmes of the elite training				
The Hong Kong Jockey Club Elite Athletes Fund Committee of Trustees	Administers the Fund and makes investment policies				
Hong Kong Sports Institute Development Committee	Oversees implementation of the HKSI brand development activities, and monitors all revenue generation activities				
Hong Kong Coaching Committee	Formulates strategies for development of coach education and accreditation programmes				
Working committees					
HKSI Redevelopment Project Steering Committee	Coordinates and oversees the implementation of the redevelopment project of the HKSI				
Athlete Education Advisory Panel	Makes recommendations on the implementation, evaluation and monitoring of the proposed athlete education initiatives				

Source: HKSI records

Best practices for corporate governance

- 3.4 In May 2010, the Efficiency Unit issued the "Guide to Corporate Governance for Subvented Organisations" (hereinafter referred to as the Corporate Governance Guide). It sets out the principles and best practices on corporate governance for organisations receiving Government subventions. The Guide aims to help sustain public trust in organisations which use public funds.
- 3.5 According to the Corporate Governance Guide, officers with oversight responsibilities are obliged to follow the guidelines and broad principles laid down by Government circulars, including in particular:
 - (a) Financial Circular No. 9/2004 regarding guidelines on the management and control of Government funding for subvented organisations; and
 - (b) Circular Memorandum No. 2/2003 issued by the Director of Administration regarding guidelines for the control and monitoring of remuneration practices in respect of senior executives in subvented bodies.

Board and committee proceedings

Scope for improving the overall attendance rates

3.6 The effectiveness of the governing board of an organisation in fulfilling its responsibilities is dependent on its members' knowledge, experience, competence and, in particular, commitment to serving the organisation. Attendance at meetings is a key indicator to reflect the board members' commitment to serving the organisation. Table 7 shows the overall attendance rates of all members at meetings of the HKSI's Board and standing committees for the years 2010-11 to 2013-14.

Table 7

Overall attendance rates at meetings of the Board and standing committees (2010-11 to 2013-14)

Board/Standing committee	2010-11	2011-12	2012-13	2013-14
Board of Directors	70%	73%	82%	74%
Corporate Management Committee	67%	60%	60%	56%
Elite Training and Athletes Affairs Committee	67%	67%	85%	63%
The Hong Kong Jockey Club Elite Athletes Fund Committee of Trustees	83%	92%	100%	100%
Hong Kong Sports Institute Development Committee (Note)	N/A	N/A	67%	75%
Hong Kong Coaching Committee	78%	72%	83%	89%

Source: Audit analysis of HKSI records

Note: The Hong Kong Sports Institute Development Committee was set up in 2012-13 and its first meeting was held in September 2012.

3.7 Table 7 shows that the overall meeting attendance rates for the Corporate Management Committee, decreasing from 67% in 2010-11 to 56% in 2013-14, were the lowest. The overall meeting attendance rates for the Board and the Elite Training and Athletes Affairs Committee, after a noticeable rise in 2012-13, were 74% and 63% respectively in 2013-14.

Low attendance rates of some directors

3.8 Audit analysis of individual directors' attendance rates at Board/committee meetings for the four years 2010-11 to 2013-14 revealed that the attendance rates of four directors were particularly low:

- (a) three directors (Director A, Director B and the LCSD's representative) attended 43% to 50% of the Board meetings during the four-year period. In 2013-14, the LCSD's representative attended only 20% of the Board meetings. Nevertheless, another LCSD officer attended all the meetings as an observer;
- (b) Director A (a director since 2011-12) joined 3 standing committees but only attended 20% to 38% of the meetings. Despite the low attendance at meetings, Director A was re-appointed in April 2013;
- (c) Director B (a director since 2010-11) joined the Corporate Management Committee but did not attend any of the 13 meetings. Despite the low attendance at meetings, Director B was re-appointed in April 2013; and
- (d) in 2013-14, the HAB's representative (as a committee member) attended 1 (25%) of the 4 Corporate Management Committee meetings. Nevertheless, another HAB officer attended all the meetings as an observer.
- 3.9 Audit noted that in nominating directors for re-appointment, the HAB did not seem to have taken into account their attendance rates in Board/committee meetings. For example, Director A and Director B were re-appointed in April 2013 despite their low attendance at meetings.

Risk of inquorate meetings

3.10 Without the benefits of the expertise and experience of members absent from meetings, the effectiveness of the Board/committees in discharging their functions may be undermined. Besides, there is a risk of inquorate meetings. Audit noted two such cases in 2014, i.e. the Corporate Management Committee meeting in September 2014 and the Elite Training and Athletes Affairs Committee meeting in March 2014. Details of the latter case are given below for illustration (Case 1).

Case 1

An inquorate meeting of the Elite Training and Athletes Affairs Committee (March 2014)

- 1. A meeting of the Elite Training and Athletes Affairs Committee (comprising 9 members) on 21 March 2014 had to be deferred as a quorum was not formed.
- 2. On 24 March 2014, the meeting was held again and a quorum of 4 members was formed only during the meeting when the fourth member arrived. After the quorum was formed, 2 members subsequently left the meeting, and the meeting became inquorate again. The remaining members continued to discuss matters, which did not involve granting approvals. For the meeting, only 2 members attended the whole session and 5 members (including representatives of the HAB and the LCSD) were absent. Audit noted that HAB and LCSD officers (not the committee members) had attended the meeting as observers.

Source: Audit analysis of HKSI records

No laid-down procedures for dealing with long absence from Board/committee meetings

3.11 For the four years 2010-11 to 2013-14, Director B attended 44% of the 18 Board meetings. He joined the Corporate Management Committee but did not attend any meetings. There were no laid-down procedures for dealing with a director's long absence from or low attendance at meetings. All attendance, including absence, of Board/committee meetings were recorded in the minutes of the meetings concerned.

Attendance rates not disclosed

- 3.12 According to the Corporate Governance Guide (see para. 3.4), a good annual report of a subvented organisation should disclose for public information the number of board/committee meetings held and the meeting attendance rates of individual members. This will enhance transparency and public accountability.
- 3.13 It is common for Government-funded organisations to disclose meeting attendance rates of their board/committee members in their annual reports or on websites. There is merit for the HKSI to adopt such a practice to enhance transparency and public accountability.

Need to improve management of conflicts of interest

- 3.14 A governing board has to properly manage conflicts of interest of its members. According to the Corporate Governance Guide, an organisation should set out requirements to avoid conflicts of interest, including a system for declaration of interests by board members which may have two tiers:
 - (a) upon joining the board, all board members would be asked to declare their general interests. They would also be asked to update the declarations on a periodic (e.g. annual) basis; and
 - (b) when there is a special instance involving a probable threat of a conflict of interest, the board member concerned has to declare the conflict of interest.
- 3.15 The HKSI has adopted a one-tier system for declaration of interests by directors, which only requires a director to declare a conflict of interest as and when it arises. Declarations of general interests are not required to be made upon joining the Board and annually thereafter.
- 3.16 In August 2005, the HAB issued a memorandum to Government bureaux and departments promulgating a set of guidelines for introducing a system for declaration of interests for advisory and statutory bodies. The guidelines advocate the adoption of a two-tier system for advisory and statutory bodies which:

Government monitoring

- (a) have a high degree of management and financial autonomy;
- (b) have extensive executive powers on matters of public interest; or
- (c) are responsible for the control and disbursement of substantial public funds.
- 3.17 To a large extent, the HKSI meets the above criteria and should follow the HAB guidelines to adopt a two-tier system for declaration of interests. The HAB guidelines also recommend good practices which are worth considering for reporting declarations of interests (such as keeping a register of all declarations, and making the register available for public inspection).

Rules on prevention of conflicts of interest not strictly followed

3.18 The HKSI's Articles of Association specify the following rules on prevention of conflicts of interest:

"A director or officer shall disclose the nature of his interest in any matter concerning the Institute and shall not attend or vote in any meetings of the Institute or engage in any discussion whereby matters that he is interested in would be considered or discussed."

- 3.19 Case 2 in Appendix C shows that, in considering the two initiatives under the Secondary Education Programme, the rules were not strictly followed at the relevant Board and committee meetings.
- 3.20 In Audit's view, the HKSI needs to remind all directors/committee members and HKSI officers of the relevant rules and devise a mechanism to enable the Board and the committees to comply with the HKSI's Articles of Association in future.

Need for Government representatives to avoid approving the HKSI's annual budget in Board/committee meetings

- 3.21 Each year, the HKSI's annual plan and budget have to be endorsed by the Corporate Management Committee and approved by the Board, before submitting to the Elite Sports Committee and the Sports Commission for advice and the HAB for approval. According to the Corporate Governance Guide, under such circumstances, the Government representatives should not be present in a board discussion on the organisation's budget.
- 3.22 Audit noted that in 2012-13 and 2013-14, the HAB's representative participated in the Corporate Management Committee and the Board meetings when the HKSI's annual plan and budget were discussed and approved. In Audit's view, the HAB needs to remind its representative to follow the good practice mentioned in paragraph 3.21.

Corporate Governance Manual not compiled

- 3.23 The operation of the HKSI's Board/committees is governed by the HKSI's Articles of Association, which lay down some basic guidelines on corporate governance. Besides, the HKSI has adopted the following practices:
 - (a) chairmanship and membership of committees are proposed by the HKSI Management for the Board's approval at the beginning of each two-year tenure;
 - (b) each director would be invited to join at least one committee;
 - (c) co-opted members (not directors) would be invited and nominated by respective committee Chairmen;
 - (d) the quorum for a committee meeting is 50% for committees with an even number of members, and 50% rounded downwards for committees with an odd number of members; and
 - (e) discussion papers should be distributed one week before the meeting date.

3.24 At present, the HKSI does not have a Corporate Governance Manual which sets out detailed guidelines and procedures, including its adopted practices (see para. 3.23), procedures for dealing with members' long absence or low attendance (see paras. 3.8 and 3.11), frequencies of Board/committee meetings, etc. Following good governance practices, the HKSI should consider compiling a Corporate Governance Manual to facilitate the effective functioning of its Board/committees and provide guidelines to directors/committee members (particularly new appointees).

Audit recommendations

- 3.25 Audit has recommended that the HKSI should:
 - (a) closely monitor the meeting attendance rates of directors/committee members;
 - (b) liaise with directors/committee members with low attendance rates or long absence to take appropriate actions, e.g. reminding them to make efforts to attend meetings as far as possible;
 - (c) publish on its website or annual report the meeting attendance rates of directors/committee members;
 - (d) consider adopting a two-tier system for declaration of interests which requires, among other things, directors/committee members to make declaration of general interests on appointment and annually thereafter;
 - (e) consider keeping a register of all declarations of interests and making it available for public inspection;
 - (f) remind directors/committee members regularly to strictly comply with the rules on prevention of conflicts of interest provided in the HKSI's Articles of Association; and

- (g) consider compiling a Corporate Governance Manual covering, among other things, its adopted practices on corporate governance, procedures to deal with long absence from or low attendance at meetings of directors/committee members and frequencies of meetings.
- 3.26 Audit has recommended that the Secretary for Home Affairs should:
 - (a) take into account the meeting attendance rates of individual directors in nominating them for re-appointment;
 - (b) remind the HAB representative to refrain from approving the HKSI's annual budget in Board/committee meetings; and
 - (c) in conjunction with the Director of Leisure and Cultural Services, ensure that their representatives (as directors/committee members) attend all Board/committee meetings as far as possible.

Response from the HKSI

3.27 The Chief Executive, HKSI accepts the audit recommendations in paragraph 3.25. She has said that the HKSI will adopt as far as practicable given its corporate structure.

Response from the Government

- 3.28 The Secretary for Home Affairs agrees with the audit recommendations in paragraph 3.26.
- 3.29 The Director of Leisure and Cultural Services has said that the LCSD concurs with the audit recommendation in paragraph 3.26(c) and will comply with it.

Internal audit and audit committee

- 3.30 Internal audit function of an organisation has the role to identify and assess on an independent basis potential risks to the organisation's operations. The internal audit function is strengthened by the setting up of an audit committee which has an important role in monitoring the organisation's audit arrangement, internal control and risk management systems. It also provides the internal audit function with a greater degree of independence from the executive management.
- 3.31 Audit committee is nowadays a fundamental part of the corporate governance landscape in Hong Kong. It is common for Government-funded organisations to set up audit committees.

Need to set up an internal audit function

3.32 Since its establishment in October 2004, the HKSI's annual expenditure had increased significantly from \$160 million in 2005-06 to an estimated amount of \$430 million in 2014-15. However, the HKSI has not established an internal audit function or an audit committee. For enhancing its governance, the HKSI needs to consider setting up an internal audit function and an audit committee under the Board. This will help the HKSI strengthen its internal control on financial and administrative matters, e.g. procurement, management of fixed assets, official entertainment expenses, etc. (see PART 4 for examples in which an effective internal audit function may help address the identified inadequacies).

Audit recommendation

3.33 Audit has *recommended* that the HKSI should consider setting up an internal audit function and an audit committee under the Board to help discharge its functions and duties effectively.

Response from the HKSI

3.34 The Chief Executive, HKSI accepts the audit recommendation.

Government monitoring

Elite Athletes Development Fund

- In 2011, the FC of LegCo approved the setting up of the EADF and the injection of \$7 billion into the EADF as seed money to support the operation of the HKSI on a sustainable and long-term basis. The EADF was established in the form of a trust fund with the Secretary for Home Affairs Incorporated as the trustee. With effect from January 2012, the funding support to the HKSI has been allocated by the HAB from the EADF (see para. 1.7).
- 3.36 Under the funding allocation mechanism of the EADF, the HKSI's annual plan and budget have to be submitted to the Sports Commission through the Elite Sports Committee for consideration before allocations are approved by the HAB. The EADF allocation to the HKSI is on an annual basis and is released bi-monthly.
- 3.37 To ensure the effective use of the EADF allocation, the HKSI is required to sign a Deed of Undertaking with the HAB annually, accompanied by a budget and a programme of activities, prescribing the performance levels and requirements to be met by the HKSI. The HAB oversees the administration and investment strategy of the EADF. It also oversees the operations of the HKSI through membership of the HKSI's Board of Directors and committees and the submission of regular reports by the HKSI.

Reporting requirements under the Deed of Undertaking not strictly followed

- 3.38 According to the Deed of Undertaking, the HKSI undertakes to implement a programme of activities within the budget and to submit to the HAB, among other things:
 - (a) a report on the implementation of the programme of activities for each financial year on or before 30 June of the following financial year; and
 - (b) a monthly statement of management accounts on or before the 20th day of the following month.

Despite the above reporting requirements, Audit noted that the HKSI had not submitted reports on the implementation of the programme of activities to the HAB in recent years. There were also no HAB reminders to the HKSI to request the submissions. In response to Audit's enquiry, the HKSI submitted in January 2015 the relevant reports to the HAB for the four years 2010-11 to 2013-14 in one go. Audit also noted that the HKSI submitted the statements of management accounts on a bi-monthly basis, instead of on a monthly basis as required. The HKSI needs to follow the reporting requirements stated in the Deed of Undertaking. The HAB also needs to see to it that the HKSI follows such reporting requirements.

Need for an agreed arrangement to deal with accumulated surpluses

- 3.40 Financial Circular No. 9/2004 stipulates that a subvented organisation may place surpluses arising from subvented programmes into a reserve. The surpluses may come from unspent subvention or unspent income from other sources supporting a subvented programme. Any surplus in excess of the agreed ceiling should be returned to the Government (e.g. by way of offsetting from next year's funding), or dealt with in accordance with the agreed arrangements.
- 3.41 Since the commencement of the current funding mechanism in January 2012, the HKSI has had operating surplus each year. As at 31 March 2014, the accumulated surpluses were about \$82 million and were transferred to the HKSI's general reserve. However, the Deed of Undertaking did not set out any arrangement regarding the handling of surpluses.

Periodic reviews of staff remuneration not conducted

3.42 The Director of Administration issued Circular Memorandum No. 2/2003 in March 2003 to promulgate a set of guidelines for the effective control and monitoring of the ranking, structure and remuneration of the top three-tier executives in subvented bodies. According to the guidelines, subvented bodies which receive more than 50% of their operating income from the Government should review the number, ranking and remuneration of their senior staff and submit to their responsible Directors of Bureaux annual reports on the review findings. The relevant Directors of Bureaux may, with justifications, approve individual bodies under their purview to submit biennial or triennial review reports.

- 3.43 According to the Deed of Undertaking, the HKSI shall review the number, ranking and remuneration of its staff as directed by the HAB and submit the report on the findings of the review in such a format as required. However, Audit was unable to trace from HKSI records the submissions of such reports in recent years.
- 3.44 Upon enquiry, the HAB and the HKSI informed Audit in March 2015 that the HKSI had conducted a salary benchmarking exercise for all level of staff in 2014. Audit considers that the HAB needs to remind the HKSI to continue to conduct remuneration reviews periodically in accordance with the Circular Memorandum and the Deed of Undertaking.

Audit recommendations

- 3.45 Audit has recommended that the Secretary for Home Affairs should:
 - (a) remind the HKSI to comply with the requirements of submitting an annual report on the implementation of the programme of activities and monthly statements of management accounts;
 - (b) work out an agreed arrangement with the HKSI to deal with its accumulated surpluses; and
 - (c) remind the HKSI to continue to conduct periodic reviews (say on an annual basis) on their senior staff remuneration packages and submit the review reports.

Response from the Government

3.46 The Secretary for Home Affairs generally agrees with the audit recommendations.

PART 4: ADMINISTRATIVE ISSUES

- 4.1 This PART examines the following administrative issues of the HKSI:
 - (a) utilisation of sports facilities (paras. 4.2 to 4.8);
 - (b) utilisation of other facilities (paras. 4.9 to 4.17);
 - (c) electricity charges and energy management (paras. 4.18 to 4.23);
 - (d) shuttle bus services (paras. 4.24 to 4.28);
 - (e) procurement and management of fixed assets (paras. 4.29 to 4.36); and
 - (f) guidelines on official entertainment (paras. 4.37 to 4.41).

Utilisation of sports facilities

4.2 The HKSI is an elite sports training centre and is tasked with providing a world class infrastructure environment and system which would enable gifted athletes to reach world levels of performance. Appendix D shows the HKSI's sports facilities as at December 2014. At the beginning of a year, the Head Coach of each elite sport can block-book the relevant training facilities for the whole year in advance. The Head Coaches may also adjust their bookings during the year to meet the needs of elite training. When there are residual timeslots, other users including NSAs, sports organisations and training course users may use some of the facilities for a fee. Table 8 shows the utilisation rates of the HKSI's sports facilities in 2014.

Table 8

Utilisation rates of sports facilities (2014)

		Utilisation rates (Note 1)				
	Facilities	Elite athletes	NSAs	Training courses (Note 2)	Others (Note 3)	All users
1	Table tennis hall	81%	0%	2%	0%	83%
2	Fencing hall	76%	1%	0%	0%	77%
3	Karatedo hall	67%	0%	0%	0%	67%
4	Badminton hall	52%	0%	10%	2%	64%
5	Wushu hall	58%	1%	2%	0%	61%
6	Grass pitch ground (multi-purpose)	54%	1%	0%	4%	59%
7	Swimming pool	35%	8%	14%	1%	58%
8	Bowling centre	55%	0%	0%	0%	55%
9	Velodrome (in Ma On Shan)	26%	8%	0%	0%	34%
10	Tennis court	N/A (Note 4)	8%	0%	22%	30%
11	Squash court	26%	1 %	1%	0%	28%
12	Athletics track and field	25%	0%	0%	0%	25%
13	Basketball court	N/A (Note 4)	1%	15%	2%	18%

Source: Audit analysis of HKSI records

Note 1: The utilisation rate in a period was calculated as follows:

 $\frac{\textit{Actual number of hours used}}{\textit{Total available hours}} \times 100\%$

Note 2: The HKSI provided training courses to the public in the sports concerned.

Note 3: This category included staff, internal programmes, sports organisations, commercial organisations, and Government departments.

Note 4: The related sports were not Tier A sports.

Need to enhance monitoring of utilisation of sports facilities

- 4.3 Table 8 shows that in 2014 the utilisation rates of the HKSI's sports facilities ranged from 18% to 83%. Upon enquiry, the HKSI informed Audit in March 2015 that:
 - (a) all the facilities of the HKSI were built with a view to catering for future development for the next 15 to 20 years; and
 - (b) the utilisation of residual timeslots (see para. 4.2) was monitored. However, for the past few years with redevelopment taking place, the HKSI had been a building site and unsafe for all but the most highly controlled community access activities.

In Audit's view, the HKSI needs to continue to monitor the utilisation of its sports facilities to ensure that they are optimally utilised.

- 4.4 Audit noted that there was room for improvement in the monitoring of utilisation of sports facilities, as follows:
 - (a) Target utilisation rates not set. In May 2008, a paper was submitted to the LegCo Panel on Home Affairs to explain the scope of the HKSI redevelopment project. In the paper, the Government informed the Panel that new performance targets would be included in the service agreement with the HKSI, including utilisation rates of the sports facilities provided under the redevelopment project. However, the target utilisation rates had not yet been set;
 - (b) *Utilisation statistics not compiled.* The HKSI did not compile utilisation statistics for the billiard centre (which was set up in December 2013). There were no records indicating the reasons for not compiling the statistics, which would provide essential information for monitoring the utilisation of the billiard centre; and
 - (c) *Inspection records not kept.* The Corporate Services Division is responsible for inspecting sports facilities on a daily basis. If irregularities are found (e.g. not turning up for bookings and unauthorised use), inspection officers have to report the irregularities to their senior

officers for follow-up actions. However, inspection officers did not keep inspection records for management review. As such, there was no evidence of inspections conducted, and no records of irregularities identified and follow-up actions taken.

Audit recommendations

- 4.5 Audit has *recommended* that the Secretary for Home Affairs should, in consultation with the HKSI, work out performance targets on the utilisation rates of the HKSI's sports facilities as pledged to the LegCo Panel in May 2008.
- 4.6 Audit has recommended that the HKSI should:
 - (a) continue to monitor the utilisation of its sports facilities to ensure that they are optimally utilised;
 - (b) compile utilisation statistics for the billiard centre for management review; and
 - (c) keep inspection records to improve the monitoring of the utilisation and proper use of its sports facilities.

Response from the Government

4.7 The Secretary for Home Affairs agrees with the audit recommendation in paragraph 4.5. He has said that as the redevelopment project will be fully completed in 2015, the HAB will work with the HKSI to include in its performance targets relevant utilisation rates for the HKSI's facilities.

Response from the HKSI

4.8 The Chief Executive, HKSI accepts the audit recommendations in paragraph 4.6.

Utilisation of other facilities

4.9 The HKSI's other facilities include the athlete hostel, sports residence (for visitors), carpark, canteen, lecture theatre, boardroom, and meeting rooms. Appendix E shows the HKSI's other facilities as at December 2014. Audit examined the utilisation of three major facilities, namely the athlete hostel, sports residence and carpark.

Need to closely monitor utilisation of facilities

- 4.10 **Athlete hostel.** The athlete hostel, with a capacity of 370 places (185 rooms), has been in operation since September 2013. It provides free accommodation to full-time elite athletes under the HKSI's Elite Training Programme (a total of 258 full-time athletes as at December 2014). The annual operating cost is about \$7 million. As at December 2014, the athlete hostel provided 262 places (Note 4) and accommodated 211 athletes. Upon enquiry, the HKSI informed Audit in March 2015 that:
 - (a) the HKSI was built to allow for future capacity, and therefore it was natural that the athlete hostel then was not fully occupied; and
 - (b) the HKSI was already taking measures to develop the depth of the full-time training cohort of elite athletes. This included setting targets across all sports to increase the cohort of full-time athletes by an average 10% every year. Based on this, the number of full-time athletes was expected to exceed 500 in less than 10 years.
- 4.11 **Sports residence.** The sports residence has been in operation since October 2013. It provides accommodation (for a fee) to international and local visiting teams, conference and seminar attendees. As at December 2014, a total of 74 rooms (each with an area of 22 to 27 square metres and fitted with two beds) were provided. According to HKSI records, the overall utilisation rate was 16% in 2014. In 2013-14, in running the sports residence, the income was \$107,000 and

Note 4: The hostel had 46 rooms (i.e. 92 places) used temporarily as offices and 8 rooms (i.e. 16 places) under maintenance.

the operating cost was \$213,000, resulting in a deficit of \$106,000 (50% of the cost). There is a need to closely monitor the operating results of the sports residence and explore improvement measures.

- 4.12 *Carpark*. As at December 2014, the HKSI had 286 parking spaces at its Fo Tan venue. Free parking is provided to HKSI staff, Board/committee members, coaches, elite athletes and guests. Parking at hourly rates is provided to visitors. The operation of the carpark (together with cleaning and security services of the HKSI) has been outsourced to a service contractor at an estimated cost of \$10.9 million in 2014-15.
- 4.13 *Utilisation statistics not compiled*. The HKSI did not compile utilisation statistics of the carpark. Audit conducted four visits to the covered carpark in the main building in January 2015 to ascertain its utilisation. As indicated by the visit results (see Table 9), the carpark's utilisation was low.

Table 9

Utilisation of the parking spaces in the main building (January 2015)

Audit visit	Date and time of audit visit	No. of cars parking	Utilisation rate (Note)			
Office .	 hours		(11010)			
1	22 January 2015 (Thursday) at 10:00 a.m.	58	27%			
1	22 January 2013 (Thursday) at 10.00 a.m.	36	2170			
2	23 January 2015 (Friday) at 3:00 p.m.	61	28%			
After o	After office hours and on a weekend					
3	24 January 2015 (Saturday) at 12:40 p.m.	45	21%			
4	27 January 2015 (Tuesday) at 6:50 p.m.	42	19%			

Source: Audit visits

Note: The utilisation rate is arrived at by dividing the number of parking cars by the number of parking spaces in the main building (i.e. 216).

- 4.14 Upon enquiry, the HKSI informed Audit in March 2015 that:
 - (a) the HKSI was built with the expectation of fulfilling needs for the next 15 to 20 years and thus it was not at optimal capacity yet; and
 - (b) additionally, given that the HKSI venue was undergoing construction works under the redevelopment project, this had temporarily limited the HKSI's capacity for hosting community engagement events, which would impact the usage statistics.

In Audit's view, the HKSI needs to request the carpark operator to compile utilisation statistics. Such statistics are essential for monitoring the utilisation of the carpark, with a view to taking necessary action to achieve optimal utilisation of the carpark.

4.15 Cases of unauthorised overnight parking. Overnight parking (i.e. parking from 12:00 midnight to 6:00 a.m.) is only allowed for authorised vehicles (e.g. vehicles of the HKSI, athletes residing in the hostel and visitors staying at the sports residence). Audit examined the overnight parking logbook (prepared by the carpark operator) of December 2014, and noted that, of the 749 overnight parking cases, 344 (46%) were related to unauthorised overnight parking (involving 45 cars). The HKSI was apparently aware of the unauthorised overnight parking (since cases of such were recorded on the logbook prepared by the operator). However, there were no records indicating any follow-up actions taken by the HKSI (Note 5). Audit considers that the HKSI needs to take prompt actions to curb unauthorised overnight parking.

Audit recommendations

4.16 Audit has recommended that the HKSI should:

Note 5: According to the HKSI, of the 344 unauthorised overnight parking cases, 183 cases were parking by 14 athletes and coaches allowable under the Security and Carpark Guidelines. However, Audit noted that for these cases, applications had not been made and approved under the Guidelines.

- (a) closely monitor the utilisation of the athlete hostel and sports residence and take measures to improve their utilisation;
- (b) request the carpark operator to compile utilisation statistics of the carpark for management review; and
- (c) take prompt actions to curb unauthorised overnight parking.

Response from the HKSI

- 4.17 The Chief Executive, HKSI accepts the audit recommendations. She has said that the HKSI:
 - (a) is already taking measures to improve the utilisation of the sports residence under the HKSI's commercial operations planning;
 - (b) will follow up with the carpark operator to submit appropriate monthly statistical data; and
 - (c) will ensure that all authorised persons for overnight parking submit their application forms to the HKSI's Facilities Department, and take prompt actions to curb unauthorised overnight parking.

Electricity charges and energy management

Electricity accounts not using the most economical tariff

4.18 The HKSI incurred electricity charges of \$18 million in 2014. It has four electricity accounts, three for its Fo Tan venue and one for its Ma On Shan satellite site. Audit examined the electricity consumption and charges in 2014 of the four accounts, and noted that only one high-consumption account was using the bulk tariff. Table 10 shows the details.

Table 10

Electricity consumption and charges of electricity accounts (2014)

Item	Location Monthly electricity consumption (Kilowatt-hour)		Annual charges (\$)	Tariff used
(a)	Sports complexes	367,615 to 666,609	6,586,000	Bulk
(b)	Main building	363,810 to 663,920	7,236,000	General service
(c)	Swimming complex	275,760 to 394,730	4,663,000	General service
(d)	Velodrome (at satellite site)	4,630 to 10,460	106,000	General service

Source: Audit analysis of HKSI records

4.19 Regarding the electricity accounts of the main building and the swimming complex (Items (b) and (c)), their monthly consumption had far exceeded the threshold (20,000 kilowatt-hours per month — Note 6) where selecting the bulk tariff might be more economical. Audit estimated that, if the bulk tariff had been used, the HKSI could have saved electricity charges of \$1.3 million in 2014 (Note 7).

Note 6: According to information provided on the website of the electricity supply company, a non-domestic electricity account with a monthly consumption of over 20,000 kilowatt-hours may select the bulk tariff (instead of the general service tariff) to achieve overall savings from the lower unit charge rates. The actual amount of savings would depend on the level and pattern of electricity consumption.

Note 7: The electricity account of the sports complexes (Item (a) in Table 10) achieved a saving of 11% in 2014 by selecting the bulk tariff. Applying this percentage saving to the two high-consumption electricity accounts currently charged under the general service tariff would arrive at a potential saving of \$1.3 million (i.e. 11% × (\$7.23 million + \$4.66 million)).

4.20 Furthermore, the HKSI can also consider merging the three electricity accounts at the Fo Tan venue into one single account for charging purpose. In doing so, their consumption level may reach the threshold required for using the large power tariff (with unit charge rates even lower than those of the bulk tariff). The HKSI needs to review the charging arrangements of its electricity accounts and select the most economical tariff to save electricity charges. In January 2015, Audit informed the HKSI of this observation for taking appropriate follow-up action (see para. 4.23).

Need to conduct energy audits

4.21 The Electrical and Mechanical Services Department has advocated the conduct of energy audits and issued guidelines for public information. An energy audit is an examination of an energy-consuming equipment/system to ensure that energy (particularly electricity) is used efficiently and to identify energy-saving opportunities. In June 2014, the HKSI commissioned a consultant to carry out an energy audit for its new premises, including the main building, the swimming complex, the sports complex annex and the rowing boathouse. In November 2014, the consultant prepared a draft report with recommendations for implementing energy-saving measures to reduce electricity consumption. As at February 2015, There is a need to implement the the report had not yet been finalised. energy-saving measures with a view to achieving savings in electricity consumption. Moreover, the scope of the HKSI's energy audit did not cover the main sports complex (Note 8). The HKSI needs to conduct an energy audit for this complex in due course.

Audit recommendations

- 4.22 Audit has recommended that the HKSI should:
 - (a) take prompt action to review the charging arrangements of its electricity accounts and select the most economical tariff to save electricity charges;

Note 8: The main sports complex was built in 1982 and renovated in 2010, with further works carried out between April 2013 and December 2014.

- (b) expedite action to finalise the energy audit report and implement the recommended energy-saving measures at an early date; and
- (c) consider conducting an energy audit on the main sports complex in due course.

Response from the HKSI

4.23 The Chief Executive, HKSI accepts the audit recommendations. She has said that the bulk tariff application for the main building and swimming complex was submitted to the electricity supply company in January 2015.

Shuttle bus services

4.24 The HKSI provides free shuttle bus services to its staff and athletes. The services facilitate their travel between the Fo Tan venue and the MTR Tai Wai Station, and between the Fo Tan venue and the Sha Tin downtown. The services have been contracted out to a private operator at a cost of \$0.5 million in 2014. Table 11 shows the details of the services.

Table 11
Shuttle bus services (2014)

Route no.	Scheduled time	Route	No. of trips (a)	Average no. of users per trip (b)	Annual service fee (c)	Average cost per user per trip $(d) = \frac{(c)}{(a) \times (b)}$
					(\$)	(\$)
For go	ing to and from	m office				,
1	7:00 a.m. Monday to Sunday	MTR Tai Wai Station to HKSI (Note)	270	2.1	72,000	127
2	8:40 a.m. Saturday	MTR Tai Wai Station to HKSI (Note)	36	2.8	10,800	107
3	1:15 p.m. Saturday	HKSI to MTR Tai Wai Station (Note)	36	3.2	10,800	94
4	8:40 a.m. Monday to Friday	MTR Tai Wai Station to HKSI	247	9.7	96,000	40
5	6:12 p.m. Monday to Friday	HKSI to MTR Tai Wai Station	247	11.0	96,000	35
6	10:20 p.m. Monday to Sunday	HKSI to MTR Tai Wai Station	361	2.7	108,000	111
For lur	ich purpose					
7	12:40 p.m. Monday to Friday	HKSI to Wai Wah Centre, Sha Tin	247	15.8	54,000	14
8	1:40 p.m. Monday to Friday	Wai Wah Centre, Sha Tin to HKSI	247	9.1	54,000	24
		Overall	1,691	7.7	501,600	

Source: Audit analysis of HKSI records

Note: In August 2014, the HKSI conducted a review of the utilisation of the shuttle bus services. Due to the low usage of these three routes (Routes no. 1 to 3), the HKSI had suspended their operation since October 2014.

Low usage of shuttle bus services

- 4.25 Table 11 shows that the usage of the shuttle bus services was low. During 2014, the average numbers of users per trip ranged from 2 to 16 among the routes, and the average costs per user per trip ranged from \$14 to \$127.
- 4.26 According to Audit's observations on site, it takes about five to six minutes to travel on foot between the HKSI's Fo Tan venue and the MTR Fo Tan Station, four minutes to travel by train between the Fo Tan and Sha Tin Stations (with a fare of \$3.5), and seven minutes between the Fo Tan and Tai Wai Stations (also with a fare of \$3.5). According to the HKSI, it has conducted regular annual reviews of the utilisation of the shuttle bus services. Following the August 2014 review, the HKSI had suspended three of the routes (see Note to Table 11). In view of the low usage of the shuttle bus services, the HKSI needs to re-examine the justifications and cost-effectiveness of providing the services.

Audit recommendation

4.27 Audit has *recommended* that the HKSI should continue to keep under review the justifications and cost-effectiveness of providing the shuttle bus services to its staff and athletes.

Response from the HKSI

4.28 The Chief Executive, HKSI accepts the audit recommendation. She has said that the HKSI will certainly continue the review process.

Procurement and management of fixed assets

Procurement

4.29 According to the HKSI's guidelines on procurement:

- (a) when the purchase value of a purchase is up to \$250,000, the laid-down quotation procedures should be applied in making the purchase. When the purchase value is above \$250,000, the laid-down tender procedures should be applied; and
- (b) suppliers invited to bid must be on the HKSI's register of suppliers.
- 4.30 The Purchasing and Supplies Section under the Corporate Services Division is responsible for making purchases. The Section has prepared an operation manual on detailed purchase procedures. According to the operation manual, the procedures for shortlisting suppliers for inviting them to bid are as follows:
 - (a) for a purchase via the quotation procedures, registered suppliers of the category of the goods/services to be purchased are shortlisted with consideration on their capacity in meeting the goods/services specification requirements, and their performance in past invitations. For repeated and general goods/services, suppliers are shortlisted on a rotational basis as far as possible; and
 - (b) for a purchase via the tender procedures, there are two shortlisting approaches. One approach is the same as that mentioned in (a) above. Regarding the other approach, all registered suppliers of the category of the goods/services to be purchased (or all local suppliers) are invited to express interest. Interested suppliers are then shortlisted with consideration on their expressions of interest.
- 4.31 In 2014-15 (up to 31 December 2014), the HKSI spent about \$26 million on purchasing goods and services. Of the \$26 million, \$15 million was via inviting quotations and \$11 million was via inviting tenders.

Room for improvement in procurement practices

4.32 Audit examined 10 purchases, comprising 6 purchases via inviting quotations (with a total purchase value of \$0.9 million) and 4 purchases via inviting tenders (with a total purchase value of \$3.2 million). Audit noted that:

- (a) for 3 of the 6 purchases via inviting quotations, single quotations were invited. For these single-source purchases, justifications (i.e. sole supplier) were provided; and
- (b) for the 3 remaining purchases via inviting quotations, in 2 cases, there was no documentation on the reasons for shortlisting particular suppliers (e.g. their performance in submitting valid or successful bids in past invitations). The HKSI needs to document such reasons to ensure accountability and achieve value for money in shortlisting suppliers.

Management of fixed assets

4.33 The HKSI has set up the Fixed Assets Registration System for recording fixed asset items. At the end of a financial year, the system generates Fixed Assets Register Lists as at 31 March which will be forwarded to various units for verification and confirmation. In addition, the Administration Section conducts an annual physical stocktake (by checking a sample of selected items). Table 12 shows the value of the HKSI's fixed assets and the extent of checking of the Administration Section's annual physical stocktake.

Table 12

HKSI's fixed assets and annual physical stocktake (2011-12 to 2013-14)

	Year-end amount		Annual physical stocktake		
Financial year	shown in financial statements (at cost)	Total no. of items	No. of items checked	Cost of fixed assets checked	
	(\$ million)			(\$ million)	
2011-12	71	3,247	43 (1%)	2.4 (3%)	
2012-13	96	3,751	54 (1%)	2.0 (2%)	
2013-14	129	9,640	110 (1%)	17.4 (13%)	

Source: HKSI records

Need to enhance the annual physical stocktake

4.34 Table 12 shows that for 2011-12 to 2013-14, the extent of checking of the Administration Section's annual physical stocktake was only 2% to 13% of the asset costs. The HKSI needs to consider enhancing the annual physical stocktake.

Audit recommendations

- 4.35 Audit has recommended that the HKSI should:
 - (a) in shortlisting suppliers for inviting them to submit quotations, document the reasons for shortlisting particular suppliers; and
 - (b) consider enhancing the annual physical stocktake of fixed assets.

Response from the HKSI

4.36 The Chief Executive, HKSI accepts the audit recommendations. She has said that the existing fixed asset count is conducted on a rotational test basis. With the completion of the redevelopment project, the asset value has significantly increased. The HKSI agrees to enhance the annual rotational test count system.

Guidelines on official entertainment

- 4.37 According to the HKSI's guidelines on official entertainment expenses, such expenses should be reasonable and not extravagant, subject to the maximum allowable rates for lunch (\$300 per head) and dinner (\$500 per head).
- 4.38 Audit examined four accounts (i.e. Corporate Functions, Entertainment Expenses, Overseas Duty Visits and Athlete Welfare) of the HKSI's 2014-15 ledger (up to 30 November 2014) which might contain official entertainment expenses. It was noted that, for the Corporate Functions account, there were two lunches with the expenditure per head exceeding the limit of \$300 laid down in the entertainment

guidelines. In view of this, Audit extended the checking on this account to cover all lunches/dinners in the period 2010-11 to 2013-14. Table 13 shows the checking results.

Table 13

Results of checking on the Corporate Functions account (2010-11 to 2014-15)

Financial year	No. of lunches/ dinners	Total expenditure on lunches/ dinners (\$)	No. of lunches/dinners with expenditure per head exceeding the limit (\$300 for lunch and \$500 for dinner)
2010-11	1	900	0
2011-12	2	1,400	0
2012-13	14	21,100	8
2013-14	15	29,000	5
2014-15 (up to November 2014)	3	3,600	2
Total	35	56,000	15

Source: Audit analysis of HKSI records

Guidelines not applicable to official entertainment expenses for corporate functions

4.39 Upon enquiry, the HKSI informed Audit in January 2015 that the guidelines on official entertainment expenses did not apply to expenses charged to the Corporate Functions account. Audit considers that the expenses for lunches/dinners charged to the Corporate Functions account were in the nature of official entertainment. The HKSI needs to consider applying the guidelines on official entertainment expenses to such expenses.

Audit recommendation

4.40 Audit has *recommended* that the HKSI should consider applying the guidelines on official entertainment expenses to all types of official entertainment regardless of the account the expenses are charged to.

Response from the HKSI

4.41 The Chief Executive, HKSI accepts the audit recommendation. She has said that the HKSI will undertake to formulate an appropriate corporate function policy.

PART 5: REDEVELOPMENT PROJECT

- 5.1 This PART examines the redevelopment of the HKSI venue at Fo Tan, focusing on the following areas:
 - (a) implementation of the project (paras. 5.5 to 5.19); and
 - (b) Government provision of land for use by the HKSI (paras. 5.20 to 5.32).

Redevelopment of the HKSI

- The main venue of the HKSI is located at Fo Tan, Sha Tin. Its main sports complex was first completed in 1982. In support of the 2008 Beijing Olympic and Paralympic Equestrian Events (the Equestrian Events) co-hosted by Hong Kong, the HKSI was temporarily relocated to Wu Kwai Sha Youth Village at Ma On Shan in January 2007, with training operations conducted at sports venues of the LCSD. The HKSI site and facilities were converted by the HKJC into competition venues and supporting facilities for the Equestrian Events held in August and September 2008.
- 5.3 In June 2007 and June 2008, the FC approved a total funding of \$1,760 million for redeveloping the HKSI in situ after the Equestrian Events at Fo Tan. The project covered upgrading of the then existing facilities at the Fo Tan venue and the provision of additional facilities to meet the projected demand for emerging new elite sports over the next 10 to 15 years (Note 9). The HKSI was responsible for implementing the project under the monitoring of the HAB, which was provided with technical advice by the Architectural Services Department upon request.

Note 9: Under the redevelopment project, the construction floor area of the Fo Tan venue would be increased from about 26,000 square metres to about 78,000 square metres.

The redevelopment project was implemented in two phases. Phase One works mainly included the refurbishment of the existing main sports complex and the foundation works of new buildings, targeted for completion in the third quarter of 2009. Phase Two works mainly included the superstructure works of new buildings, targeted for completion in the third quarter of 2011 (see Table 14). Figure 3 shows an overview of the HKSI after redevelopment.

Table 14
Schedule of the redevelopment project

Contract	Major works item	Target completion date		
Phase On	e			
1	Refurbishment of the existing main sports complex and construction of a temporary velodrome at Whitehead, Ma On Shan	2009 3rd quarter		
2	Foundation works for a new multi-purpose building, a multi-purpose sports hall, a rowing boathouse, and an indoor swimming pool	2009 3rd quarter		
Phase Two				
3	Superstructure works for the new facilities with foundation works completed under Contract 2	2011 3rd quarter		
4	Alteration and addition works for the existing swimming pool, hostel wing and spectator stand, and refurbishment of the external areas and the multi-purpose hard court	2011 3rd quarter		

Source: HKSI records

Figure 3

An overview of the HKSI after redevelopment



Source: HKSI records

Implementation of the project

As stated in the Public Works Subcommittee paper of May 2008, the redevelopment project had to be planned and phased very carefully to minimise disruption to the normal operations of the HKSI and athlete training. It was also desirable for the project to be completed as early as possible for the betterment of elite sport development in Hong Kong and to release as soon as possible the Wu Kwai Sha Youth Village and the LCSD's sports facilities temporarily occupied by the HKSI.

Delay in project completion

It was envisaged that, on completion of the Phase One works by the third quarter of 2009, the HKSI could move back to the Fo Tan venue to resume normal training operations. However, Phase One works were delayed and the HKSI could only move back in March 2010. The target completion date of Phase Two works (third quarter of 2011) was also not met. According to the HKSI, the redevelopment project was substantially completed in December 2014, except the rowing boat launching facilities (see paras. 5.11 to 5.14). Against the target date of overall completion in the third quarter of 2011, there was a delay of over three years. HKSI records indicated that the reasons for delay in project completion included:

- (a) delay in hand-over of works sites to contractors and knock-on effects of delays in earlier contracts;
- (b) time taken in letting the velodrome site at Whitehead to the HKSI;
- (c) unforeseen technical difficulties in construction of the concrete cycle track of the velodrome to meet international standards of safety and precision;
- (d) extra time needed for re-submitting tree survey and transplanting proposal to the Lands Department for approval; and
- (e) longer construction period allowed for better site safety, environmental management and quality of work.
- Audit noted that as a result of the delay in project completion, the HKSI could not move back as planned in the third quarter of 2009 (see para. 5.6), but could only do so in March 2010 to resume normal operations. The delay had also brought about additional costs of \$22.3 million, as follows:
 - (a) the lead consultant of the project claimed an additional fee due to prolongation of the works. The claim was settled in October 2014 at \$11.8 million;
 - (b) an additional staff cost of \$7 million was incurred for the in-house technical team; and
 - (c) the prolonged occupation of the Wu Kwai Sha Youth Village had incurred an additional \$3.5 million in rental charges.

As there were a provision for contingencies (\$130 million) and offsetting savings in other works items, the additional costs incurred did not result in a cost overrun of the whole project.

5.8 Actual cost within approved project estimate. The HKSI's Board considers that despite the complexity and length of the redevelopment project which commenced over six years ago and some delays, the HKSI will be able to complete

the entire project within the overall budget. According to the cost estimates prepared by the HKSI in February 2015, the overall approved project estimate of the redevelopment project (\$1,760 million) would not be exceeded, taking into account provisions for remaining works (mainly the rowing boat launching facilities). There would be a potential saving of \$36 million.

- Audit noted that in June 2009, when the redevelopment project was in progress, the Hong Kong Paralympic Committee and Sports Association for the Physically Disabled raised a request for designated training facilities for disabled athletes to be located in the Fo Tan venue (Note 10). The HKSI agreed to the request with a view to enhancing the support to sports for both able-bodied and disabled athletes. In the event, the HKSI implemented an enhancement project to convert the old hostel wing into a multi-purpose training centre for both able-bodied and disabled athletes, with training facilities, changing rooms and coach offices, etc. Under the original project scope, the old hostel wing was to be partly demolished for constructing the entrance of the new swimming pool and upgrading the existing spectator stand.
- As the enhancement works were outside the project scope approved by the FC (see para. 5.3), additional funding over the approved project estimate had to be sought. To this end, the HKSI was able to secure a sponsorship of \$103.2 million from the HKJC to meet the funding requirement. The enhancement project was subsequently packaged under Contract 4 with separate accounts for funding control. As at January 2015, the enhancement project was substantially completed. According to the HKSI, it has all along made efforts to keep the project cost within the HKJC sponsorship and the estimated final cost of the enhancement project would be about \$84.8 million, well within the sponsorship funding of \$103.2 million.

Outstanding works to be completed

5.11 As at January 2015, Audit noted on site that though the redevelopment project was reported by the HKSI as substantially completed (see para. 5.6), there

Note 10: Beside able-bodied elite athletes, the HKSI also supports the training of elite athletes competing in sports for the disabled. As at December 2014, there were 145 disabled athletes supported by the HKSI. Sports for the disabled are not counted as one of the 16 elite sports (see para. 2.3) supported by the HKSI.

were still a number of outstanding remedial works at the Fo Tan venue. HKSI records also showed that there was one major outstanding works item, namely the rowing boat launching facilities.

- 5.12 The redevelopment project included a new rowing boathouse to provide facilities for training in boat rowing at the Shing Mun River. The two-storey boathouse was completed in December 2012 under Contract 3. However, as at January 2015, works for constructing the boat launching facilities, an integral part of the rowing facility, had not started.
- 5.13 The proposed site for constructing the launching facilities was outside the boundaries of the Fo Tan site that has been allocated to the LCSD (which has leased it to the HKSI see paras. 5.26 and 5.27). Land issues were involved, including planning permissions/amendments and a change of the Government land allocation. After the approval of funding for the redevelopment project in June 2008, the HKSI initiated action to tackle the land issues in September 2010. Four years later, in mid-2014, after considering various options and locations, the HKSI completed a design of the launching facilities, comprising mainly a loading platform, a gangway and a floating pontoon with an estimated cost of \$40 million. As at January 2015, the HKSI was still discussing with relevant Government departments to resolve the outstanding issues concerning the works site. There was no timetable for completing the launching facilities.
- Before the completion of the HKSI's rowing boat launching facilities, the interim arrangement was to have all the rowing boats transported manually from the boathouse across the public cycle track and pedestrian footbridge to the nearby (about 100 metres away) Sha Tin Rowing Centre (operated by the Hong Kong, China Rowing Association) to share the launching facilities there. According to the HKSI, it was having increasing difficulties in getting the timeslots due to the Centre's own heavy commitments. There is a need to expedite action on the construction of the rowing boat launching facilities.

On-site training facilities not provided for some elite sports

5.15 There are currently no on-site training facilities provided for some of the elite sports and off-site facilities have been arranged instead. Examples are as follows:

- (a) *Cycling*. The old outdoor velodrome at the Fo Tan venue was demolished to make way for the new nine-storey multi-purpose building. Under the redevelopment project, a temporary outdoor velodrome was constructed on a site at Whitehead (see Contract 1 of Table 14 in para. 5.4). In December 2013, the LCSD completed the new Hong Kong Velodrome at Tseung Kwan O and the HKSI has hired the facilities as the cycling training base for elite athletes;
- (b) *Gymnastics*. Not having been an elite sport for some years, gymnastics returned to the elite sports system in 2011-12. There was no provision for a gymnastic hall and gymnastic facilities in the redevelopment project. The gymnastic NSA has hired the LCSD's Shun Lee Tsuen Sports Centre to operate its training programme for elite athletes. The venue is considered small and its facilities are not fully meeting the training requirements; and
- (c) *Rugby sevens*. It has become an elite sport since 2013-14. It is the only team sport among the elite sports. There is currently no designated rugby field at the HKSI. The rugby team shares the grass infield of the athletics field with other athletes. The rugby NSA also has its own grass pitches at the King's Park Sports Ground.

Looking ahead, there may be other sports entering the elite sports system and similar issues of not having on-site training facilities provided for such sports.

- 5.16 Upon enquiry, the HKSI informed Audit in March 2015 that:
 - (a) from a professional elite sport perspective and as a standard around the world, no sports institute could possibly cater on-site facilities for all possible sports. Sports institutes commonly had some non-centralised or satellite training venues and mobile support teams travelling to the off-site venues (and competitions) to provide the needed services; and
 - (b) given the physical constraints of the Fo Tan venue, the hiring of necessary satellite venues would continue to be a normative part of sports facilities provision in future.

5.17 The HAB also informed Audit in March 2015 that it was not the intention to provide all elite training facilities on-site at the HKSI. The Government, the HKSI and NSAs together could decide on how best and where the training facilities should be provided, taking into account the specific needs of the sports concerned.

Audit recommendations

- 5.18 Audit has recommended that the HKSI should:
 - (a) complete the outstanding works of the redevelopment project as soon as possible, particularly the rowing boat launching facilities; and
 - (b) after completing the redevelopment project, conduct a post-implementation review of the project to identify lessons learnt for application to future projects, in particular:
 - (i) the reasons for the delay in project completion; and
 - (ii) the slow progress in constructing the rowing boat launching facilities.

Response from the HKSI

- 5.19 The Chief Executive, HKSI accepts the audit recommendations. She has said that:
 - (a) the HKSI has taken continuing action with a view to expediting the construction of the rowing boat launching facilities. While the project is complicated with technical difficulties in selecting an appropriate site for the facilities, the HKSI has endeavoured to take forward the project in a progressive manner; and

(b) the HKSI considers the interim arrangement of launching boats from the Sha Tin Rowing Centre not unusual compared with overseas practices. The HKSI is extremely grateful to the Hong Kong, China Rowing Association for its patience and generosity in allowing the continued interim use of its launching facilities.

Government provision of land for use by the HKSI

Reduced site for redevelopment

- 5.20 Before redevelopment, the Fo Tan venue of the HKSI occupied a site of 15.9 hectares (Note 11). The site was allocated to the LCSD and was leased to the HKSI for elite sports training. In 2005, during the planning stage for co-hosting the Equestrian Events (see para. 5.2), the HKJC expressed intentions to retain the stables to be built on the site after the competition for its horse racing operations. There were concerns from the sports sector and LegCo Members that the reduction in the site area of the Fo Tan venue would undermine the HKSI's operations.
- 5.21 In April 2007, the Government decided to allow the HKJC to retain the stables to be built for the Equestrian Events (the stables site), on the grounds that:
 - (a) the retention of the Olympic stables would provide a legacy value to the Equestrian Events and avoid the wastage of demolishing brand new facilities. This effective utilisation of the equestrian facilities would be welcomed by the international sports community;
 - (b) the redeveloped HKSI at the reduced site should be capable of meeting its elite sports training needs over a period of 10 to 15 years. The HKSI and key stakeholders of the sports sector had showed support to the arrangement; and
 - (c) the HKJC would use the equestrian stables for decanting horses during its redevelopment of the stable blocks of the Sha Tin Racecourse. It was mentioned that the reclaimed land on which the stable blocks were built was suffering from serious subsidence problems.
- **Note 11:** This referred to the Fo Tan venue before the temporary relocation to Wu Kwai Sha Youth Village in January 2007 (see para. 5.2).

- 5.22 In April 2007, LegCo was informed that the HKJC would need to occupy the site on a temporary basis for 7 to 10 years. Some LegCo Members expressed concerns over the arrangement and asked for a timetable for returning the site.
- With the policy support of the HAB, the stables site was rented to the HKJC, under a short-term tenancy at a nominal annual rent of \$1 for 4 years and 11 months starting from 1 January 2009, renewable for a further term of two years and thereafter yearly. Figure 4 shows the reduced HKSI site and the stables site leased to the HKJC. The stables site, with an area of about 4.7 hectares, represents about 30% of the total area of 15.9 hectares occupied by the HKSI before redevelopment.

Figure 4

The reduced HKSI site and the stables site



Source: Lands Department records

Remarks: Under the original whole-site redevelopment plan, the HKSI would provide a covered velodrome and two grass football pitches on the now stables site.

- In August 2013, the HKJC served the Lands Department a notice of renewal of the stables site for a further term of two years and thereafter yearly. In November 2013, the Lands Department informed the HKJC that the option to renew the short-term tenancy for two years commencing from 1 December 2013 was accepted. The short-term tenancy was extended to 30 November 2015 and thereafter yearly.
- As at January 2015, the HKJC had occupied the stables site for some six years since January 2009 (against the retention period of 7 to 10 years reported to LegCo). Upon enquiry, the HAB informed Audit in March 2015 that follow-up actions were being taken to deal with the future use of the site and the relevant information would be made available to the public when ready.

Need to review lease arrangements for HKSI

- When the HKSI was first established by the HKJC as the Jubilee Sports Centre in 1982, the site was granted under a private recreational lease at a nominal one-off premium of \$1,000 and an annual rent of \$100. The lease was transferred to the Hong Kong Sports Development Board when the HKSI was subsumed into the Board in 1994. Upon the dissolution of the Board in 2004, the Government took back the site and allocated it to the LCSD. In turn, the LCSD leased the site and the facilities to the HKSI for its operations. The rent level was determined by the utilisation rates of the HKSI's facilities for commercial use and their respective rateable values assessed by the Rating and Valuation Department.
- The lease arrangement was suspended during the period April 2007 to December 2008 for preparing and conducting the Equestrian Events (see para. 5.2). The lease arrangement continued in January 2009, except that the site area was reduced (see paras. 5.20 to 5.23). The tenancy was last renewed in April 2014 for a period of 36 months at a monthly rent of \$0.33 million (i.e. \$3.96 million a year). Audit noted that, in 2013, the HAB had proposed to the Financial Services and the Treasury Bureau (FSTB) that it would be more in line with the Government's policy in supporting sports development to charge a nominal rent on the HKSI instead of charging a rent based on its commercial income. The FSTB had raised concerns and sought clarifications regarding the proposal. In the event, the HAB did not pursue the nominal-rent proposal.

- 5.28 Audit noted that there were considerable administrative efforts in renewing the tenancy agreement and reviewing the rent level regularly, which included the preparation of financial estimates of revenue-generating activities by the HKSI for submission to the LCSD for calculating the rent level, and seeking the approval of the FSTB on the proposed rent level. In addition, the current lease arrangement does not seem to be commensurate with the Government's long-term support to elite sports through the HKSI.
- When the HKSI was first established as the Jubilee Sports Centre in 1982, it was granted the whole site under a private recreational lease at a nominal premium (see para. 5.26). As at March 2013, there were 69 such leases granted at a nominal premium to different parties, including private sports clubs, NSAs, and welfare organisations (Note 12). The HKSI is the Government's agent for delivering elite sports training, and all its directors are nominated by the HAB. In Audit's view, the HAB may further explore whether there is merit in granting the site to the HKSI under a private recreational lease at a nominal premium (Note 13). Apart from saving the efforts spent in collecting rent from the HKSI, this may also provide a more steady and stable environment for the HKSI in launching its long-term strategies for elite sports development.

Audit recommendation

5.30 Audit has *recommended* that the Secretary for Home Affairs should, subject to the result of the HAB's review of private recreational lease policy, consider whether there is merit in granting the Fo Tan site to the HKSI for its long-term operations under a private recreational lease at a nominal premium.

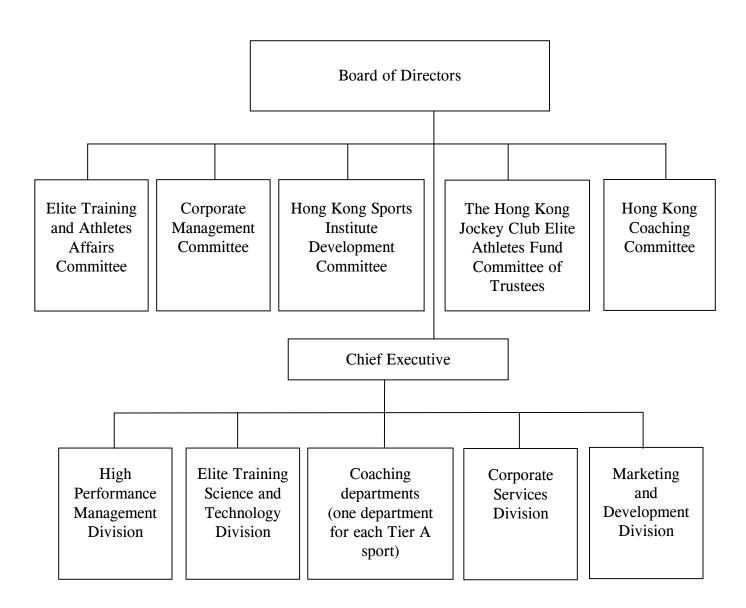
Note 12: In October 2013, Audit conducted a review of private recreational leases. The results were reported in Chapter 1 of the Director of Audit's Report No. 61. A private recreational lease usually has a term of 21 years, and can be extended for 15 years on expiry.

Note 13: As at December 2014, the HAB was conducting a review of private recreational lease policy.

Response from the Government

- 5.31 The Secretary for Home Affairs generally agrees with the audit recommendation. He has said that the HAB will consider a suitable form of land grant for any future site that may be allocated for use by the HKSI.
- 5.32 The Director of Leisure and Cultural Services agrees with the audit recommendation.

HKSI Organisation chart (December 2014)



Source: HKSI records

Eligibility criteria for direct financial support grants (December 2014)

		Elite Training Grants	Sports Aid Grants	Sports Aid Grants for Athletes with Disabilities	Individual Athletes Support Scheme grants (Note 1)
(I)	Olympic/Asian Games sports:				
	(A) Tier A sports				
	(a) Athletes under HKSI's Elite Training Programme	✓			
	(b) Athletes not under HKSI's Elite Training Programme		√		
	(B) Secondary disciplines of Tier A sports (Note 2) or non-Tier A sports				
	(a) Athletes with EVSS Point 3 or above	✓			✓
	(b) Athletes without EVSS Point 3 or above		√		
(II)	Athletes of non-Olympic/ non-Asian Games sports		√		
(III)	Athletes with disabilities			✓	

Source: HKSI records

Note 1: The grants are programme grants provided to the NSAs concerned to conduct training programmes for elite athletes of secondary disciplines of Tier A sports or non-Tier A sports.

Note 2: Secondary disciplines are disciplines with insufficient cohorts for sustainable development.

Case 2

Handling of conflict of interest in Board/committee meetings

- 1. In August 2012, with the Board's approval, the HKSI appointed an education consultant (the Consultant) to make proposals on the provision of integrated education services for young elite athletes with the objective of allowing them to be trained as full-time professionals without sacrificing their educational development. The services would include, among others, the launching of a Secondary Education Programme with partnership schools nearby the HKSI to provide a sports education curriculum with the following features:
 - (a) the athletes' sports training knowledge and experience would be integrated into the academic subjects;
 - (b) the athletes' timetables would be designed in order not to clash with their training and competition schedules; and
 - (c) the athletes' Hong Kong Diploma of Secondary Education results could meet the minimum entry requirements for local universities.
- 2. In October 2012, the Board set up an Athlete Education Advisory Panel (the Panel) to oversee the progress of the consultancy. The Chairman of the Board was appointed Chairman of the Panel, with seven other members (including a representative of the HAB).
- 3. In June 2013, the HKSI Management presented the Consultant's draft final report to the Panel and thereafter to the Board. On the Board's advice, the report was revised and re-submitted to the Panel and thereafter to the Board in October 2013. The Panel endorsed and the Board approved in principle the Consultant's recommended feasibility model for launching the Secondary Education Programme and the implementation timetable.

- 4. The Consultant's recommended feasibility model for launching the Secondary Education Programme for young elite athletes as approved at the Board meeting of October 2013 was as follows:
 - (a) Establishing an Elite Athlete-friendly School Network (School Network). The Consultant proposed to invite schools which provided significant support to student athletes to join the School Network. This would give them public recognition for the support they provided. The Consultant recommended a set of key criteria for identifying such network schools. One key criterion was that the school should have good experience in handling a group of elite athletes (at least 10 elite athletes who were studying in the school). Based on the key criteria, the HKSI Management identified six likely candidate schools as the basis to form the School Network; and
 - (b) *Implementing a Partnership School Programme.* The Consultant proposed to select from the network schools (a total of six as mentioned in (a) above) a smaller number of schools for further and deeper collaboration under a partnership arrangement. The HKSI would provide some funding to the selected schools to support their provision of a tailor-made and integrated sports education curriculum for young elite athletes (see para. 1).
- 5. At the Board meeting of October 2013, the Board was informed that:
 - (a) among the six schools identified as the likely candidate schools to form the School Network, Schools A and B had already expressed interest in the partnership school collaboration; and
 - (b) as a pilot scheme, the HKSI Management would work with Schools A and B for the partnership school arrangement.

After the Board's approval of the Consultant's feasibility model in October 2013, the HKSI Management proceeded with the implementation of the Secondary Education Programme.

- 6. At the March 2014 Board meeting, the HKSI Management reported the progress of the Secondary Education Programme as follows:
 - (a) a seminar on "Elite Athlete Education Support" was conducted in March 2014. The School Network initiative was introduced to attending schools and their participation in the Network was invited; and
 - (b) regarding the Partnership School Programme, proposals had been received from three schools, which would be presented to the Board via the Panel at their coming meetings.

- 7. In May 2014, the HKSI Management reported to the Panel that:
 - (a) 25 secondary schools had confirmed to join the School Network (Note 1); and
 - (b) Schools A and B and School Organisation C (Note 2) had submitted proposals (with cost estimates) to the HKSI for the Partnership School Programme.
- 8. In this connection, Audit noted that the Secondary Education Programme had been expanded beyond the scope of the feasibility model recommended by the Consultant and approved by the Board in October 2013:
 - (a) the number of network schools had increased from 6 to 25. Many of the network schools had fewer than 10 elite athletes (see para. 4(a)); and
 - (b) while schools for the Partnership School Programme should be selected from the candidate schools meeting the key criteria (see para. 4(b)), School Organisation C, not listed as a candidate school initially, had been included.
- 9. Upon enquiry, the HKSI informed Audit in March 2015 that:
 - (a) the Board did not restrict the number of schools involved in the Secondary Education Programme. It was an open programme for any schools willing to assist young elite athletes; and
 - (b) updated progress of the Programme, including the number of participating schools, had been reported to the Board at its meetings held in March (see para. 6) and June 2014 (see paras. 11 and 12).
- 10. At the May 2014 Panel meeting (see para. 7), the Chairman declared his capacity as the Chairman of School Organisation C and the Chief Executive, HKSI declared her capacity as a member of the management committee of School A. It was recorded that neither of them had been involved in the preparation of the related partnership proposals. They continued to participate in the meeting in which the three proposals were presented. After the presentations, the Panel deliberated on the proposals and came to the view that the proposals from School B and School Organisation C could offer the models needed for the dual development pathway for athletes.

- 11. In June 2014, the three proposals (with cost estimates), incorporating the Panel's advice, were submitted to the Board for discussion. At the meeting, declaration of interest was made by:
 - (a) the Chairman of the Board, as Chairman of School Organisation C;
 - (b) Director C (Note 3), as Supervisor of School B; and
 - (c) the Chief Executive, HKSI, as a member of the management committee of School A.
- 12. After declaring their relevant interests, no objections were made for the three persons to continue to participate in the meeting. After deliberations, the meeting approved in principle for the HKSI Management to continue working with School B and School Organisation C for the Partnership School Programme with a view to initiating the pilot integrated education programmes.
- 13. A provision of \$2 million was made in the HKSI's 2015-16 budget for providing funding to partnership schools in implementing the Secondary Education Programme.

Audit comments

14. The HKSI has strict rules on dealing with conflicts of interest in Board/committee proceedings. Its Articles of Association specify the following rules:

A director or officer shall disclose the nature of his interest in any matter concerning the Institute and shall not attend or vote in any meetings of the Institute or engage in any discussion whereby matters that he is interested in would be considered or discussed.

- 15. Audit however noted that:
- (a) at the Panel meeting of May 2014 (see paras. 7 and 10), the Chairman and the Chief Executive, HKSI declared interests on the subject matter but continued to participate in the meeting;
- (b) similar issues involving the Chairman, Director C and the Chief Executive, HKSI occurred at the Board meeting of June 2014 (see paras. 11 and 12); and
- (c) no declarations of interests were made at the Panel and Board meetings before May 2014.
- 16. Upon enquiry, the HKSI informed Audit in March 2015 that:
 - (a) the HKSI's position regarding the interpretation and application of regulatory imperatives was that the objective reasonable person test would always be applied in applying risk assessments to any potential conflict of interest, and to whether the nature of the interest was of such materiality as to require any member to absent him/herself from a meeting. This was according to the guidelines provided by the Independent Commission Against Corruption, the Efficiency Unit, as well as the Companies Ordinance;
 - (b) in this case, as the directors/officer concerned had no financial interests in the schools, it was not so considered, as evidenced by the facts of the case and the relevant minutes which provided a summary of the meeting discussion;
 - (c) furthermore, no objections were raised in the relevant meetings regarding the decisions made. Therefore, the results would have been no different if the directors/officer had not been there;
 - (d) importantly as recorded in the minutes, neither the directors nor the officer lobbied for the school about which they had openly and fully declared their interests; and

- (e) the final approval for the partner schools with the associated budgets was not made until 16 March 2015, during which meeting relevant directors declared their interests and with the agreement of the Board continued to attend the meeting but abstained from voting.
- 17. In Audit's view, the HKSI needs to ensure that the rules on dealing with conflicts of interest in Board/committee proceedings as specified in the HKSI's Articles of Association are strictly followed.

Source: Audit analysis of HKSI records

- Note 1: The School Network was officially launched in early June 2014, with 25 network schools, including five of the six candidate schools complying with the key criteria recommended by the Consultant (see para. 4(a)) and seven schools of School Organisation C.
- Note 2: Schools A and B were among the six candidate schools. School Organisation C comprised a number of schools. The proposal of School Organisation C involved only two of its schools.
- *Note 3: Director C was not a member of the Panel.*

Sports facilities of the HKSI (December 2014)

Location	Facilities	Approximate area (Square metre)	No. of units available
Fo Tan venue			
Main sports	Fencing hall	820	19 pistes
complex	Badminton hall	2,410	16 courts
	Karatedo hall	280	1 court
	Table tennis hall	825	16 tables
	Squash court	850	11 single courts
Sports complex	Bowling centre	1,100	12 lanes
annex	Billiard centre	215	6 billiard tables
	Squash court	385	4 single courts convertible into 3 double courts
	Wushu hall	1,450	4 mats
Swimming complex	52-metre swimming pool	2,770	10 lanes
Outdoor	Athletics track and field	16,190	1 venue
	Basketball court	1,200	2 courts
	Grass pitch ground	6,300	1 venue
	Tennis court	6,035	8 courts
Ma On Shan satellite site			
Velodrome	Velodrome	6,100	1 venue

Source: HKSI records

Other facilities of the HKSI (December 2014)

Location	Facilities	Approximate area (Square metre)	Capacity/No.
Fo Tan venue	Athlete hostel	5,748	185 rooms
	Sports residence	2,187	74 rooms
	Carpark	7,511	216 covered spaces and 70 outdoor spaces
	Canteen	1,151	1 (300 seats)
	Lecture theatre	407	1 (400 seats)
	Boardroom	101	1
	Meeting room	649	11
	Function room	219	1
Ma On Shan satellite site	Meeting room	42	1

Source: HKSI records

Appendix F

Acronyms and abbreviations

Audit Audit Commission

EADF Elite Athletes Development Fund

EVSS Elite Vote Support System

FC Finance Committee

FSTB Financial Services and the Treasury Bureau

HAB Home Affairs Bureau

HKJC Hong Kong Jockey Club

HKSI Hong Kong Sports Institute Limited

LCSD Leisure and Cultural Services Department

LegCo Legislative Council

NSAs National Sports Associations

School Network Elite Athlete-friendly School Network

SF&OC Sports Federation and Olympic Committee

of Hong Kong, China

CHAPTER 6

Labour Department Employees Compensation Assistance Fund Board

Employees' compensation for injuries and fatalities

Audit Commission Hong Kong 1 April 2015 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. 64 of the Director of Audit contains 8 Chapters which are available on our website at http://www.aud.gov.hk

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EMPLOYEES' COMPENSATION FOR INJURIES AND FATALITIES

Contents

	Paragraph
EXECUTIVE SUMMARY	
PART 1: INTRODUCTION	1.1 - 1.17
Audit review	1.18
General response from the Government and the ECAFB	1.19 - 1.20
Acknowledgement	1.21
PART 2: PROCESSING OF EMPLOYEES' COMPENSATION CLAIMS BY THE LABOUR DEPARTMENT	2.1
Settlement of employees' compensation claims	2.2 - 2.3
Time taken for processing employees' compensation claims	2.4 - 2.10
Audit recommendations	2.11
Response from the Government	2.12
PART 3: ADMINISTRATION OF THE EMPLOYEES COMPENSATION ASSISTANCE FUND	3.1
Framework of applying for payment from the ECAF	3.2 - 3.6
Processing time of ECAF applications	3.7 - 3.11
Measures to help streamline the operations	3.12 - 3.16
Procurement practice for selecting retained lawyers	3.17 - 3.18

	Paragraph
Management of surplus funds	3.19 - 3.20
Publicity work	3.21 - 3.23
Audit recommendations	3.24
Response from the ECAFB	3.25
PART 4: ENSURING EMPLOYEES ARE COVERED BY EMPLOYEES' COMPENSATION INSURANCE	4.1
Background	4.2 - 4.4
Inspection strategies	4.5 - 4.16
Audit recommendation	4.17
Response from the Government	4.18
Monitoring of inspections	4.19 - 4.22
Audit recommendations	4.23
Response from the Government	4.24
Integrity of the workplace database	4.25 - 4.31
Audit recommendation	4.32
Response from the Government	4.33
Performance information	4.34 - 4.37
Audit recommendations	4.38
Response from the Government	4.39
Appendices	Page
A: Organisation and functions of the LID and the ECD (extract) (March 2015)	59
B: Acronyms and abbreviations	60

EMPLOYEES' COMPENSATION FOR INJURIES AND FATALITIES

Executive Summary

- 1. Employees are protected by the Employees' Compensation Ordinance (ECO Cap. 282), which provides for the payments of employees' compensation in respect of injuries or deaths caused by accidents arising out of and in the course of employment, or prescribed occupational diseases. The Labour Department (LD) is responsible for administering the ECO. The Employees' Compensation Division (ECD) of the LD handles employees' compensation claims and assesses the compensation payable by employers. To ensure that employers take out employees' compensation insurance to cover their liabilities both under the ECO and common law, the Labour Inspection Division (LID) of the LD conducts inspections to workplaces.
- 2. If an employee, or the eligible family member(s) in cases of fatalities, fails to receive from the employer employees' compensation under the ECO and/or common law damages for which the employer is liable after exhausting legal and financially viable means of recovery, the employee or the eligible family member(s) may apply for assistance payment (in relation to the unpaid compensation) and/or relief payment (in relation to the unpaid damages) from the Employees Compensation Assistance Fund (ECAF). The ECAF, established on 1 July 1991 under the Employees Compensation Assistance Ordinance (Cap. 365), is administered by the Employees Compensation Assistance Fund Board (ECAFB). In the period from 1 July 1991 to 31 March 2014, payments of \$1,115 million had been made to 2,270 applicants.
- 3. The Audit Commission (Audit) has recently conducted a review of the work of the LD and the ECAFB in protecting employees in cases of sustaining work injuries and fatalities.

Executive Summary

Processing of employees' compensation claims by the Labour Department

4. *Time taken for processing claims*. As at 30 September 2014, 7,470 (5%) of the 148,490 claims (excluding fatal claims) received by the ECD during the period from 1 January 2009 to 31 December 2013 were still not settled. Of the 7,470 outstanding claims, 1,776 (24%) were pending assessment by the Employees' Compensation (Ordinary Assessment) Board. The average time for attending the Board ranged from 6 to 17 weeks. In December 2013, the LD commenced a review to identify measures (such as increasing the Board's capacity) to shorten the time taken for processing claims. The LD needs to implement the measures identified as soon as practicable and to monitor the effectiveness of these measures. Moreover, in the period from January to September 2014, the no-show rate of the Board's appointments was 7%. The LD needs to explore measures to better utilise the unused appointment quotas (paras. 2.4, 2.6 and 2.8 to 2.10).

Administration of the ECAF

- 5. **Processing time of ECAF applications.** Audit examined 20 cases assisted by the ECAFB. Audit noted that the average time taken by the ECAFB in processing an application was 5.7 months (ranging from 1.3 to 19.6 months) for assistance payment and 5.1 months (ranging from 0.1 to 21.1 months) for relief payment. The ECAFB did not require the Secretariat to report regularly the progress of all cases to the ECAFB. With a mechanism for periodic reporting of progress of applications by the Secretariat, the ECAFB could instruct the Secretariat to carry out follow-up actions more expeditiously (paras. 3.7, 3.10 and 3.11).
- 6. *Measures to help streamline the operations*. The hiring of in-house legal staff may help the ECAFB to monitor the progress of the cases more efficiently and effectively. Out-of-court settlement and mediation have the advantage of settling cases more quickly and could save legal costs. In the period from 1 April 2011 to 31 March 2014: (a) 13 (11%) of the 117 settled cases for assistance payment were settled out-of-court; and (b) 22 (28%) of the 80 settled cases for relief payment were settled either out-of-court or by mediation. The ECAFB needs to make better use of these measures to help streamline its operations (paras. 3.14 to 3.16).

Executive Summary

- 7. **Procurement practice for selecting retained lawyers.** Given the fact that the three retained lawyers of the ECAFB have been engaged for a long time, the ECAFB needs to devise a suitable mechanism (e.g. through open tendering) for selecting lawyers as retained lawyers (para. 3.18).
- 8. *Management of surplus funds*. In recent years, the ECAF has been operating in surplus. Its accumulated surplus had increased significantly from \$37 million as at 31 March 2009 to \$468 million as at 31 March 2014. The ECAFB needs to consider how the issue of increasing amount of accumulated surplus should be addressed (paras. 3.19 and 3.20).

Ensuring employees are covered by employees' compensation insurance

- 9. Need to document the basis of selecting workplaces for inspection. Under the ECO, employers are required to take out employees' compensation insurance and display a notice of insurance at the workplaces. The Labour Inspectors of the LID conduct inspections to enforce the ECO. According to the Operation Manual, the LID should adopt an offence-prone approach in selecting workplaces from the workplace database for routine inspection. Audit noted that there was no documentation showing that the offence-prone approach was adopted in selecting workplaces for routine inspections (paras. 4.2, 4.5 and 4.6).
- 10. Many workplaces not inspected for over three years. In its response to an assignment report of May 2007 on the Labour Inspections Procedures of the LD issued by the Independent Commission Against Corruption, the LD stated that a workplace would be inspected once every two to three years. Audit, however, noted that up to 17 December 2014, 127,039 (37%) of the 344,172 workplaces in the LID's workplace database had not been inspected for over three years (from 3 to 10 years) (para. 4.8).

Executive Summary

- 11. Need to improve measures to ensure proper display of notice of insurance. The LID conducts inspections to check the employers' compliance with the requirement of displaying, in a conspicuous place, a notice of insurance at the workplaces. Under the existing practice, only employers who had been given the warning for more than two times regarding the same offence within three years would be referred to the Prosecutions Division of the LD. Audit noted that in the three-year period from 2011 to 2013, of the 196,586 workplaces inspected, only 2,416 (1.2%) had been inspected for three times or more. This implies that employers of 194,170 (98.8%) workplaces would not be prosecuted even if they failed to display the notice of insurance throughout the period. The LD needs to review its existing practice of enforcing the display of notice of insurance (paras. 4.2, 4.15 and 4.16).
- Monitoring of inspections. Supervisory inspection (i.e. a Senior Labour Inspector re-inspects on a monthly basis a workplace inspected by a Labour Inspector) is an effective means to ensure the consistency and quality of inspections. Audit, however, noted that in the period from 1 January 2013 to 31 December 2014, some Senior Labour Inspectors had not conducted supervisory inspections as frequently as required (paras. 4.19 and 4.20).
- 13. Not all offence-prone workplaces were included in the database. According to the Operation Manual, new concerns are offence-prone workplaces, and the Labour Inspectors have to keep a close watch on new workplaces in their course of inspections and the workplace database will be updated once new workplaces are noted. In January 2015, Audit visited 39 workplaces on Russell Street in Causeway Bay. Eight of the 39 workplaces visited had been in operation on Russell Street but had not been detected by the Labour Inspectors for some time (from more than one year to 14 years) (paras. 4.28 and 4.29).
- 14. **Performance information.** The LD reported in its Controlling Officer's Report a key performance indicator "Inspections to workplaces". Audit found that in the years from 2009 to 2013, the number of inspections reported in the Controlling Officer's Reports included 393,203 inspections conducted by the LID. However, 163,519 (41.6%) of the 393,203 inspections were conducted on removed, locked or vacant workplaces and therefore no enforcement work (i.e. ensuring that employers have taken out employees' compensation insurance) had been carried out (paras. 4.34 to 4.36).

Executive Summary

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 Commissioner for Labour should:

Processing of employees' compensation claims by the Labour Department

- (a) expedite the processing of the outstanding employees' compensation claims (para. 2.11(a));
- (b) continue to monitor the time taken for processing employees' compensation claims and, where warranted, take appropriate measures to address the issue (para. 2.11(b));

Ensuring employees are covered by employees' compensation insurance

- (c) take measures to improve the existing inspection strategies (para. 4.17);
- (d) take measures to ensure that supervisory inspections are conducted in accordance with the Operation Manual (para. 4.23(a));
- (e) take measures to enhance the integrity of the workplace database (para. 4.32); and
- (f) review the performance indicators of the LID so that inspections where no enforcement work is carried out are excluded or separately reported in the Controlling Officer's Report (para. 4.38(a)).

Executive Summary

16. Audit has also recommended that the ECAFB should:

Administration of the ECAF

- (a) take measures to shorten the time taken for processing ECAF applications (para. 3.24(a));
- (b) consider the feasibility of hiring in-house legal staff (para. 3.24(b));
- (c) where appropriate, explore the possibility of settling cases out-of-court or by mediation (para. 3.24(c));
- (d) devise a suitable mechanism for selecting lawyers as retained lawyers (para. 3.24(d)); and
- (e) monitor the issue of increasing amount of accumulated surplus funds of the ECAF, and when necessary, take appropriate measures to address the issue (para. 3.24(e)).

Response from the Government and the ECAFB

17. The Commissioner for Labour and the ECAFB 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.

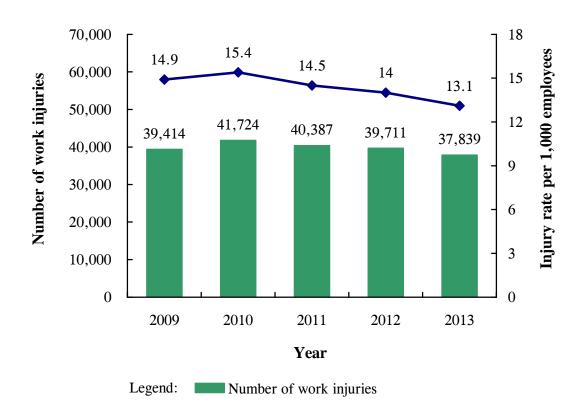
Employees' Compensation Ordinance

1.2 Employees are protected by the Employees' Compensation Ordinance (ECO — Cap. 282), which provides for the payments of employees' compensation by employers to employees (or to employees' family members in cases of fatalities) for injuries caused by accidents arising out of and in the course of employment. The ECO also covers payments to employees suffering from prescribed occupational diseases specified in the ECO (e.g. Tuberculosis and infection by Streptococcus suis).

Statistics on work injuries, fatalities and prescribed occupational diseases

1.3 Figure 1 shows the statistics on work injuries (excluding fatalities) for the period from 2009 to 2013. Figures 2 and 3 show for the same period the statistics on fatalities and prescribed occupational diseases.

Figure 1
Work injuries (2009 to 2013)



Source: Occupational Safety and Health Statistics of the Labour Department

← Injury rate per 1,000 employees

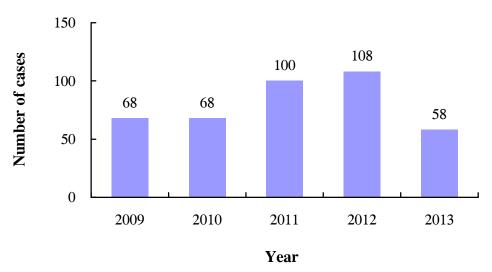
Remarks: The statistics only included work injuries (excluding fatalities) resulting in incapacity for work for more than three days.

Figure 2 **Fatalities** (2009 to 2013) 196 191 188 200 183 165 Number of cases 150 100 50 0 2009 2010 2011 2012 2013 Year

Source: Occupational Safety and Health Statistics of the Labour Department

Figure 3

Prescribed occupational diseases (2009 to 2013)



Source: Occupational Safety and Health Statistics of the Labour Department

Obligations of employers under the ECO

- 1.4 An employer must be in possession of a valid employees' compensation insurance policy to cover his liabilities both under the ECO and common law (Note 1) for work injuries and fatalities as well as prescribed occupational diseases of his employees. An employer who fails to take out such an insurance policy is liable on conviction to a maximum fine of \$100,000 and imprisonment for two years. An employer is also required to display, at a conspicuous place, a notice of the insurance at the workplace (a place where employees are employed). The purpose of displaying the notice is to enable employees to know whether their employers have taken out the insurance, so that they can lodge complaints with the Labour Department (LD) if they found that their employers have not done so. An employer who fails to display the notice may be subject to a maximum fine of \$10,000 upon conviction.
- 1.5 Under the ECO, in cases of work injuries or prescribed occupational diseases, the employer must notify the LD within 14 days. If an employee dies as a result of accident, the employer must notify the LD within seven days. An employer who, without reasonable excuse, fails to fulfill the requirements may be liable, upon conviction, to a maximum fine of \$50,000.

Insurance premiums and employees' compensation

1.6 Table 1 shows for the period from 2010 to 2014 (up to September 2014), the insurance premiums paid by employers to insurers for employees' compensation insurance policies. It also shows the employees' compensation (including ECO compensation and common law damages) paid by insurers together with their commissions and other expenses.

Note 1: In addition to the protection of the ECO, an injured employee, an employee suffering from a prescribed occupational disease or a deceased employee's family members may start a civil suit for claiming common law damages against the employer if the injury or death is caused by the negligence or other wrongful acts of the employer.

Table 1

Insurance premiums, employees' compensation, and commissions and other expenses (2010 to 2014)

	2010 (\$ million)	2011 (\$ million)	2012 (\$ million)	2013 (\$ million)	2014 (up to 30 September) (\$ million)
Gross premiums (Note 1)	3,731	4,063	5,540	6,601	5,155
Earned premiums (Note 2)	2,908	3,263	3,971	5,006	4,224
Net employees' compensation claims incurred (Note 3)	2,318	2,530	3,387	3,865	2,983
Commissions and other expenses	914	993	1,233	1,518	1,228

Source: Office of the Commissioner of Insurance website

Note 1: Gross premiums refer to insurance premiums paid by employers.

Note 2: Earned premiums are gross premiums after deducting reinsurance outward premiums and making adjustment for unearned premiums.

Note 3: Net employees' compensation claims incurred are gross claims paid after deducting claims recovered from reinsurers and making adjustment for outstanding claims provision.

Terms of employees' compensation under ECO

1.7 The ECO operates on a "no-fault" basis and employees' compensation is payable irrespective of the degree of fault of the employers and employees concerned. The ECO sets out the terms of compensation for work injuries and fatalities as well as prescribed occupational diseases as follows:

- (a) **Temporary incapacity.** For temporary incapacity (Note 2 up to 24 months and a further period of not more than 12 months subject to the approval of court), the employee is entitled to compensation which is calculated at the rate of four-fifths of the difference between his monthly earnings at the time of accident and his monthly earnings during the period of temporary incapacity;
- (b) **Permanent partial incapacity.** For permanent partial incapacity, the amount of compensation payable equals to: "amount of compensation due to permanent total capacity (see para. 1.7(c) below) × percentage of permanent loss of earning capacity". Examples of percentages of permanent loss of earning capacity are shown in Table 2;

Table 2

Examples of percentages of permanent loss of earning capacity

Type of work injuries	Percentage
Loss of both feet	100%
Loss of leg at hip	80%
Loss of sight of one eye	50%
Loss of thumb — both phalanges	30%
Loss of entire nose	25%
Loss of ring finger — three phalanges	8%

Source: ECO

Note 2: A period of temporary incapacity refers to a period of absence from duty certified to be necessary by a registered medical practitioner, a registered Chinese medicine practitioner, a registered dentist or an Employees' Compensation (Ordinary Assessment) Board (see para. 2.5).

(c) **Permanent total incapacity.** The amount of compensation payable for permanent total incapacity is shown in Table 3;

Table 3

Compensation payable for permanent total incapacity

Age of employee	Amount of compensation				
Under 40	96 months' earnings (Note 1)				
40 to under 56	72 months' earnings (Note 1)	Or minimum amount of compensation, whichever is higher (Note 2)			
56 or above	48 months' earnings (Note 1)				

Source: ECO

Note 1: For an accident happened between 1 August 2010 and 20 July 2012, between 21 July 2012 and 4 March 2015, and on or after 5 March 2015, the monthly earning is capped at \$21,500, \$23,580 and \$26,070 respectively.

Note 2: For an accident happened between 1 August 2010 and 20 July 2012, between 21 July 2012 and 4 March 2015, and on or after 5 March 2015, the minimum amount is \$352,000, \$386,110 and \$426,880 respectively.

(d) *Fatal cases.* The amount of compensation payable for fatal cases is shown in Table 4; and

Table 4

Compensation payable for fatal cases

Age of employee	Amount of compensation					
Under 40	84 months' earnings (Note 1)					
40 to under 56	60 months' earnings (Note 1)	Or minimum amount of compensation, whichever is higher (Note 2)				
56 or above	36 months' earnings (Note 1)					

Source: ECO

Note 1: For an accident happened between 1 August 2010 and 20 July 2012, between 21 July 2012 and 4 March 2015, and on or after 5 March 2015, the monthly earning is capped at \$21,500, \$23,580 and \$26,070 respectively.

Note 2: For an accident happened between 1 August 2010 and 20 July 2012, between 21 July 2012 and 4 March 2015, and on or after 5 March 2015, the minimum amount is \$310,000, \$340,040 and \$375,950 respectively.

(e) *Medical and funeral expenses*. Irrespective of the types of incapacity, an employer is liable to pay daily medical expenses of \$200 or \$280 for medical treatment received by an employee (Note 3). Where applicable, the employer is liable to pay the initial and maintenance costs of supplying and fitting the prosthesis or surgical appliance (Note 4). For fatal cases, an employer is liable to reimburse expenses of funeral and medical

Note 3: The daily maximum amount of medical expenses where an employee is given medical treatment as an in-patient or other than as an in-patient is \$200. The daily maximum amount where an employee is given medical treatment both as an in-patient and other than as an in-patient is \$280.

Note 4: For accidents happened before 5 March 2015, the initial costs for supplying and fitting the prosthesis or surgical appliance and the costs of repairing/renewing the item during a period of ten years are capped at a maximum amount of \$33,460 and \$101,390 respectively. For accidents happened on or after 5 March 2015, such initial costs and repairing/renewing costs are capped at a maximum amount of \$36,430 and \$110,390 respectively.

attendance up to a maximum amount of \$76,220 for an accident happened on or after 5 March 2015 (\$35,000 for an accident happened between 1 August 2010 and 20 July 2012, and \$70,000 for an accident happened between 21 July 2012 and 4 March 2015).

Role of the LD

- 1.8 The LD aims to enhance the protection of employees' rights and benefits in a way which is commensurate with the pace of Hong Kong's economic and social developments. To achieve this, the LD, among other things, administers the ECO.
- Division (ECD) of the LD assists the injured employees (hereafter injured employees include employees suffering from prescribed occupational diseases), or injured employees' family members in cases of fatalities, to settle employees' compensation claims by handling the claims and assessing the compensation payable by employers (see Table 9 in para. 2.2). The ECD comprises the Headquarters, one Fatal Cases Office and nine Branch Offices (see Appendix A). The Fatal Cases Office, headed by a Labour Officer, is manned by a team of seven staff (including both Labour Officer grade staff and clerical grade staff). The Headquarters and the nine Branch Offices (led by six Labour Officers) are headed by a Senior Labour Officer. Each Branch Office is manned by a team of 9 to 11 staff.
- 1.10 Table 5 shows, for the period from 2009 to 2013, the number of employees' compensation claims (for work injuries, fatalities and prescribed occupational diseases) received and settled by the ECD. It also shows the amounts of compensation settled.

Table 5
Employees' compensation claims received and settled by ECD (2009 to 2013)

	2009	2010	2011	2012	2013
No. of claims received	55,799	58,791	56,996	56,763	55,168
No. of claims settled (Note)	42,520	41,467	41,647	41,916	39,955
Compensation (\$ million)	1,039	957	1,058	1,266	1,255

Source: LD records

Note: Claims settled in a year: (a) include claims received in the year and previous years; and (b) exclude claims settled by direct payment (see (a) in Table 9 in para. 2.2).

1.11 District Offices (DOs) of the Labour Inspection Division (LID). The DOs of the LID of the LD enforce the ECO by conducting inspections to workplaces to check employers' compliance with the compulsory insurance requirement under the ECO (see paras. 1.13 to 1.17).

Employees Compensation Assistance Fund

1.12 If an employee, or the eligible family member(s) in cases of fatalities, fails to receive from the employer employees' compensation under the ECO and/or common law damages for which the employer is liable after exhausting legal and financially viable means of recovery (e.g. the employer has not taken out employees' compensation insurance policy to cover his liabilities for the work injury of the injured/deceased employee concerned and has declared bankrupt or wound-up by court), the employee or the eligible family member(s) may apply for assistance payment (in relation to the unpaid compensation) and/or relief payment (in relation to the unpaid damages) from the Employees Compensation Assistance Fund (ECAF). Background of the ECAF is shown in Table 6.

Table 6

ECAF

Establishment Established on 1 July 1991 under the Employees

Compensation Assistance Ordinance (ECAO — Cap. 365)

Administration Administered by the

Employees Compensation Assistance Fund Board (ECAFB), which comprises nine members:

- the chairman
- two members (who represent employers)
- two members (who represent employees)
- one member (who has expertise in the practice of accounting, investment or law)
- one member (who has expertise in the practice of insurance)
- the Commissioner for Labour his or representative
- the Director of Legal Aid or his representative
- The ECAFB has a Secretariat responsible for the day-to-day operation of the ECAF. The Secretariat's services are provided by the Occupational Safety and Health Council (Note 1) at a mutually agreed charge (\$1.6 million for 2013-14 comprising the salaries of a Secretary and an Executive Assistant, and office expenses). The ECAFB also hires two Claims Executives and an Administrative Assistant (at a total remuneration of some \$870,000 for 2013-14) to assist the Secretary

Table 6 (Cont'd)

Functions of ECAFB

- To hold the ECAF in trust and to administer it for the benefit of those eligible for payments under the ECAF
- To consider applications for payment from the ECAF
- To receive monies collected from insurers by the Employees' Compensation Insurance Levies Management Board (ECILMB — Note 2)
- To regularly advise the ECILMB on the amounts required to meet known and anticipated claims against the ECAF

Number of assisted applicants

- 2,270 (1 July 1991 to 31 March 2014)
- For the period from 2009-10 to 2013-14:

2009-10	2010-11	2011-12	2012-13	2013-14
57	66	55	67	72

Payments to assisted applicants

- \$1,115 million (1 July 1991 to 31 March 2014)
- For the period from 2009-10 to 2013-14:

2009-10	2010-11	2011-12	2012-13	2013-14	
(\$ million)					
41.4	45.3	50.9	47.1	53.6	

Income (2013-14)

\$201 million, including \$197 million (98%) received from the ECILMB which collects levies (currently 5.8%) on insurance premiums paid by employers

Table 6 (Cont'd)

Expenditure : \$70.3 million, including \$66.7 million (95%) for

(2013-14) assistance payment in relation to unpaid compensation,

relief payment in relation to unpaid damages, and legal

costs

Accumulated : \$468 million

operating surplus (as at 31 March

2014)

Source: ECAFB records

Note 1: The Occupational Safety and Health Council is a statutory body established in August 1988. It is responsible for promoting safety and health at work and sustaining the workforce of Hong Kong.

Note 2: The ECILMB is a statutory body established in July 1990. It is responsible for collecting the Employees' Compensation Insurance Levy remitted by insurers and distributing the levies to three specified statutory bodies including the ECAFB.

The District Offices of the LID

1.13 As mentioned in paragraph 1.4, it is the obligations of an employer to take out employees' compensation insurance to cover his liabilities both under the ECO and common law, and display a notice of insurance at the workplace. To ensure that employers fulfil these obligations under the ECO, the DOs of the LID of the LD enforce the ECO by conducting inspections to workplaces (Note 5).

Note 5: The function of the DOs is to conduct inspections to workplaces. In 2013, the majority (77%) of the DOs' inspections was to check whether employers had fulfilled their obligations under the ECO. Other inspections conducted by the DOs are shown at Appendix A. The Appendix also shows the overall organisation and functions of the LID.

- 1.14 There are 12 DOs located throughout the territory. Each DO is headed by a Senior Labour Inspector, who oversees the work of five to six Labour Inspectors. As at 31 December 2014, the DOs had 58 Labour Inspectors in total.
- 1.15 Table 7 shows, for the period from 2010 to 2014, the number of inspections conducted by the DOs to enforce the ECO.

Table 7

DOs' inspections to enforce ECO (2010 to 2014)

Year	Number of inspections
2010	80,204
2011	62,079
2012	69,174
2013	97,729
2014	86,803

Source: LD records

1.16 Employers found to have failed to fulfil their obligations under the ECO are liable to prosecution by the Prosecutions Division of the LD. Table 8 shows, for the period from 2010 to 2014, the number of prosecutions conducted by the Prosecutions Division against employers detected by the LID for failing to fulfil their obligations under the ECO. It also shows the number of convictions and the amounts of fines involved.

Table 8

Statistics of prosecutions relating to non-compliance with ECO detected by LID (2010 to 2014)

	2010	2011	2012	2013	2014
Number of prosecutions	1,392	741	776	1,013	927
Number of convictions	1,300	683	747	986	887
Total fine (\$ million)	2.6	1.3	1.5	2.1	1.9

Source: LD records

Recurrent expenditure of the ECD and the DOs

1.17 The work of the ECD and the DOs, which deals with matters concerning employees' compensation, forms part of the LD's programme for safeguarding the rights and benefits of employees (Note 6). For 2014-15, the estimated expenditure for the programme amounted to \$332.8 million.

Audit review

1.18 The Audit Commission (Audit) commenced a review in November 2014 of the work of the LD and the ECAFB in protecting employees in cases of sustaining work injuries, fatalities or suffering from prescribed occupational diseases. The audit focused on the following areas:

Note 6: Other work of the LD for safeguarding the rights and benefits of employees include: (a) the work of the LID's Special Enforcement Teams (see Appendix A); (b) the assistance rendered by the LD's Wage Security Division (which assists employees on such matters as owed wages and severance payments); and (c) the work of the LD's Employment Claims Investigation Division (which conducts investigations into complicated cases involving offences under the Employment Ordinance (Cap. 57)).

Introduction

- (a) processing of employees' compensation claims by the LD (PART 2);
- (b) administration of the ECAF (PART 3); and
- (c) ensuring employees are covered by employees' compensation insurance (PART 4).

General response from the Government and the ECAFB

- 1.19 The Commissioner for Labour agrees with the audit observations and accepts the recommendations. He has said that the LD attaches great importance to safeguarding the rights and benefits of employees who sustained work-related injuries or fatalities and will spare no efforts in making continuous improvements in processing employees' compensation claims as well as taking vigorous enforcement actions to ensure employees' protection by employees' compensation insurance and clamping down on law-defying employers. To this end, the LD will continue to keep up its efforts in identifying areas for improvement and implement concrete measures on various fronts where appropriate.
- 1.20 The ECAFB agrees with the audit recommendations. The Chairman, ECAFB has said that the ECAF serves as the safety net for the injured employees or family members of deceased employees who are unable to receive their entitlements of compensation and damages for work injuries from employers or insurers after exhausting legal and financially viable means of recovery. The ECAFB attaches great importance to ensuring its efficient administration and long-term sustainability. To this end, the ECAFB will continue to explore and implement concrete measures on various fronts.

Acknowledgement

1.21 Audit would like to acknowledge with gratitude the full cooperation of the staff of the LD and the ECAFB during the course of the audit review.

PART 2: PROCESSING OF EMPLOYEES' COMPENSATION CLAIMS BY THE LABOUR DEPARTMENT

2.1 This PART examines the work of the ECD in processing employees' compensation claims.

Settlement of employees' compensation claims

As mentioned in paragraph 1.5, in cases of work injuries or prescribed occupational diseases, employers must notify the ECD of the LD within 14 days. On receipt of the notification, the ECD takes steps to process the claims (see Figure 4). There are a number of ways an employees' compensation claim can be settled. Details of the ways of settlement are shown in Table 9.

Figure 4

Procedures for processing employees' compensation claims



Source: LD records

Table 9
Ways of settlement of employees' compensation claims

Ter	nporary incapacity	
(a)		Direct payment. The employer directly makes payment for injuries and prescribed occupational diseases involving only temporary incapacity (i.e. periodical payments) on the same days as wages that would have been payable to the employee during the period of the sick leave. Except for those cases where information provided is incomplete or irregularities are detected, the ECD's processing is not required.
(b)	Sick leave exceeding 3 days but not more than 7 days and no permanent incapacity is resulted	Direct settlement. The employer directly agrees with the employee as to the amount of compensation payable under the ECO and makes such payment on the same days or before which wages would have been payable to the employee. The ECD vets the information provided to ensure that all required information (e.g. details of accident, employees' compensation insurance, earnings of the employee, direct settlement amount and injury) is proper. If there are disputes between the employer and the employee on the details of the direct settlement or on the existence of such settlement agreement or the employee may have permanent incapacity, the case would be handled in the same manner as those with sick leave exceeding 7 days (see (c) below).
(c)	Sick leave exceeding 7 days	Certificate of Compensation Assessment. The ECD assesses the compensation payable under the ECO and the employee has to attend medical clearance at the LD's Occupational Medicine Unit (OMU — Note 1). Upon completion of medical clearance procedure, if the injury (or prescribed occupational disease) results in temporary incapacity only, the ECD issues to the employer and the employee a Certificate of Compensation Assessment stating the amount of the compensation payable. The employer has to settle the compensation

Table 9 (Cont'd)

as set out in the Certificate. The compensation paid by the employer is recoverable from his insurer under the policy. If, in the opinion of the OMU, the injury (or prescribed occupational disease) would likely result in permanent partial or total incapacity, the employee concerned will be referred to the Employees' Compensation (Ordinary Assessment) Board (ECOAB) for assessment (see (d) below).

Permanent incapacity (partial or total)

(d) Employees with permanent incapacity

Medical assessment. If in the light of the available medical information, an injury (or prescribed disease) would likely occupational result permanent incapacity, the employee will be referred by the OMU to the ECOAB (see para. 2.5 for more details). After the medical condition of an injured employee (or an employee suffered from an prescribed occupational disease) has stabilised, he will attend the ECOAB for an assessment of the period of absence from duty and the percentage of loss of earning capacity permanently caused by the injury (or prescribed occupational disease). When the assessment result is available, the ECOAB will issue a Certificate of Assessment. Based on the Certificate of Assessment, the ECD will issue a Certificate of Compensation Assessment to both the employer and employee stating the amount of compensation payable. The employer has to settle the compensation as set out in the Certificate. The compensation paid by the employer is recoverable from his insurer under the policy.

Fatal cases

(e) Deceased employees

Determination by Commissioner for Labour. In accidents where the employer and all the parties to the claim have agreed, and the Commissioner for Labour considers that a claim is suitable for determination, the Commissioner may determine on

Table 9 (Cont'd)

the amount of the compensation for death (Note 2) and/or funeral and medical expenses payable, and the persons to whom such compensation and/or payment shall be paid, and issue the relevant Certificate(s) to all the applicants and the employer. The employer has to settle the amount of compensation and/or payment as set out in the Certificate(s). The compensation paid by the employer is recoverable from his insurer under the policy.

Court cases

(f) Cases not settled in the above ways (e.g. cases in dispute) Determination by court. Except for cases which should be settled by direct payment (see (a) above), cases which cannot be settled in the above ways (see (b) to (e) above) shall be determined by the District Court. In particular, if there are disputes between the employer and the employee on the claims respect of certain items (e.g. employer-employee relationship, medical conditions and injury parts), an application to the court has to be made within 24 months from the date of the accident causing the injury, occupational disease or death. For appeals against the assessment result of the Commissioner for Labour or the ECOAB, an application has to be made within six months from the date of issue of the relevant Certificate.

Source: LD records

Note 1: The OMU is under the Occupational Medicine Division (Clinical Services) of the LD. As at 31 December 2014, the OMU comprised 8 nursing staff and 21 clerical staff. The OMU interviews the injured employees and vets the medical certificates issued by doctors in respect of the work injuries or prescribed occupational diseases.

Note 2: The compensation for death shall be apportioned among the deceased employee's eligible family members in the manner as stipulated in the ECO.

2.3 Table 10 shows, for the period from 2009 to 2013, the number of employees' compensation claims received by the ECD.

Table 10

Number of employees' compensation claims received by ECD (2009 to 2013)

	2009	2010	2011	2012	2013	Total			
			2011	2012	2013	Total			
Claims not requiring ECD's	Claims not requiring ECD's processing								
Sick leave not more than 3 days (direct payment cases)	15,503	16,165	15,944	16,266	16,096	79,974			
Sick leave exceeding 3 days but not more than 7 days (direct settlement cases)	10,946	11,694	10,956	10,584	9,900	54,080			
Sub-total	26,449	27,859	26,900	26,850	25,996	134,054			
Claims requiring ECD's pro	cessing								
Sick leave exceeding 3 days but not more than 7 days where employer or employee disputed over compensation payable	1,948	1,847	1,638	1,522	1,274	8,229			
Sick leave exceeding 7 days and employee with permanent incapacity	27,218	28,888	28,263	28,198	27,694	140,261			
Fatal cases	184	197	195	193	204	973			
Sub-total	29,350	30,932	30,096	29,913	29,172	149,463			
Total	55,799	58,791	56,996	56,763	55,168	283,517			

Source: LD records

Time taken for processing employees' compensation claims

Need to monitor long outstanding employees' compensation claims

As at 30 September 2014, 107 (11%) of the 973 fatal cases (see Table 10) received by the ECD on or before 31 December 2013 were pending decisions of family members of deceased employees, employers' consents, court proceedings or legal aid application results, etc. For work injuries and prescribed occupational diseases, 7,470 (5%) of the 148,490 (149,463-973) (see Table 10) claims received by the ECD during the period from 2009 to 2013 were still not yet settled. An analysis of the 7,470 claims is shown in Table 11.

Table 11

Outstanding work injury and occupational disease claims
(30 September 2014)

		Number of claims received (outstanding as at 30 September 2014)					Total	
	2009	2010	2011	2012	2013			
Pending completion of medical clearance (Note 1)	13	15	41	154	1,390	1,613	22%	
Pending ECOAB's assessment and issue of Certificate of Assessment after the availability of assessment results	10	14	54	219	1,479	1,776	24%	
Pending ECD's issue of Certificate of Compensation Assessment	0	0	3	18	164	185	2%	
Under ECD's investigation of claims involving disputes	0	0	3	13	146	162	2%	
Pending legal aid application/District Court's results (Note 2)	36	179	527	1,438	1,554	3,734	50%	
Total	59	208	628	1,842	4,733	7,470	100%	

Source: LD records

Note 1: Medical clearance cannot be completed until an employee attends the OMU and the required medical information is ready for the ECOAB.

Note 2: Claims pending legal aid application/District Court's results include those claims where there are disputes between the employers and the employees and where the employees had claimed common law damages in addition to employees' compensation against the employers.

Need to shorten waiting time for attending ECOAB

- An ECOAB (Note 7) comprises two doctors from the Hospital Authority (HA) and a Labour Officer from the Branch Offices of the ECD. The ECOABs are located at 16 HA's hospitals. In general, the ECOABs conduct one session to two sessions per week (Monday to Friday). Each session lasts for three hours and around 30 to 50 injured employees are arranged to be assessed in the session depending on the resources of each HA hospital allocated to the ECOAB.
- The majority of injured employees are treated by the Orthopaedics & Traumatology (O&T) Departments or the Accident & Emergency (A&E) Departments while a small number of injured employees are treated by the Psychiatry Departments or other specialties of the HA at the same time. As shown in Table 11, 24% of the outstanding injury claims was pending assessment by the ECOAB. Audit noted that as at 1 December 2014, the average waiting time for attending the ECOAB ranged from 6 to 17 weeks (see Table 12).

Note 7: The ECOAB is formed under the ECO. Members of the Board are appointed by the Commissioner for Labour.

Table 12
Waiting time for attending ECOAB
(1 December 2014)

		Waiting time (Week)			
District	Hospital	O&T	A&E	Psychiatry	
Hong Kong	Pamela Youde Nethersole Eastern Hospital	16	10	N.A.	
	Queen Mary Hospital	6	9	N.A.	
	Ruttonjee and Tang Shiu Kin Hospital	12	13	N.A.	
Kowloon	United Christian Hospital	7	6	N.A.	
	Queen Elizabeth Hospital	10	14	N.A.	
	Kwong Wah Hospital	8	7	N.A.	
	Caritas Medical Centre	13	12	N.A.	
	Tseung Kwan O Hospital	15	10	N.A.	
New Territories	Tuen Mun Hospital	13	17	N.A.	
	Princess Margaret Hospital	10	10	N.A.	
	Yan Chai Hospital	13	14	N.A.	
	Prince of Wales Hospital	11	13	N.A.	
	Alice Ho Mui Ling Nethersole Hospital	13	13	N.A.	
	North District Hospital	12	10	N.A.	
	Castle Peak Hospital	N.A.	N.A.	14	
	Kwai Chung Hospital	N.A.	N.A.	11	

Source: LD records

In 1994, the LD introduced an Off-duty Doctor Scheme to hire additional HA doctors with the LD's funding to conduct extra assessments during their off-duty hours with a view to shortening the waiting time of the ECOABs in individual hospitals (Note 8). In the years from 2009 to 2013, on average,

Note 8: Under the Scheme, each HA doctor was paid \$2,100 (\$2,224 with effect from 1 February 2015) for each four-hour assessment session.

75 additional sessions with some 2,700 assessments were conducted under the Scheme annually. Nevertheless, according to the LD, the ECOAB's capacity (some 21,000 scheduled assessments a year on average) had not been able to cope with the continued influx of new cases.

Need to continue to shorten the time taken for processing claims

- 2.8 In December 2013, the LD commenced a review to identify measures to shorten the time of processing claims, especially the waiting time for assessment by the ECOABs (Note 9). The measures identified by the LD included:
 - (a) Enhancing communication with the HA hospitals. Under the existing practice which has been established between the HA's hospitals and the LD, some of the Departments (e.g. the O&T Departments) inform the OMU to schedule the ECOAB appointments once the injured employees are found suitable for assessment by the ECOAB (an injured employee's medical condition has to be stable before he can attend the assessment). However, for employees treated by some other Departments (e.g. the A&E Departments), the OMU had to write many times to them to enquire about the suitability of the injured employees for assessment;
 - (b) Minimising the number of referrals from the OMU to the ECOAB. If, in the light of available medical information, an injury (or prescribed occupational disease) would likely result in permanent incapacity, the OMU will refer the injured employee to the ECOAB for assessment. In the period from 2009 to 2013, 12% of the assessments conducted were found not resulted in permanent incapacity. Referrals from the OMU may be reduced if the attending doctors of the injured employees could indicate in their medical reports whether the employees are suffering from permanent incapacity; and
 - (c) Conducting extra assessments. The options of hiring retired doctors and convening assessments outside normal office hours (e.g. in the evening or on Saturday mornings) could be explored to increase the ECOAB's capacity.

Note 9: Up to 31 January 2015, the LD's review had not been completed.

- Audit welcomes the LD's measures to shorten the time taken for processing claims. Audit considers that the LD needs to implement these measures as soon as practicable and to monitor the effectiveness of these measures. Where necessary, the LD may also need to implement further measures to address the issue.
- Regarding the utilisation of quotas of the ECOAB, Audit noted that in the period from January to September 2014, 1,164 (7%) of 16,555 injured employees did not attend the ECOAB appointments. The LD informed Audit in March 2015 that it had been regularly compiling statistics on no-show rates of individual hospitals and the rate of no-show cases had already been taken into account in determining the ECOAB's available appointment quotas. Therefore, it is not desirable to further increase the number of quotas. Given the fact that the ECOAB's capacity is limited and there has been a continued influx of new cases, Audit considers that the LD needs to continue to closely monitor the no-show rate and explore measures to better utilise the unused appointment quotas.

Audit recommendations

- 2.11 Audit has *recommended* that the Commissioner for Labour should, taking into consideration the pertinent audit comments (see paras. 2.4 to 2.10):
 - (a) expedite the processing of the outstanding employees' compensation claims; and
 - (b) continue to monitor the time taken for processing employees' compensation claims and, where warranted, take appropriate measures to address the issue (e.g. make better use of unused appointment quotas if there is a surge in the no-show rate).

Response from the Government

2.12 The Commissioner for Labour agrees with the audit recommendations. He has said that to further improve the processing of employees' compensation claims, the LD will continue to closely monitor the no-show rate and, in collaboration with the HA, to explore measures to better utilise the unused appointment quotas if there is a persistent surge in the no-show rate.

PART 3: ADMINISTRATION OF THE EMPLOYEES COMPENSATION ASSISTANCE FUND

- 3.1 This PART examines the administration of the ECAF. Audit has found that there is scope for improvement in the following areas:
 - (a) processing time of ECAF applications (paras. 3.7 to 3.11);
 - (b) measures to help streamline the operations (paras. 3.12 to 3.16);
 - (c) procurement practice for selecting retained lawyers (paras. 3.17 and 3.18);
 - (d) management of surplus funds (paras. 3.19 and 3.20); and
 - (e) publicity work (paras. 3.21 to 3.23).

Framework of applying for payment from the ECAF

Eligibility of applying for payment from the ECAF

- 3.2 Under the ECAO, if an injured employee or the eligible family member(s) of a deceased employee is unable to recover from an employer, after exhausting legal and financially viable means of recovery (Note 10):
 - (a) employees' compensation for which the employer is liable pursuant to a judgment or order of a court or a relevant certificate (e.g. a Certificate of Compensation Assessment) issued by the Commissioner for Labour under the ECO; and/or

Note 10: In cases of financial difficulties, injured employees or eligible family members may apply for legal aid from the Legal Aid Department to pursue their claims against the employers at court.

(b) damages (Note 11) for which the employer is liable pursuant to a judgment or order of a court,

the injured employee or the eligible family member(s) may apply for assistance payment in relation to the unpaid employees' compensation and/or relief payment in relation to the unpaid damages from the ECAF. The primary liability to pay employees' compensation and damages for work injuries rests with the employers. The ECAF acts as a last resort for those injured employees and eligible family members who have established liability and quantum of claims against the employers but are unable to recover their entitlement from the employers.

3.3 Where necessary and appropriate (e.g. in cases where employment relationship is in serious dispute or suspicious, the quantum of the claim is high and the employer is unrepresented), the ECAFB may apply to the court to be joined as a party to the proceedings taken by the injured employee or the eligible family member(s) against the employer (Note 12). The ECAFB will not join in every set of proceedings as there is the risk of complicating and unnecessarily prolonging those proceedings and adding to the costs of litigation.

Coverage of ECAF

- 3.4 According to the ECAO, payment from the ECAF to assisted applicants covers the following items:
 - (a) assistance payment in relation to unpaid employees' compensation adjudged to be payable by the employers to the injured employees or the eligible family members, and interest on the compensation;
- **Note 11:** In addition to the statutory employees' compensation, an injured employee or eligible family member(s) may seek common law damages for negligence or wrongful act of the employer through a court in a civil suit.
- Note 12: A notification system has thus been set up under the ECAO to require a person who commences proceedings in respect of a claim for employees' compensation or damages, to give written notice to the ECAFB within a prescribed period to facilitate it to consider whether to join in the proceedings to defend claims for better protecting the interest of the ECAF.

- (b) legal costs incurred by the injured employees or the eligible family members in legal proceedings claiming employees' compensation (e.g. engaging a lawyer to file a claim at the court and to enforce a court judgment) against the employers; and
- (c) relief payment in relation to unpaid damages adjudged to be payable by the employers to the injured employees or the eligible family members.

Payments are also made to the ECAFB's retained lawyers for their legal services to the ECAFB.

3.5 Table 13 shows the number of applicants assisted by the ECAFB in the period from 2009-10 to 2013-14. Table 14 shows for the same period the amount of assistance payments and relief payments made by the ECAFB to the applicants and the legal costs paid by the ECAFB.

Table 13

Number of applicants assisted by the ECAFB (2009-10 to 2013-14)

Year	Applicants		
2009-10	57		
2010-11	66		
2011-12	55		
2012-13	67		
2013-14	72		

Source: ECAFB records

Table 14
Assistance/relief payments and legal costs paid by the ECAFB (2009-10 to 2013-14)

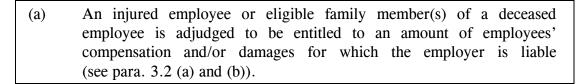
	2009-10 (\$ million)	2010-11 (\$ million)	2011-12 (\$ million)	2012-13 (\$ million)	2013-14 (\$ million)
Payments					
Assistance payment in relation to unpaid employees' compensation	18.4	14.2	12.8	12.4	14.7
Relief payment in relation to unpaid damages	11.6	19.0	28.2	24.2	24.2
Total	30.0	33.2	41.0	36.6	38.9
Legal costs					
Applicants' legal costs relating to employees' compensation claims against their employers	11.4	12.1	9.9	10.5	14.7
Legal costs paid to the ECAFB's retained lawyers	7.9	7.5	9.1	11.8	13.1
Total	19.3	19.6	19.0	22.3	27.8

Source: ECAFB records

Procedures for processing ECAF applications

3.6 Figure 5 shows the procedures for processing applications for payment from the ECAF (ECAF applications).

Figure 5 Procedures for processing ECAF applications



- (b) The employer defaults on payment and does not have a valid employees' compensation insurance policy to cover his liability.
- (c) The injured employee or the eligible family member(s) enforces the court judgment or court order by typically applying for: (i) a bankruptcy order against the defaulting employer who is an individual; or (ii) a winding-up order in the case of a limited company. This assists in ensuring as much as possible that employers who have not taken out valid employees' compensation insurance policies will themselves bear the liability to pay employees' compensation/damages.

(Processing of application by the ECAFB triggered)

- (d) The injured employee or the eligible family member(s) submits an application to the ECAFB for: (i) assistance payment in relation to the unpaid employees' compensation; and/or (ii) relief payment in relation to the unpaid damages (Note 1).
- (e) The ECAFB's Secretary (as delegated by the ECAFB) may at some point assign one of the ECAFB's retained lawyers to handle the applicant's application (Notes 2 and 3).
- (f) The ECAFB verifies the application, and if the application is successful, the ECAFB approves it and makes payment.

Source: ECAFB records

- Note 1: An injured employee or eligible family member(s) needs to submit separate applications for assistance payment in relation to the unpaid employees' compensation and relief payment in relation to the unpaid damages.
- Note 2: Depending on factors such as the amount and complexity of the case, the Secretary may assign a retained lawyer before or after the court judgment/order to handle the case.
- Note 3: Procedure (e) is not applicable where the ECAFB directly settles with the applicant (i.e. not involving any of the ECAFB's retained lawyers).

Processing time of ECAF applications

3.7 Audit examined 20 cases assisted by the ECAFB. Assistance was paid out in the period from 1 April 2011 to 31 March 2014 and the payments amounted to a total of \$27.6 million. Audit noted that the average time taken in processing an application was 5.7 months (ranging from 1.3 to 19.6 months) for assistance payment in relation to unpaid employees' compensation and 5.1 months (ranging from 0.1 to 21.1 months) for relief payment in relation to unpaid damages (see Table 15).

Table 15

Processing time of applications for payment by the ECAFB (1 April 2011 to 31 March 2014)

Case	Employees' compensation (Months — Note 1)	Relief payment (Months — Note 1)
A	15.1	15.1
В	4.5	4.5
С	2.6	2.6
D	19.6	21.1
Е	2.5	2.5
F	16.7	16.7
G	1.8	1.8
Н	2.5	2.5
I	7.7	7.7
J	3.7	0.8
K	6.8	9.9
L	1.7	1.7
M	1.9	1.5
N	1.9	1.9
0	5.2	N.A. (Note 2)
P	7.1	0.7
Q	N.A. (Note 3)	0.4
R	1.7	1.0
S	3.6	3.8
T	1.3	0.1
Average	5.7	5.1

Source: ECAFB records

Note 1: The number of months taken for processing applications for payment from the ECAF is counted:

- (a) from the date of establishing the employer's liability and inability to pay (i.e. the date of application to the ECAFB, the date of court judgment/order, or the date of bankruptcy/winding-up order, whichever is the latest); and
- (b) to the date of first payment. Under the ECAO, relief payment in relation to unpaid damages exceeding \$1.5 million will be paid by an initial lump sum of \$1.5 million and followed by monthly instalments.
- Note 2: The applicant did not apply for relief payment in relation to the unpaid damages.
- Note 3: The applicant did not apply for assistance payment in relation to unpaid employees' compensation because his employer had paid for the compensation.

- 3.8 Audit's review of the above 20 cases indicated that there was room for improvement in the time taken for processing applications by the ECAFB in order to facilitate earlier payment to the injured employees.
- 3.9 Audit noted that in some instances, the time taken for injured employees to obtain payment could have been shortened. For example, in a case reviewed by Audit, the retained lawyer took about 15 months to review the case and advise the ECAFB on the approval of the application. Audit noted that the retained lawyer had spent time on requesting from the applicant's lawyer information which had already been provided to him.

Closer monitoring of the progress of cases by the ECAFB

- 3.10 Audit noted that the ECAFB did not have a specific mechanism in place for monitoring the case progress. The ECAFB did not require the Secretariat to report regularly the progress of all cases to the ECAFB. The Secretariat was only required to:
 - (a) bring up cases with unusual nature (e.g. suspected fraudulent cases or cases involving illegal workers) for discussion in the meetings of the ECAFB; and
 - (b) for each application, after all the required handling work had been completed, provide a detailed summary of the application together with the relevant legal advice and documents to the ECAFB for obtaining the ECAFB's approval (by way of circulation of papers) on the application.
- 3.11 To facilitate monitoring of the progress of applications, Audit considers that the ECAFB needs to establish a mechanism for periodic reporting of progress of applications by the Secretariat to the ECAFB. The mechanism would facilitate the ECAFB to instruct the Secretariat to carry out follow-up actions more expeditiously when warranted and assess the performance of the retained lawyers periodically.

Measures to help streamline the operations

Need to monitor legal costs payable from the ECAF

- 3.12 As can be seen from Table 14 in paragraph 3.5, the total legal costs paid by the ECAFB represented significant amounts in relation to the assistance/relief payments paid to the assisted applicants.
- 3.13 While recognising that the level of legal costs depends on a number of factors (including the complexity of individual cases) that may be beyond the control of the ECAFB, Audit notes that the following measures may help streamline the operations:
 - (a) hiring of in-house legal staff to better allocate cases to retained lawyers and monitor case progress; and
 - (b) more use of out-of-court settlement and mediation.

Hiring of in-house legal staff

At an ECAFB meeting held in June 2014, the ECAFB discussed the option of hiring in-house legal staff but had not reached a decision due to the fact that the ECAFB still had outstanding indebtedness incurred in earlier years (Note 13). Audit considers that while the hiring of in-house legal staff would not replace the need to engage retained lawyers, it may help the Secretary to the ECAFB to better allocate the cases to retained lawyers and help the ECAFB to monitor the progress of the cases more efficiently and effectively. As the outstanding debt was fully repaid on 1 April 2015, the ECAFB needs to consider the feasibility of hiring in-house legal staff.

Note 13: In June 2000 and June 2002, the ECAFB obtained a bridging loan of \$60 million and \$220 million respectively from the Government to finance the ECAF's deficit caused by large payments awarded by the courts and the insolvency of three local insurance companies.

More use of out-of-court settlement and mediation

- 3.15 Out-of-court settlement and mediation have the advantage of settling cases more quickly and could save legal costs (Note 14). In the 20 cases examined by Audit, applications for relief payment in relation to unpaid damages in six cases were settled out-of-court. The out-of-court settlement of these six cases was initiated by the ECAFB's retained lawyers.
- 3.16 In the period from 1 April 2011 to 31 March 2014:
 - (a) of the 117 settled cases for assistance payment in relation to unpaid employees' compensation, 13 (11%) were settled out-of-court; and
 - (b) of the 80 settled cases for relief payment in relation to unpaid damages, 19 (24%) were settled out-of-court and three (4%) were settled by mediation (Note 15).

Not all cases are suitable for out-of-court settlement or mediation (e.g. cases with vigorous contests on liability or there is information indicating that the employers are holding certain assets). The parties must themselves be willing to enter into any negotiated settlement or agreement. Notwithstanding this, given that out-of-court settlement and mediation have the advantage of settling cases more quickly, Audit considers that the ECAFB needs to make better use of these channels and where appropriate explore the possibility of settling the cases out-of-court or by mediation.

Procurement practice for selecting retained lawyers

3.17 At present, the ECAFB has engaged three legal firms as its retained lawyers. The Secretary to the ECAFB is responsible for the allocation of cases of ECAF applications to retained lawyers. The retained lawyers would assist the ECAFB to monitor the cases and provide legal advice when necessary. According

Note 14: According to the Judiciary, parties can save time and money in not having to contest matters in court with an early settlement as litigation is a much longer process.

Note 15: The Mediation Ordinance (Cap. 620) came into effect in January 2013.

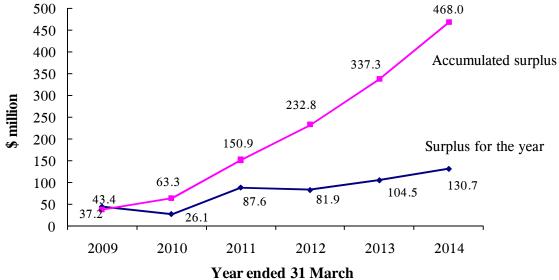
to the Secretary, each of the three firms has provided one to two lawyers to specially handle the ECAF's cases and the firms' fees and charges are standardised.

3.18 Given the fact that the three retained lawyers have been engaged for a long period of time (one engaged in 1991 and two in 1997), Audit considers that the ECAFB needs to review the procurement practice of the legal services and devise a suitable mechanism for selecting lawyers as retained lawyers (e.g. through open tendering).

Management of surplus funds

3.19 In recent years, the ECAF has been operating in surplus. Its accumulated surplus had increased significantly from \$37 million as at 31 March 2009 to \$468 million as at 31 March 2014 (see Figure 6).

Figure 6
Surplus funds of ECAF
(2009 to 2014)



Source: ECAFB records

3.20 In view of the increasing operating surplus, Audit considers that the ECAFB needs to consider how the issue of increasing amount of accumulated surplus should be addressed and to make better use of the surplus already accumulated.

Publicity work

- 3.21 The ECAFB publicises the services it provides through:
 - (a) the relevant webpage of the LD which includes:
 - (i) the functions and membership of the ECAFB; and
 - (ii) a Guide to the ECAO and Procedures for Applying for Payment from the ECAF (the Guide); and
 - (b) the Guide available for collection by the public at:
 - (i) the Business Registration Office of the Inland Revenue Department;
 - (ii) the Companies Registry; and
 - (iii) the Branch Offices of the LD's ECD.
- 3.22 Audit considers that the ECAFB could do more to enhance the publicity of the ECAF. The ECAFB, for example, could enhance the information in the LD's website or establish the ECAF's own website to provide comprehensive information. Such information may include sections of frequently asked questions and cases of applications illustrating how the ECAF has assisted injured employees and eligible family members of deceased employees.

3.23 In the period from late December 2014 to early February 2015, Audit visited the Business Registration Office, the Companies Registry, and three Branch Offices of the LD's ECD. In all the visits, Audit found that the Guide was not available for collection by the public.

Audit recommendations

- 3.24 Audit has recommended that the ECAFB should:
 - (a) take measures to shorten the time taken for processing ECAF applications;
 - (b) consider the feasibility of hiring in-house legal staff;
 - (c) where appropriate, explore the possibility of settling cases out-of-court or by mediation;
 - (d) devise a suitable mechanism for selecting lawyers as retained lawyers;
 - (e) monitor the issue of increasing amount of accumulated surplus funds of the ECAF, and when necessary, take appropriate measures to address the issue;
 - (f) consider establishing a website of the ECAF to provide comprehensive information on the ECAF or enhancing the information relating to the ECAF in the LD's website; and
 - (g) take measures to ensure that copies of the Guide for collection by the public (e.g. on the display racks of Branch Offices of the LD's ECD) are replenished in a timely manner.

Response from the ECAFB

- 3.25 The ECAFB agrees with the audit recommendations. The Chairman, ECAFB has said that:
 - (a) the extent of the reduction in legal costs would depend on a number of factors beyond the control of the ECAFB, namely the complexity of individual cases, the court procedures necessary for injured employees to establish their employers' liability and inability to pay, fees charged by lawyers in Hong Kong in the coming years and the scale of costs adopted by the courts on taxation; and
 - (b) given the difficulties and uncertainties which are beyond the ECAFB's control, whilst the ECAFB will try its best to monitor legal costs and avoid unnecessary spending, reducing costs in such a climate will prove a huge challenge.

PART 4: ENSURING EMPLOYEES ARE COVERED BY EMPLOYEES' COMPENSATION INSURANCE

- 4.1 This PART examines the LD's work in ensuring employees are covered by employees' compensation insurance. Audit has found that there is scope for improvement in the following areas:
 - (a) inspection strategies (paras. 4.5 to 4.18);
 - (b) monitoring of inspections (paras. 4.19 to 4.24);
 - (c) integrity of the workplace database (paras. 4.25 to 4.33); and
 - (d) performance information (paras. 4.34 to 4.39).

Background

- Employers are liable to pay employees' compensation for cases in which employees sustained work injuries or died or suffered from a prescribed occupational disease specified in the ECO. Under the ECO, no employer shall employ any employee in any employment unless there is in force a policy of insurance to cover his liabilities under the ECO and common law. An insured employer is required to display, in a conspicuous place on each of his workplaces where any employee is employed, a notice of insurance. The Labour Inspectors of the DOs of the LID conduct three types of inspections to check the compliance with these requirements:
 - (a) *Inspections arising from complaints and referrals.* Upon receipt of complaints from the public or referrals from other bureaux/departments or other divisions of the LD, Labour Inspectors will conduct inspections of the workplaces concerned;
 - (b) *Campaign inspections*. DOs conduct inspections under one to four district-based enforcement campaigns each quarter targeting offence-prone trades/locations; and

- (c) **Routine inspections.** Workplaces are selected from the LID's workplace database (see para. 4.25) for inspection on a routine basis. The Operation Manual issued by the LID stipulates that the selection should be based on an offence-prone approach. Under this approach, which has been in operation since 2006, trades that are more likely to have non-compliance are accorded with a higher priority while reputable organisations (such as consulates) are accorded with a lower priority.
- 4.3 In the years of 2013 and 2014, the number of routine inspections accounted for 95% of all inspections conducted (see Table 16).

Table 16

Number of inspections conducted (2013 and 2014)

	201	13	2014		
Туре	Number	%	Number	%	
Inspections arising from complaints and referrals	497	1	523	1	
Campaign inspections	4,043	4	3,310	4	
Routine inspections	93,189	95	82,970	95	
Total	97,729	100	86,803	100	

Source: Audit analysis of LD records

Audit visited 3 of the 12 DOs to examine their inspection documentation and records. Audit also accompanied the Labour Inspectors (see para. 4.14) in conducting 29 inspections. Audit noted that improvements could be made in a number of areas (see paras. 4.5 to 4.33).

Inspection strategies

Need to document the basis of selecting workplaces for inspection

- 4.5 The Operation Manual stipulates that Senior Labour Inspectors should identify offence-prone establishments/trades and black spots for targeted inspections. According to the Manual, the offence-prone establishments include those with previous offence records, new concerns and new arcades, arcades and shopping malls with frequent turnover of shops and companies, small and medium-sized establishments with relatively little resources to take care of personnel matters, establishments/trades with seasonal demand of manpower, and service contracts due to expire or complete. Furthermore, according to the LID, the risk level of the offence-prone workplaces is assessed by the offence detection rates. According to the Manual, the Senior Labour Inspectors take into account the district characteristics and other relevant factors (e.g. whether the establishments are offence-prone) in identifying a list of establishments for routine inspections from the database of the LID.
- Routine inspections accounted for some 95% of the inspections conducted by the DOs (see Table 16 in para. 4.3). Audit noted that there was no documentation showing that the Senior Labour Inspectors in charge of the DOs had adopted the offence-prone approach in selecting workplaces for routine inspections. The Senior Labour Inspectors did not document the reasons why the selected workplaces were offence-prone (i.e. under which of the criteria listed in the Operation Manual were the selected workplaces considered as offence-prone). For example, it was not documented whether the workplace selected for inspection was located in shopping malls with frequent turnover of shops, or located in new arcade, or its trade had seasonal demand of manpower. There was also no documentation indicating that the inspections were conducted in accordance with the offence detection rates.
- 4.7 For the effective use of inspection resources and to ensure that the Senior Labour Inspectors comply with the offence-prone approach stipulated in the Operation Manual, Audit considers that the LD needs to take measures to improve the documentation of the basis of selecting workplaces for inspection.

Many workplaces not inspected for over three years

It is not stipulated in the Operation Manual whether workplaces not inspected for a period of time should be accorded with priority for routine inspection. Nonetheless, in its response to an assignment report of May 2007 on the Labour Inspections Procedures of the LD issued by the Independent Commission Against Corruption, the LD stated that a workplace would be inspected once every two to three years. Audit, however, noted that up to 17 December 2014, 127,039 (37%) of the 344,172 workplaces in the LID's workplace database had not been inspected for more than three years (see Table 17).

Table 17
Workplaces not inspected for over three years
(17 December 2014)

	Number of workplaces
Over 3 years to 5 years	60,121
Over 5 years to 10 years	47,249
Over 10 years	19,669
Total	127,039

Source: Audit analysis of LD records

Audit considers that the LD needs to work out an appropriate strategy on inspection frequency. For instance, workplaces that have not been inspected for a certain number of years would be retrieved and assessed on their priority for routine inspection.

List of workplaces of group companies not updated

4.9 It is stipulated in the Operation Manual that for workplaces of a group company, the LID adopts a simplified inspection arrangement. After inspecting the group company's employees' compensation group insurance policy which covers all the employees of the group company's workplaces, the Labour Inspector will issue a "confirmation letter" to the group company specifying the workplaces covered

under the group insurance policy. The group company is required to distribute a copy of the "confirmation letter" to its workplaces. During the inspection of the workplaces of a group company, the Labour Inspector will only check the "confirmation letter".

- 4.10 Audit noted that the LID maintained a list of group companies in the Operation Manual. However, the list had not been updated since 2002 and included only 13 group companies. In March 2015, the LD informed Audit that:
 - (a) in the past ten years, electronic means of transmitting documents had been increasingly popular and was also widely recognised. The LD had accepted the submission of insurance policy by fax and email to provide flexibility to employers; and
 - (b) with effect from 12 March 2015, the special inspection arrangement for group companies was discontinued and the Operation Manual had been updated to reflect the fact that the LD had accepted the submission of the insurance policies by fax and email.

Unable to conduct inspections to ensure foreign domestic helpers are covered by employees' compensation insurance

- 4.11 According to the Census and Statistics Department, in 2013, there were some 320,000 foreign domestic helpers in Hong Kong. Employers must take out employees' compensation insurance for their helpers in accordance with the ECO.
- 4.12 Inspections to domestic premises cannot be conducted to check whether the employers have taken out employees' compensation insurance for foreign domestic helpers because under the ECO, Labour Inspectors cannot enter domestic premises for inspections without a warrant issued by a magistrate. As foreign domestic helpers may not be familiar with their rights and benefits under the ECO, relying on them to lodge complaints may not a reliable means to detect non-compliance. In response to Audit's enquiry, the LD informed Audit in March 2015 that it had undertaken various promotional activities in conjunction with consulates targeting at foreign domestic helpers and their employers to enhance their understanding of relevant provisions of the ECO. Audit considers that the LD needs

to take further measures to ensure that employers have taken out employees' compensation insurance for their helpers. Such measures may include, for example, stepping up publicity to remind the helpers of their rights and benefits and employers of their obligations under the ECO.

Need to improve measures to ensure proper display of notice of insurance

- 4.13 As mentioned in paragraph 4.2, the DOs conduct inspections to ensure that notices of employees' compensation insurance are displayed at conspicuous places at workplaces. The proper display of the notice of insurance would provide employees the assurance that employees' compensation insurance has been duly taken out by their employers.
- 4.14 In 6 (21%) of the 29 accompanied inspections (see para. 4.4), the employers were found to have failed to display the notice of insurance. Furthermore, Audit noted that in the period from 1 January 2011 to 30 September 2014, the LID had given 11,782 verbal warnings and 215 written warnings to employers found to have failed to display the notice. In the same period, the LID had not initiated any prosecutions for the offence.
- 4.15 According to the Operation Manual, when an employer is found to have failed to display the notice of insurance, the DOs should take one of following three enforcement actions against the employer:
 - (a) giving a verbal warning for first-time offence;
 - (b) giving a written warning for second-time offence; or
 - (c) referring to the Prosecutions Division of the LD for initiating prosecution for subsequent offences.

In deciding the enforcement action to be taken, the DOs would only take into account offences of the same nature committed by an employer in the past three years.

Audit noted that in the three-year period from 2011 to 2013, the DOs inspected a total of 196,586 workplaces. Out of these workplaces, only 2,416 (1.2%) workplaces had been inspected for three times or more. This implies that only the employers of these 2,416 workplaces would have the possibility of being prosecuted if the employers had already been given a verbal warning and a written warning. The employers of the remaining 194,170 (98.8%) workplaces would not be prosecuted even if they failed to display the notice of insurance throughout the three-year period. For effective enforcement of the display of notice of insurance by employers, Audit considers that the LD needs to review its existing practice of taking enforcement actions only on those employers who had been given warning for more than two times regarding the same offence within three years.

Audit recommendation

4.17 Audit has *recommended* that the Commissioner for Labour should take measures to improve the existing inspection strategies taking into consideration the pertinent audit comments (see paras. 4.5 to 4.16).

Response from the Government

4.18 The Commissioner for Labour agrees with the audit recommendation.

Monitoring of inspections

4.19 According to the Operation Manual, the Senior Labour Inspector of a DO is required to re-inspect on a monthly basis one of the workplaces inspected by each of the Labour Inspectors. Supervisory inspections are an effective means to ensure the consistency and quality of inspections conducted by Labour Inspectors. An example is shown below.

- 1. In July 2013, a Labour Inspector of the Mongkok DO conducted an inspection at a workplace. In the inspection, the Labour Inspector had not taken steps (e.g. checking the Hong Kong Identity Card) to identify the employer and the employee at the workplace. He only spoke to a person who claimed to be a relative of the employer. The person said that the employer did not hire any employees.
- 2. In August 2013, the Senior Labour Inspector conducted a supervisory inspection. In the inspection, she found that the employer had failed to take out employees' compensation insurance for the employee for two consecutive years.

Source: LD records

4.20 The number and nature of inspections conducted each month were recorded in the activity records of the Senior Labour Inspectors. Audit, however, noted that in the period from 1 January 2013 to 31 December 2014, the Senior Labour Inspectors of the three DOs visited by Audit (see para. 4.4) had not conducted supervisory inspections as frequently as required by the Operation Manual (see Table 18).

Table 18

Shortfall of supervisory inspections
(1 January 2013 to 31 December 2014)

	Number of supervisory inspections					
DO	Required (a)	Conducted (b)	Shortfall (c) = (a) - (b)			
Hong Kong East	136	113	23 (17%)			
Mongkok	117	107	10 (8%)			
New Territories East	124	116	8 (6%)			
Total	377	336	41 (11%)			

Source: Audit analysis of LD records

- 4.21 In response to Audit's enquiry, the LID explained that the supervisory inspections were conducted less frequently than required due to unanticipated and urgent work commitments of the Senior Labour Inspectors concerned during the period. Out of the total number of supervisory inspections not conducted, four supervisory inspections in the Mongkok DO and five supervisory inspections in the New Territories East DO were not conducted because the Senior Labour Inspectors concerned were on leave or on sick leave during the period.
- 4.22 In view of the importance of supervisory inspections, the LD needs to ensure that supervisory inspections are conducted in accordance with the Operation Manual as far as possible. In case of genuine difficulties, the reasons for not conducting the required supervisory inspections should be documented and the omission of these inspections be approved by the Chief Labour Inspector of the LID.

Audit recommendations

- 4.23 Audit has recommended that the Commissioner for Labour should:
 - (a) take measures to ensure that supervisory inspections are conducted in accordance with the Operation Manual; and
 - (b) if supervisory inspections are not conducted due to genuine difficulties, ensure that the justifications are documented and the approval from the Chief Labour Inspector of the LID is obtained.

Response from the Government

4.24 The Commissioner for Labour agrees with the audit recommendations.

Integrity of the workplace database

4.25 The LID maintains a workplace database for the Senior Labour Inspectors of the DOs to select workplaces for routine inspections. As at mid-December 2014,

Ensuring employees are covered by employees' compensation insurance

the database contained a total of 344,172 workplaces. The database is updated with information on workplaces obtained from the following sources:

- (a) complaints by the public and referrals from other divisions of the LD and other government bureaux/departments;
- (b) new workplaces identified during district-based enforcement campaigns (see para. 4.2(b)); and
- (c) new workplaces noticed by Labour Inspectors during the course of inspections of existing workplaces.
- 4.26 According to the LID, it is not its policy to maintain a complete database on establishments employing employees in Hong Kong and inspect them all. Nevertheless, it updates the workplace database from time to time so that the database could be used as one of the reference points in planning inspection work and identifying inspection targets. In fact, in the years of 2013 and 2014, 95% of the inspections conducted by the DOs were routine inspections to workplaces selected from the LID's database (see paras. 4.2(c) and 4.3).
- 4.27 In Audit's view, it is important for the LID to ensure that workplaces, particularly those offence-prone ones, are included in the workplace database as far as possible. The LID will then have a more comprehensive and reliable basis for planning inspection work. It will enable the DOs to ascertain more accurately the total population of potential targets for inspection in a district, thus minimising the omission of some offence-prone workplaces from inspection and the possible allegation of selective enforcement. Audit's examination indicated that there was room for improvement in this regard (see paras. 4.28 to 4.31).

Not all offence-prone workplaces were included in the database

4.28 *New workplaces not included in the database.* According to the Operation Manual, new concerns are offence-prone workplaces. Therefore, the Labour Inspectors have to keep a close watch on new workplaces in their course of inspections. The LID's workplace database will be updated once new workplaces are noted.

On 22 January 2015, Audit conducted a survey of workplaces on Russell Street in Causeway Bay. Audit visited 39 workplaces on the street (15 on the ground floor and 24 upstairs) to ascertain whether there were any new workplaces operating but unnoticed by the Labour Inspectors of the DOs. Audit found that 9 (23%) of the 39 workplaces were not included in the database and as a result, had not been inspected since they commenced business. Audit's business registration search on 27 January 2015 revealed that eight of the nine workplaces had been in operation on Russell Street but had not been detected by the Labour Inspectors for some time (from more than one year to 14 years — see Table 19). In addition to the fact that these eight workplaces were new concerns, they may also be small and medium-sized establishments with relatively little resources to take care of personnel matters (see para. 4.5).

Table 19

Establishments operated on Russell Street not detected by Labour Inspectors
(January 2015)

Business nature	Location	Business commencement date	Period in operation
Beauty parlour	Upstairs	Dec 2010	4 years and 1 month
Beauty parlour	Upstairs	May 2010	4 years and 8 months
Beauty parlour	Upstairs	Aug 2013	1 year and 5 months
Dental service centre	Upstairs	Sep 2000	14 years and 4 months
Hair salon	Upstairs	Oct 2007	7 years and 3 months
Photo shop	Upstairs	Jul 2014	7 months
Retail shop (Chinese dried seafood)	Upstairs	Nov 2000	14 years and 2 months
Retail shop (cosmetics and skin care)	Upstairs	Oct 2013	1 year and 3 months
Retail shop (watches)	Ground floor	Jun 2011	3 years and 7 months

Source: Audit's street survey and business registration search conducted in January 2015

Need to make use of the workplace database maintained by another division of LD

- 4.30 The Occupational Safety Operations Division (OSOD) of the LD receives notifications of workplaces of industrial undertakings (Note 16):
 - (a) under the Factories and Industrial Undertakings Ordinance (Cap. 59), a person having the management or control of a notifiable workplace (including a factory or an industrial establishment as specified in the law, but excluding construction site) is required to notify the LD before commencing operation; and
 - (b) under the Construction Sites (Safety) Regulations (Cap. 59I), a contractor undertaking construction works lasting for a specific period of time or employing a workforce of specific size should notify the LD within seven days after commencement of the work.

Based on the notifications and other sources of information, the OSOD maintains a workplace database for conducting inspections to workplaces to ensure that employers comply with the safety and health standards stipulated under the Occupational Safety and Health Ordinance (Cap. 509) and the Factories and Industrial Undertakings Ordinance.

Using the workplaces in the Tai Po Industrial Estate as an example, Audit compared the workplace database of the OSOD with that of the LID. Audit found that, as at 30 September 2014, 278 (79%) of 353 workplaces in the OSOD's database were missing in that of the LID. Audit considers that the LID needs to make use of the OSOD's workplace database to update its own database.

Note 16: Industrial undertakings refer to workplaces such as factories, construction sites, catering establishments, cargo and container handling undertakings, and repair workshops.

Audit recommendation

4.32 Audit has *recommended* that the Commissioner for Labour should take measures to enhance the integrity of the workplace database taking into account the pertinent audit comments (see paras. 4.25 to 4.31).

Response from the Government

4.33 The Commissioner for Labour agrees with the audit recommendation.

Performance information

4.34 The LD reported in its Controlling Officer's Report (COR) a key performance indicator known as "Inspections to workplaces" conducted by the LID (see Table 20).

Table 20

Key performance indicator: Inspections to workplaces (2009 to 2013)

	2009	2010	2011	2012	2013	Total
Target	120,000	120,000	120,000	130,000	130,000	620,000
Actual	139,718	140,267	138,395	143,680	151,912	713,972

Source: LD CORs for the period from 2010-11 to 2014-15

4.35 The performance indicator "Inspections to workplaces" refers to inspections conducted by both the DOs and the Special Enforcement Teams (see Appendix A) of the LID. For the period from 2009 to 2013, of the 713,972 inspections (see Table 20), 393,203 (55%) were conducted by the DOs for enforcing the ECO (see Table 21).

Table 21
Inspections conducted by DOs for enforcing ECO (2009 to 2013)

	2009	2010	2011	2012	2013	Total
Number of inspections	84,017	80,204	62,079	69,174	97,729	393,203

Source: LD records

4.36 Audit analysis of the LID's inspection statistics revealed that the figures reported in the CORs included inspections where the workplaces were removed, locked or vacant and therefore no enforcement work (i.e. ensuring that employers have taken out employees' compensation insurance) had been carried out. In the years from 2009 to 2013, the figures reported in the CORs included 163,519 such inspections (representing 41.6% of the 393,203 inspections — see Table 22).

Table 22

Number of DO's inspection visits to workplaces (2009 to 2013)

	2009	2010	2011	2012	2013	Total
Inspections with ECO enforcement work carried out	49,661	45,584	36,464	40,033	57,942	229,684 (58.4%)
Inspections without ECO	enforcem	ent work	carried or	ut		
Workplace removed	19,088	17,542	12,983	14,487	20,220	84,320 (21.5%)
Workplace locked	15,077	16,855	12,492	14,508	19,441	78,373 (19.9%)
Workplace vacant	191	223	140	146	126	826 (0.2%)
Sub-total	34,356	34,620	25,615	29,141	39,787	163,519 (41.6%)
Total	84,017	80,204	62,079	69,174	97,729	393,203 (100.0%)

Source: LD records

- 4.37 Furthermore, Audit noted that the number of inspections provided by the LD to the Legislative Council (LegCo) also included inspections where the workplaces were visited but no enforcement work had been carried out because they were removed, locked or vacant:
 - in May 2013, in its briefing to the LegCo Panel on Manpower on the LD's enforcement action for protecting employees' rights and benefits, the LD reported that the DOs conducted some 69,000 inspections in 2012 (see Table 22 in para. 4.36); and
 - (b) in July 2013, in response to a LegCo Member's question, the LD reported that in 2010 and 2011, the DOs conducted some 80,000 and 62,000 inspections respectively (see Table 22 in para. 4.36) to check employers' compliance with the compulsory insurance requirement under the ECO.

Given a high percentage of the inspections were on workplaces which were removed, locked or vacant, Audit considers that such inspections need to be excluded or separately reported in the COR.

Audit recommendations

- 4.38 Audit has recommended that the Commissioner for Labour should:
 - (a) review the performance indicators of the LID so that inspections where no enforcement work is carried out are excluded or separately reported in the COR; and
 - (b) take action to improve the performance information provided to LegCo in future.

Response from the Government

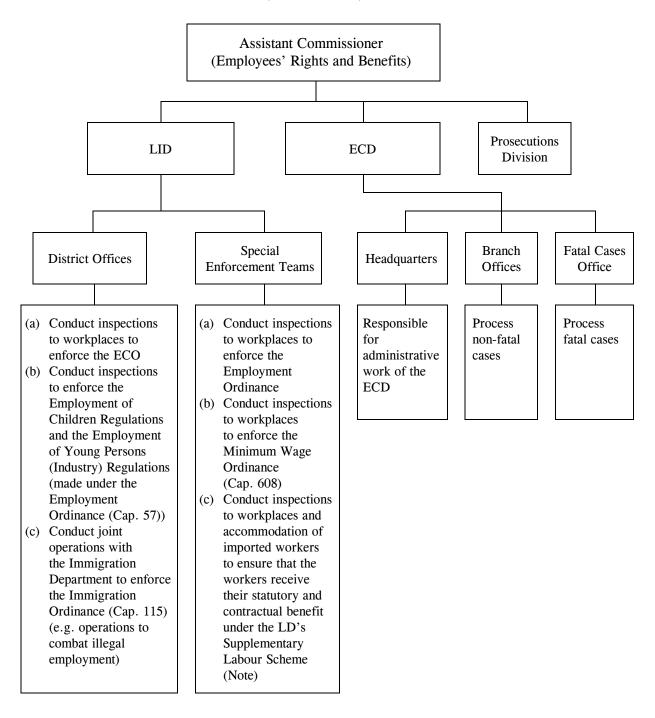
- 4.39 The Commissioner for Labour agrees with the audit recommendations. He has said that:
 - (a) identifying removed, locked or vacant establishments without enforcement work is also a form of inspection as it is the Labour Inspectors' duty to report on new establishments detected during inspections and update the database for removed, locked and vacant workplaces;
 - (b) the LD will add a remark in the performance indicators to show the number of inspections to workplaces which are found locked, removed or vacant; and
 - (c) the LD will improve the performance information provided to LegCo in future by showing the yearly total of the number of inspections to the workplaces with a remark indicating the number of inspections to the workplaces which are found locked, removed or vacant.

Appendix A

(para. 1.9, Note 5 in para. 1.13, Note 6 in

para. 1.17 and para. 4.35 refer)

Organisation and functions of the LID and the ECD (extract) (March 2015)



Source: LD records

Note: It is a labour importation scheme which allows employers with genuine difficulties in finding suitable

local staff at technician level or below to import workers to alleviate the manpower shortages.

Appendix B

Acronyms and abbreviations

Audit Audit Commission

A&E Accident & Emergency

COR Controlling Officer's Report

DOs District Offices

ECAF Employees Compensation Assistance Fund

ECAFB Employees Compensation Assistance Fund Board

ECAO Employees Compensation Assistance Ordinance

ECD Employees' Compensation Division

ECILMB Employees' Compensation Insurance Levies

Management Board

ECO Employees' Compensation Ordinance

ECOAB Employees' Compensation (Ordinary Assessment) Board

HA Hospital Authority

LD Labour Department

LegCo Legislative Council

LID Labour Inspection Division

OMU Occupational Medicine Unit

OSOD Occupational Safety Operations Division

O&T Orthopaedics & Traumatology

CHAPTER 7

Education Bureau

Education Bureau Kowloon Tong Education Services Centre

Audit Commission Hong Kong 1 April 2015 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. 64 of the Director of Audit contains 8 Chapters which are available on our website at http://www.aud.gov.hk

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EDUCATION BUREAU KOWLOON TONG EDUCATION SERVICES CENTRE

Contents

	Paragraph
EXECUTIVE SUMMARY	
PART 1: INTRODUCTION	1.1 - 1.3
Facilities provided at the KTESC	1.4 - 1.5
Audit review	1.6
General response from the Government	1.7
Acknowledgement	1.8
PART 2: REALISATION OF EXPECTED BENEFITS OF KTESC	2.1
Expected benefits of the KTESC	2.2 - 2.3
Changes in accommodations	2.4 - 2.7
Utilisation of educational facilities	2.8 - 2.29
Utilisation of communal facilities	2.30 - 2.39
Feedback from users	2.40
Performance targets	2.41

	Paragraph
PART 3: OPERATIONAL ISSUES OF KTESC	3.1
Services of the Central Resources Centre	3.2 - 3.11
Borrowing service of the Special Education Resource Centre	3.12 - 3.20
Mini-theatre of the Young Achievers' Gallery	3.21 - 3.24
PART 4: WAY FORWARD	4.1
Need to work out a strategy for effective use of the KTESC	4.2
Need for a post-implementation review of the KTESC	4.3 - 4.5
Audit recommendations	4.6
Response from the Government	4.7
Appendices	Page
A: SoAs of the KTESC approved by the PVC in November 2002 and January 2004 and the usage of the KTESC as at 31 October 2014	57 - 61
B: Acronyms and abbreviations	62

EDUCATION BUREAU KOWLOON TONG EDUCATION SERVICES CENTRE

Executive Summary

- 1. The Education Bureau Kowloon Tong Education Services Centre (KTESC) is located on top of a public transport interchange at 19 Suffolk Road, Kowloon and adjacent to the Mass Transit Railway Kowloon Tong Station. It has a total net operational floor area (NOFA) of 13,900 square metres (m²). The KTESC commenced operation in early 2006. The project expenditure was \$487 million.
- 2. The KTESC provides the following facilities:
 - (a) educational facilities, namely the Central Resources Centre (CRC), Special Education Resource Centre (SERC), Hong Kong Teachers' Centre (HKTC) and Young Achievers' Gallery (YAG);
 - (b) 12 communal facilities, namely one lecture theatre, one mini-lecture theatre, one multi-purpose hall and nine function rooms; and
 - (c) office accommodation for some 550 staff of the Education Bureau (EDB).

The Audit Commission (Audit) has recently conducted a review on the KTESC.

Realisation of expected benefits of KTESC

3. Changes in accommodations. According to the Government's Accommodation Regulations, the user bureau/department (B/D) of a Specialist/Departmental Building has to prepare a Schedule of Accommodation (SoA) and seek the Property Vetting Committee's (PVC) approval. After the approval of SoA, if the NOFA of any individual item varies by more than 10% from the approved NOFA or the total NOFA varies by more than 5% from the approved

area, the user B/D should re-submit the SoA to the PVC for further approval. Audit compared the NOFA of the accommodations of the KTESC as at 31 October 2014 with the latest approved SoA in January 2004. Audit noted that for some accommodations, there were variations exceeding 10%. Audit also noted that some existing accommodations (e.g. Applied Learning Section) were not included in the January 2004 approved SoA (paras. 2.4 to 2.6).

- 4. *Utilisation of educational facilities*. Educational facilities accounted for 11% of the KTESC's total NOFA of 13,900 m² (para. 2.8). Audit found that:
 - (a) *CRC*. The EDB used the reading recorded by an automatic patron counter of the entrance gate to calculate the number of visitors. The daily average number of visitors reported for 2014 was 266. Audit conducted a five-day on-site survey in January 2015 and noted that the number of visitors included passers-by who entered the CRC solely on the way of visiting the multi-purpose hall adjacent to the CRC. The daily number of visitors who used the CRC services during Audit's five-day survey ranged from 97 to 253 whereas the daily number of visitors calculated by the CRC ranged from 297 to 950 (paras. 2.15 to 2.19);
 - (b) **SERC.** Similar to the CRC, the EDB also used a gate counter to collect the number of visitors. The reported daily average number of visitors in 2014 was 119. Audit's five-day survey noted that the number of visitors was five or below on each of the five days (average 3.8 visitors per day) (paras. 2.22 to 2.24);
 - (c) **HKTC.** The EDB did not collect information on the number of visitors to the HKTC. Audit's five-day survey noted that the number of visitors was on the low side. During the survey, there were 15 visitors or less on weekdays and 22 visitors on Saturday (average 11.2 visitors per day) (para. 2.26); and
 - (d) YAG. The daily average number of visitors to the YAG was low, ranging from 15 to 28 for the years 2009 to 2014 (up to 31 October) (para. 2.28).

- 5. Utilisation of communal facilities. Communal facilities accounted for 12% of the KTESC's total NOFA. In response to the Government Property Agency (GPA)'s survey on utilisation of training venues, in August 2012, the EDB informed the GPA that the average utilisation rate of the 12 communal facilities (see para. 2(b)) was 37% for the period from July 2011 to June 2012. In June 2013, the EDB informed the GPA that the low utilisation was attributed to: (a) high wastage rate (booked sessions subsequently unused) of 60%; and (b) late/no release of unused sessions, of which some 26% were released less than 7 days before the session dates, and 13% had not been released at all. In November 2013, the EDB informed the GPA of its improvement actions taken, including: (i) if the user did not respond to email issued (one month prior to the event date) by the Administration and Management Office (AMO) requesting confirmation of booking within 5 working days, the AMO would cancel the booking; and (ii) opening up the evening session of the lecture theatre, mini-lecture theatre and multi-purpose hall for booking by other B/Ds three months in advance (paras. 2.30, 2.32 to 2.35). Audit, however, found that:
 - (a) the average utilisation rate of the communal facilities for the period from November 2013 to October 2014 had only been marginally improved to 39% (para. 2.36);
 - (b) the problems of "booked sessions unused" and "late/no release of unused sessions" still persisted. Of the 4,981 booked but unused sessions during the period from November 2013 to October 2014: (i) for 1,812 (36%) sessions, the users did not turn up; and (ii) for 3,169 (64%) cancelled sessions, 1,050 (33% of the 3,169) were only cancelled and released for rebooking 7 days or less prior to the event dates (para. 2.37); and
 - (c) the response to the opening up of the facilities for booking by other B/Ds was not encouraging. Up to 31 December 2014, the lecture theatre (the only facility that had been booked by other B/Ds) was only used for eight sessions (para. 2.38(b)).

Operational issues of KTESC

- 6. Services of the CRC. Audit found that:
 - (a) **Borrowing of library resources.** During the period from April 2011 to September 2014: (i) 85% of some 28,000 resource items available for borrowing had not been borrowed by members; and (ii) less than 10% of members had used the borrowing services (paras. 3.5 and 3.6); and
 - (b) Usage of resources at the CRC. There was scope for enhancing the usage of some in-house services (e.g. in-house reading of books and printed journals and access to electronic resources) (para. 3.8).
- 7. **Borrowing service of the SERC.** As at 30 September 2014, the SERC had a collection of some 2,600 books and 4,497 members. According to the EDB's records, there were 11,472 borrowing records (on average 480 each month) for the two-year period from October 2012 to September 2014. During this two-year period, except only one day, each and every day when the SERC was open, there were some members who came to borrow books. The daily average number of borrowers was about 10 (paras. 3.12 to 3.14). However,
 - (a) during a five-day Audit survey conducted in January 2015, Audit observed that no member had borrowed any item from the SERC. Only on one of the five days, one member visited the SERC and returned one book (para. 3.15); and
 - (b) Audit selected 15 books during the five-day survey and noted that the numbers of borrowing as indicated by the due dates on the books were much less than those shown in the SERC's borrowing records (para. 3.17).

This matter has been referred to the EDB management for investigation (para. 3.16).

Way forward

8. The EDB has not conducted a post-implementation review (PIR) to assess the effectiveness of the KTESC project in achieving its planned objectives and expected benefits (para. 4.5).

Audit recommendations

9. Audit recommendations are made in PART 4 of this Audit Report. Only the key ones are highlighted in this Executive Summary. Audit has recommended that the Secretary for Education should:

Realisation of expected benefits of KTESC

- (a) for changes to the accommodations at the KTESC after the PVC's approval in January 2004, seek approval from the PVC in accordance with Accommodation Regulation 312 and Annex IV (Part One) of the Accommodation Regulations;
- (b) take measures to ensure that in future changes to accommodations are properly approved by the PVC;
- (c) improve the accuracy of the methods for recording the number of visitors to the CRC and the SERC, with a view to more accurately reflecting their utilisation;
- (d) take effective action to improve the utilisation of the educational facilities (i.e. the CRC, SERC, HKTC and YAG);
- (e) take effective action to improve the utilisation of communal facilities;

Operational issues of KTESC

(f) take effective action to further promote the services of the CRC and the SERC;

Executive Summary

- (g) investigate the discrepancies between the borrowing activities as observed by Audit and the borrowing records in the computer system of the SERC;
- (h) ensure that the borrowing statistics of the CRC and the SERC accurately reflect their actual borrowing activities;

Way forward

- (i) work out a strategy for the effective use of the KTESC and closely monitor the implementation of the strategy; and
- (j) conduct a PIR of the KTESC project, taking into account the audit findings in this Audit Report.

Response from the Government

10. 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 The Education Bureau Kowloon Tong Education Services Centre (KTESC — see Photograph 1) officially opened in August 2006 (commenced operation in early 2006). It is located on top of a public transport interchange at 19 Suffolk Road, Kowloon and adjacent to the Mass Transit Railway Kowloon Tong Station. The five-storey building comprises the East Block and West Block (each with four floors linked at each level via link-bridges) sharing a common podium. The Centre has a total net operational floor area (NOFA) of 13,900 square metres (m²) and is managed by the Education Bureau (EDB).

Photograph 1

KTESC



Source: Photograph taken by Audit on 22 November 2014

1.3 The KTESC aims to provide an integrated and more efficient education services to the public through a centrally located composite centre. When the Government submitted the funding application to the Finance Committee (FC) of the Legislative Council (LegCo) in March 2001, it stated that the KTESC would house various education resources centres and service centres for children of special education needs then scattered across the territory. The KTESC was constructed in two stages (see Table 1).

Table 1
Construction of KTESC

		FC (\$ million)		Completion	
Stage	Works involved	approval date	Approved	Actual	date
1	Site foundation works and the commission of a pre-contract consultancy for Stage 2		90	55	September 2002
2	Construction works, including a public transport interchange underneath the KTESC	December 2002	483	432	October 2005

Source: EDB and Architectural Services Department records

Remarks: An underground concourse was built under the site of the KTESC. Upon project completion, the KTESC, the public transport interchange and the underground concourse formed an integrated structure. The project was therefore split into two stages, with Stage 1's site foundation works entrusted to the Mass Transit Railway Corporation so as to avoid interface problems. The Architectural Services Department took up the construction works of the KTESC and the public transport interchange at Stage 2.

The total actual project expenditure of the KTESC was \$487 million. It was completed on time and within the approved budget.

Facilities provided at the KTESC

1.4 The KTESC provides the following facilities:

Educational facilities

- (a) Central Resources Centre (CRC). It provides multi-dimensional services and resources to the education professionals, teachers, parents and the public, including book loan service, reference service, access to online education research databases, resources for parent education, photocopying, as well as a meeting place for professional exchanges and sharing;
- (b) Special Education Resource Centre (SERC). It provides computers, multi-media equipment and library service on special education;
- (c) *Hong Kong Teachers' Centre (HKTC)*. It aims to promote continuous professional development and enrichment among teachers. It organises courses and activities to promote professional development and physical and mental health of teachers. It also provides computers and Internet facilities, sharing corners and resting area for teachers;
- (d) Young Achievers' Gallery (YAG). It showcases the outstanding achievements of Hong Kong students and their efforts in various national and international competitions;

The above educational facilities are open for public use, including teaching professionals and parents. They are managed by various divisions of the EDB. The CRC and the YAG are managed by the Curriculum Development Institute (CDI). The HKTC is managed by the Professional Development and Training Division and the SERC by the Special Education and Kindergarten Education Division.

Communal facilities

(e) the KTESC has 12 communal facilities for holding conferences, seminars, training courses and meetings:

	(i)	one lecture theatre;
	(ii)	one mini-lecture theatre;
	(iii)	one multi-purpose hall; and
	(iv)	nine function rooms.
	by El	these facilities can be used by the public, booking can only be done DB staff. These 12 communal facilities are managed by the histration and Management Office (AMO) of the KTESC; and
Office	es	
(f)		ΓESC provides office accommodation for some 550 staff (Note 1) of as sections of the following EDB divisions:
	(i)	Administration Division;
	(ii)	CDI;
	(iii)	Education Infrastructure Division;
	(iv)	Professional Development and Training Division;
	(v)	Quality Assurance and School-based Support Division;
	(vi)	School Administration Division;
	(vii)	School Development Division; and
	(viii)	Special Education and Kindergarten Education Division.

They included 14 staff providing support to the CRC (see para. 1.4(a)) and 14 staff providing support to the HKTC (see para. 1.4(c)). Note 1:

1.5 The AMO is responsible for property management of the KTESC. It is headed by a Centre Manager, who is assisted by three support staff. Building management, cleansing and security guard services are outsourced to contractors. Electrical and mechanical services are provided by the Electrical and Mechanical Services Department. In 2013-14, the operating expenditure of the KTESC was \$25.2 million.

Audit review

- 1.6 The Audit Commission (Audit) commenced a review on the KTESC in November 2014. The audit focused on the following areas:
 - (a) realisation of expected benefits of the KTESC (PART 2);
 - (b) operational issues of the KTESC (PART 3); and
 - (c) way forward (PART 4).

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

General response from the Government

1.7 The Secretary for Education agrees with the audit recommendations. He appreciates that Audit has found that there is room for improvement in the realisation of expected benefits and operation of the KTESC.

Acknowledgement

1.8 Audit would like to acknowledge with gratitude the assistance and full cooperation of the staff of the EDB during the course of the audit review.

PART 2: REALISATION OF EXPECTED BENEFITS OF KTESC

- 2.1 This PART examines the realisation of expected benefits of the KTESC stated by the Government when seeking funding approval for the project in 2002, focusing on the following issues:
 - (a) expected benefits of the KTESC (see paras. 2.2 and 2.3);
 - (b) changes in accommodations (see paras. 2.4 to 2.7);
 - (c) utilisation of educational facilities (see paras. 2.8 to 2.29);
 - (d) utilisation of communal facilities (see paras. 2.30 to 2.39);
 - (e) feedback from users (see para. 2.40); and
 - (f) performance targets (see para. 2.41).

Expected benefits of the KTESC

- 2.2 In seeking the FC's approval of the KTESC in 2002, the then Education and Manpower Bureau (Note 2) put forward the following benefits as justifications for the project:
 - (a) Improving the standard of services by reprovisioning scattered centres in a centrally-located building. The spreading of education resources centres and service centres for children of special needs in different locations was not convenient to clients. Also, owing to accommodation constraints, some facilities in these centres were sub-standard. Housing these scattered centres in a composite building would provide a focal point of resource support with improved facilities to teachers in the delivery of quality education;

Note 2: In January 2003, the Education Department was merged with the then Education and Manpower Bureau. In July 2007, the Bureau was renamed the EDB upon the reorganisation of the Government Secretariat.

- (b) Releasing existing school premises for other educational uses. The premises of four former schools (Note 3) occupied by education resources centres and special education services centres could be released for other educational purposes; and
- (c) Facilitating exchanges among educational professionals. With conference facilities like lecture theatres and conference rooms open to all educational institutes for booking, the KTESC could provide a common meeting place for teachers, principals, teachers' organisations and educational bodies to organise seminars or workshops and to share experience.
- With regard to paragraph 2.2(b) above, Audit noted that the four former school premises had been released for educational uses (e.g. as primary schools). However, with regard to paragraph 2.2(a) and (c), Audit noted that there were areas for improvement.

Changes in accommodations

The Accommodation Regulations of the Government set out the policy and guiding principles on government accommodation and related matters for government bureaux/departments (B/Ds). According to the Accommodation Regulations (Regulation 312 and Annex IV (Part One)), the user B/D of a Specialist/Departmental Building has to prepare a Schedule of Accommodation (SoA) and seek the Property Vetting Committee's (PVC — Note 4) approval for the accommodation concerned. Furthermore, after the approval of SoA, if the NOFA of any individual item varies by more than 10% from the approved NOFA or the total NOFA varies by more than 5% from the approved area, the user B/D should re-submit the SoA to the PVC for further approval. The KTESC is a Specialist/Departmental Building. Thus the EDB, as the user bureau, should abide by this requirement.

- Note 3: These four schools were Tin Kwong Road Government Secondary School, Perth Street Government Primary School, Sir Robert Black College of Education, Hung Hom Annex and Tsuen Wan Government Secondary Technical School.
- Note 4: The PVC is established under the Accommodation Regulations to vet and approve SoAs of Specialist/Departmental Buildings. It is chaired by an Assistant Director of the Architectural Services Department and comprises representatives from the Financial Services and the Treasury Bureau and the Government Property Agency as members.

According to the EDB's records, the latest SoA approved by the PVC was dated 26 January 2004 (hereinafter referred to as "SoA 2004"). Audit compared the NOFA of the accommodations as at 31 October 2014 with those approved in the SoA 2004 and noted that for some items, there were variations exceeding 10% (see Appendix A). Some examples are shown in Table 2.

Table 2

Deviations of NOFA from SoA 2004
(October 2014)

Facility/EDB office	NOFA as at October 2014 (a) (m²)	NOFA per SoA 2004 (b) (m²)	Difference (c) = (a) - (b) (m ²)
HKTC (Note (a))	444	878	-434 (-49%)
Educational Psychology Service (Kowloon) Section (Note (b))	338	622	-284 (-46%)
Language Learning Support Section (Note (c))	602	1,015	-413 (-41%)
Fung Hon Chu Gifted Education Centre (Note (d))	736	1,060	-324 (-31%)

Source: Audit analysis of EDB records

Note: The EDB informed Audit in March 2015 that:

- (a) the resources in the original proposed multi-media library of the HKTC were subsequently provided in the CRC and the NOFA for the HKTC was reduced;
- (b) the SoA 2004 included areas for the Psychological Services (Special Education) Section and Psychological Services (Professional Support) Section. Due to changes in the mode of service delivery from centre-based to school-based, the Psychological Services Sections had been reorganised and the Educational Psychology Service (Kowloon) Section remained in the KTESC;
- (c) the SoA 2004 incorporated space requirement for the Language Resources Centre of the Language Learning Support Section. The Centre was closed down at the time when the Section moved into the KTESC; and
- (d) some of the functions previously carried out by the Fung Hon Chu Gifted Education Centre had been taken over by the Hong Kong Academy of Gifted Education. As a result, there was a reduction of student activities conducted at the Centre.

Audit also noted that some existing accommodations were not included in the approved accommodations in the SoA 2004 (see Table 3). In response to Audit's enquiry, the EDB informed Audit in March 2015 that the accommodations were set up/relocated to the KTESC mainly due to operational considerations.

Table 3

Accommodations not included in the approved accommodations in SoA 2004 (October 2014)

Facility/EDB office	NOFA (m²)	Year moved to KTESC
Applied Learning Section	258	2006
General Offices, CDI Administration Section	223	2006
Guidance and Discipline Section	26	2006
Home-School Cooperation Section	278	2006
Life-wide Learning and Library Section	96	2006
Placement and Support Section — Non-attendance Cases Team	241	2006
School Leadership and Professional Development Section	63	2007
YAG	304	2007
Textbook Review Team	115	2012

Source: EDB records

2.7 There was no documentary evidence showing that the above changes (see Tables 2 and 3) to the KTESC's accommodations were supported by SoAs approved by the PVC. The EDB needs to ensure that all changes to the KTESC's accommodations were duly approved.

Utilisation of educational facilities

2.8 The KTESC contains educational facilities for use by the teaching professionals and the public. These facilities accounted for 11% of the KTESC's total NOFA of 13,900 m². One of the justifications for building the KTESC put forward by the EDB was to house the then scattered centres at a conveniently located composite building with a view to providing a focal point of resource support to users (see para. 2.2(a)). Audit reviewed the utilisation of the educational facilities (i.e. the CRC, the SERC, the HKTC and the YAG) at the KTESC. The findings are at paragraphs 2.9 to 2.29 below.

Government Property Agency's survey on resource centres

- 2.9 According to the Accommodation Regulations, B/Ds are accountable for education/resource centres under their charge and must ensure that they are well-utilised and cost-effective. If the utilisation and cost-effectiveness of an education/resource centre fail to achieve a reasonable level, the B/D concerned should promptly implement remedial measures, including putting the education/resource centre to multiple uses, downsizing or closing it and putting the space released to gainful alternative uses.
- 2.10 To ensure the effective use of accommodation resources, starting from 2011, the Government Property Agency (GPA), under the directive of the Property Strategy Group (PSG Note 5), has been conducting annual survey on the
- Note 5: The PSG is chaired by the Permanent Secretary for Financial Services and the Treasury (Treasury), and comprises representatives from the Development Bureau, the Home Affairs Department, the Planning Department, the Architectural Services Department, and the GPA as members. Its terms of reference include developing guidelines, identifying and promoting programmes or projects, for the optimal utilisation of government sites as well as maintaining an oversight on their implementation.

utilisation of various education/resource centres operated by B/Ds (the GPA survey). The relevant B/Ds are required to report, among others, the target/actual number of visitors and the operating costs of the centres to the GPA. For centres with low utilisation, the PSG would request the relevant B/Ds to take improvement measures, such as improving the utilisation of the centres, setting up a performance management system and reviewing the cost-effectiveness of the centres (including critically assessing the value of keeping the centres or considering the consolidation of various centres for achieving synergy). According to the PSG, utilisation level in terms of visitor flow is a key yardstick to measure whether a centre has achieved its objectives.

2.11 The CRC and the SERC fell within the scope of the GPA survey. The target and actual number of visitors to the CRC and the SERC from 2011 to 2014 as reported by the EDB to the GPA are shown in Table 4.

Table 4

Target and reported number of visitors to CRC and SERC in GPA survey (2011 to 2014)

Voor	CRC		SERC	
Year	Target	Reported	Target	Reported
2011	12,500	19,915	2,500	2,236
2012	19,000	57,100	10,140	10,202
2013	72,000	69,590	19,520	21,296
2014	70,000	78,596	19,580	29,466

Source: EDB records

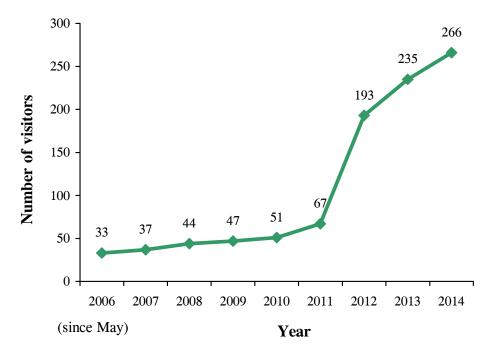
2.12 The GPA survey showed that there had been a significant increase in the number of visitors to the CRC and the SERC since 2012. However, Audit found that the existing methodology for collecting visitor information of the CRC and the SERC could affect the accuracy of the numbers reported in the GPA survey (see paras. 2.13 to 2.24).

Reported number of visitors to CRC included passers-by

- 2.13 The CRC aims to provide a wide range of educational resources and services to support learning and teaching as well as teachers' professional development in Hong Kong. In this connection, Parent Corner, Wi-Fi Zone, Computer Workstation Area, Multi-media Resources Zone, Art Gallery and Exhibition Area are set up in the CRC. Apart from the collection for teachers, there are children's books/references on development, parenting and education-related information for parents. The CRC is open to all teachers, teaching professionals and parents. The CRC is located at the podium of West Block. It has an operational area of 654 m², of which 434 m² (66%) are for public It opens daily (except Sundays and public holidays) from 8:30 a.m. to 8:00 p.m.
- 2.14 The number of visitors to the CRC is reported each month to the EDB management for monitoring the performance of the CRC. The daily average number of visitors to the CRC since its commencement of service in May 2006 to December 2014 is shown in Figure 1.

Figure 1

Daily average number of visitors to CRC (May 2006 to December 2014)



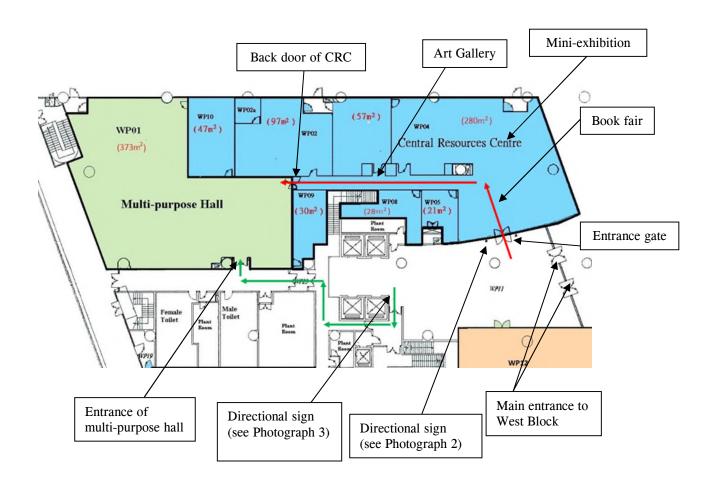
Source: Audit analysis of EDB records

- Figure 1 revealed that between 2006 and 2011, the daily average number of visitors increased steadily, but had risen significantly since 2012 (increased by three times from 67 in 2011 to 266 in 2014). The EDB informed Audit that before 2012, the reported number of visitors was the sum of the several hourly counts performed by CRC staff every day. Under this manual counting method, some users might not have been counted, such as those who only had a brief stay in the CRC and therefore were not present at the time of counting. To overcome this inadequacy, starting from January 2012, the EDB used the reading recorded by an automatic patron counter of the entrance gate to calculate the number of visitors (Note 6).
- Audit, however, found that the number of visitors recorded by the automatic patron counter of the entrance gate might not have accurately reflected the actual number of visitors to the CRC, and hence might not have represented a fair picture of the usage of the CRC. Audit noted that the multi-purpose hall (WP01 see Figure 2) was located adjacent to the CRC. The multi-purpose hall was used for various purposes, including exhibitions, seminars and meetings. The CRC and the multi-purpose hall were located in a way that visitors would enter the multi-purpose hall via the CRC entrance gate (see Figure 2). Directional signs were also placed to direct visitors to enter the multi-purpose hall via the CRC (see Photographs 2 and 3). These visitors to the hall were also counted as visitors to the CRC. According to the EDB, the directional signs were placed by organisers of the events held in the multi-purpose hall.

Note 6: According to the EDB, the automatic patron counter of the entrance gate is part of a detection system to safeguard the CRC resources. The detection system has been installed since the opening of the CRC in May 2006. The EDB later noted that the detection system could also be used to record the daily counts of people passing through the gate. Since then, the CRC staff have used the readings of the automatic patron counter of the entrance gate to calculate the number of visitors by the following formula:

Number of daily visitors = [(daily closing gate log figure - daily opening gate log figure) ÷ 2] - estimated number of non-CRC users (i.e. 50 for weekdays and 18 for weekends)

Figure 2
Floor plan of CRC and multi-purpose hall



Legend: Access to the multi-purpose hall via the CRC

Access to the multi-purpose hall not via the CRC

Source: Audit analysis of EDB records

Photograph 2

Directional sign outside CRC directing visitors to enter multi-purpose hall via CRC



Directional sign

Entrance gate

Source: Photograph taken by Audit on 2 December 2014

Photograph 3

Directional sign opposite to CRC directing visitors to enter multi-purpose hall via CRC



Directional sign

Source: Photograph taken by Audit on 9 January 2015

- 2.17 The EDB had not ascertained the number of passers-by who entered the CRC solely for the purpose of visiting the multi-purpose hall. In January 2015, the EDB informed Audit that:
 - (a) it was not possible to identify and record the number of persons who entered the CRC solely for the purpose of going to the multi-purpose hall;
 - (b) some visitors to the multi-purpose hall might have browsed the exhibits and might have borrowed resources of the CRC before going to the multi-purpose hall;
 - (c) the CRC often held activities such as book fairs and exhibitions with themes related to the function of the multi-purpose hall. The visitors of the multi-purpose hall could read and access resources of the CRC during the break of the function in multi-purpose hall or after the event; and
 - (d) some visitors to the CRC were not counted as visitors to the CRC although they should have been counted. Some visitors of the multi-purpose hall might enter and leave the multi-purpose hall through the back door (see Figure 2). These visitors were not counted by the automatic patron counter although they might have been to the CRC.
- 2.18 To ascertain the extent of passers-by who enter the CRC solely on the way of visiting the multi-purpose hall, Audit conducted a five full-day (i.e. during the opening hours of the CRC from 8:30 a.m. to 8:00 p.m.) on-site survey at the CRC in January 2015. Results of the on-site survey are shown in Table 5.

Table 5

Results of Audit's on-site survey at CRC (January 2015)

	Number of visitors			Number of visitors
Date (January 2015)	who entered the CRC solely on the way of visiting the multi-purpose hall	who entered the CRC and used the services provided	Total	calculated based on automatic patron counter
				(see Note 6 to para. 2.15)
	(a)	(b)	(c) = (a) + (b)	(d)
15	240	97	337	469
(Thursday)	(71%)	(29%)	(100%)	
17	448	157	605	950
(Saturday)	(74%)	(26%)	(100%)	
21	73	175	248	357
(Wednesday)	(29%)	(71%)	(100%)	
26	19	133	152	297
(Monday)	(13%)	(87%)	(100%)	
30	96	253	349	535
(Friday)	(28%)	(72%)	(100%)	

Source: Audit on-site survey and EDB records

Remarks: There were exhibitions and seminars held at the multi-purpose hall on 15, 17 and

30 January 2015.

2.19 Audit's on-site survey revealed that:

(a) the number of visitors who entered the CRC and used the services provided (column (b) in Table 5) was significantly less than the number of visitors calculated based on the automatic patron counter (column (d) in Table 5). In response to Audit's enquiry, the EDB informed Audit in March 2015 that as compared with visual counting, the automatic patron

counter served as an evidence-based and more objective and cost-effective method for collecting visitor numbers. The EDB also said that the higher number of visitors in column (d) of Table 5 might be attributable to counting multiple entries of the same visitor;

- (b) visitors who stayed in the CRC rarely borrowed books and used the reference resources (see also Audit's observations in paras. 3.2 to 3.11). Activities of visitors who stayed in the CRC included using the workstations or their personal electronic devices, reading books and other publications and skimming through the exhibited books. Audit had already included these visitors in column (b) of Table 5;
- (c) an exhibition was held in the multi-purpose hall during Audit's survey on 15 and 17 January 2015. Most visitors were students who entered the CRC solely for visiting the multi-purpose hall (see column (a) in Table 5). Audit observed that most students went directly to the multi-purpose hall without using the CRC resources or reading the exhibited books of the book fair or mini-exhibition at the CRC (see Photograph 4);

Photograph 4
Students entering the multi-purpose hall via CRC



Source: Photograph taken by Audit on 13 January 2015

- (d) on 21 and 26 January 2015, the visitor numbers were much reduced because the exhibition mentioned in (c) ended on 20 January 2015; and
- (e) on 30 January 2015, a training course was held in the multi-purpose hall. Audit observed that 111 participants entered the multi-purpose hall via the CRC. Most of the participants went directly to the multi-purpose hall. During break time, 15 participants went to the CRC and browsed the CRC resources briefly. They were already included in column (b) of Table 5.

Audit considers that the EDB needs to review and revise the method for measuring the patronage of the CRC, with a view to more accurately reflecting the number of visitors. Furthermore, the EDB needs to take measures to improve the utilisation of the CRC.

Need to review the accuracy of the number of visitors to SERC

- 2.20 The purpose of the SERC is to provide professional support to teachers and other stakeholders (e.g. supporting staff and parents) with an information base for sharing teaching strategies, reference resources and the latest information on development of the support for students with special educational needs. These students include those with visual impairment, hearing impairment, speech and language impairments, and learning, emotional or behavioural difficulties.
- 2.21 The SERC is located on the second floor of the West Block of the KTESC with an area of 120 m². It is open for public access from Monday to Friday (9:30 a.m. to 1:00 p.m. and 2:00 p.m. to 6:30 p.m.). The Centre provides computers, multi-media equipment and library service (e.g. journals, magazines and books on special education as well as school-based teaching and learning packages) for visitors' uses. Visitors can make use of the reference books and learning materials/packages to search information on special education or produce teaching materials (see Photograph 5).

Photograph 5

SERC



Source: Photograph taken by Audit on 22 January 2015

2.22 Since October 2012, the number of visitors to the SERC has been collected monthly using a gate counter installed at the entrance of the SERC (Note 7 — see Photograph 6). Prior to that, the number of visitors was collected by counting the number of signatures on a visitor record book. According to the EDB, as many visitors were not willing to sign on the record book, the reported numbers of visitors before October 2012 were understated.

Note 7: *The formula used for calculating the number of visitors to the SERC is as follows:*

Number of visitors = $(gate\ counter\ reading\ \div\ 2) - number\ of\ visits\ by\ non-users\ (9\ per\ day)$

Photograph 6

Gate counter and gate sensor of SERC

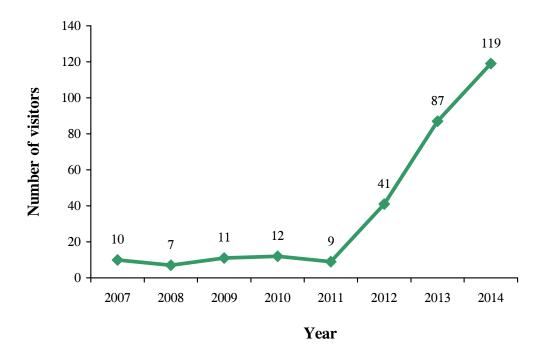


Source: Photograph taken by Audit on 9 January 2015

Figure 3 shows the daily average number of visitors to the SERC from 2007 to 2014 according to the EDB's records. It can be seen that the daily average number of visitors increased significantly (some nine times) from 10 (2007 to 2011) to 103 (2013 and 2014) after using the gate counter in October 2012. Audit also noted that, starting from October 2012, the EDB has been organising more guided tours to the SERC in order to enhance the utilisation rate of the SERC. The number of participants in guided tours were 1,186 and 1,719 in 2013 and 2014 respectively.

Figure 3

Daily average number of visitors to SERC (2007 to 2014)



Source: Audit analysis of EDB records

Remarks: Starting from October 2012, the SERC has been using a gate counter to collect visitor information. The daily average number of visitors from 2007 to 2011 was 10 and that for 2013 and 2014 was 103.

- 2.24 To ascertain the usage of the SERC facilities and observe the visitor flow, Audit conducted an on-site survey at the SERC on five days in January 2015 (from 9:30 a.m. to 6:30 p.m.). Audit's on-site survey revealed that:
 - (a) the number of visitors to the centre was five or below on each of the five days (average 3.8 visitors per day see Table 6). No guided tours were observed; and

Table 6

Results of Audit's on-site survey at SERC (January 2015)

Date (January 2015)	Number of visitors (Note)
15 (Thursday)	5
19 (Monday)	5
22 (Thursday)	3
26 (Monday)	5
28 (Wednesday)	1
Average	3.8

Source: Audit's on-site survey

Note: The number of visitors excluded staff stationed at the SERC.

Remarks: There were no guided tours on any of the five days.

(b) many visitors just skimmed through the books on the bookshelf briefly. Only one visitor had used the borrowing service (for returning a book).

It can be seen that there is a great discrepancy between the results of Audit's survey and the EDB's record calculated using the readings of the gate counter (see Note 7 to para. 2.22) on the number of visitors to the SERC (average 103 per day for 2013 and 2014 — see para. 2.23). In response to Audit's enquiry, the EDB informed Audit in March 2015 that the higher number of visitors recorded by the gate counter, as compared to the Audit finding, might be attributable to the different ways of counting the number of visitors, i.e. multiple entries of the same visitor. The EDB needs to investigate the reasons for the discrepancy and explore ways to improve the accuracy of its counting method on the number of visitors to the SERC.

Visitor number to HKTC not monitored

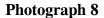
2.25 The HKTC was established in 1989 (Note 8) and moved to the KTESC in April 2006. The HKTC is located on the first floor of the West Block of the KTESC. It is open for teachers' use on Monday to Friday from 9 a.m. to 7 p.m. and on Saturday from 9 a.m. to 6 p.m. It has a total area of 440 m², of which 240 m² (55%) are for office use and 200 m² (45%) for providing facilities such as computer workstations, sharing corners, resting area (with newspapers and leisure magazines) and display-boards (see Photographs 7 to 9).

Photographs 7 to 9

Facilities of HKTC

Photograph 7







Resting area

Sharing corners

Photograph 9



Computer workstations

Source: Photographs taken by Audit on 2 December 2014

Note 8: The Education Commission Report No. 1 published in 1984 recommended the establishment of a HKTC to promote continuing professional development and training of teachers as well as to foster a greater sense of unity and professionalism among teachers in an encouraging, neutral and non-hierarchical environment. The secretariat services and daily operation of the HKTC are supported by the EDB.

- Audit noted that the EDB did not collect information on the number of visitors to the HKTC. To ascertain the utilisation of the HKTC facilities, Audit conducted a five-day on-site survey throughout the opening hours of the HKTC in January 2015. Audit's on-site survey revealed that:
 - (a) the numbers of visitors (excluding non-users, e.g. staff and visitors for dispatch purposes) to the centre were on the low side. During weekdays, there were 15 or less visitors and on Saturday, there were 22 visitors (on average 11.2 visitors per day see Table 7); and

Table 7

Results of Audit's on-site survey at HKTC (January 2015)

Date (January 2015)	Number of visitors
15 (Thursday)	4
17 (Saturday)	22
19 (Monday)	6
22 (Thursday)	9
26 (Monday)	15
Average	11.2

Source: Audit's on-site survey

(b) visitors usually used the computer workstations and read newspapers or magazines in the resting area. The usage of the sharing corners was particularly low as compared to usage of the other facilities.

Audit considers that the EDB needs to collect visitor information of the HKTC and monitor the usage of the HKTC facilities in order to make effective use of the facilities.

Small number of visitors to YAG

2.27 The YAG showcases the outstanding achievements of Hong Kong students (e.g. students who had received awards at national and international competitions in areas like sports, science and technology, etc.) so as to inspire and encourage other students to strive for success. It has an area of 304 m² and is located at the podium of the West Block (see Photograph 10). It is open for public access from Monday to Saturday (except public holidays) from 10 a.m. to 6 p.m.

Photograph 10





Source: Photograph taken by Audit on 2 December 2014

2.28 The EDB organises group visits to the YAG. The YAG is also open to walk-in visitors. The EDB did not set target on the number of visitors to the YAG. However, the number of visitors (including walk-in visitors and group visits) to the YAG had been on the low side (on average 21.5 visitors per day). Table 8 below shows the daily average number of visitors from 2009 to 2014 (up to 31 October).

Table 8

Daily average number of visitors to YAG (2009 to 2014)

Year	Number of visitors
2009	20
2010	25
2011	18
2012	15
2013	24
2014 (up to 31 October)	28
Overall	21.5 (Note)

Source: EDB records

Note: This is a weighted average of the 5.83 years from January 2009

to October 2014.

2.29 To improve the utilisation of the YAG, the EDB plans to convert the YAG into a multiple function hall to encourage students to learn from each other through appreciating other young achievers' learning exhibits in relevant key learning areas (e.g. science education). It also plans to reduce the present scale of the YAG but supplement it with a digital version for both on-site visits and virtual tours through the Internet in 2015-16. The estimated expenditure is \$1.7 million. Audit welcomes the effort to improve the usage of the area and considers that the EDB needs to closely monitor the utilisation of the YAG to ensure that the objectives of the YAG are achieved.

Utilisation of communal facilities

2.30 The communal facilities of the KTESC comprise 12 facilities, namely one lecture theatre, one mini-lecture theatre, one multi-purpose hall and nine function rooms (see Photographs 11 to 14). These facilities are located on the third and fourth floors of the West Block (except for the multi-purpose hall, which is located at the podium of the West Block). They accounted for 12% of the KTESC's total

NOFA of 13,900 m² and are managed by the AMO. Three booking sessions (morning, afternoon and evening — Note 9) are available each day (except Sundays and public holidays). The facilities can be booked 360 days in advance.

Photographs 11 to 14

Communal facilities of KTESC

Photograph 11



Photograph 12



Lecture theatre

Mini-lecture theatre

Source: Photographs taken by Audit on 27 January 2015

Photograph 13



Photograph 14



Multi-purpose hall

One of the function rooms

Source: Photographs taken by Audit on 2 December 2014

Note 9: Morning session is from 9 a.m. to 1 p.m., afternoon session from 2 p.m. to 5:30 p.m. and evening session from 6:30 p.m. to 10 p.m.

2.31 The operational areas and seating capacity of the communal facilities are shown in Table 9.

Table 9

Operational areas and seating capacity of communal facilities of KTESC

Communal facilities	Area (m²)	Capacity (No. of persons)
Lecture theatre	457	440
Mini-lecture theatre	295	200
Multi-purpose hall	373	200
9 function rooms	44 to 102 (total: 555)	30 to 85 (total: 435)

Source: EDB records

Concern of PSG on utilisation of communal facilities

- 2.32 In July 2012, in connection with a survey on the utilisation of training venues initiated by the PSG, the GPA requested the EDB to provide utilisation details on the training venues of the KTESC for the year from July 2011 to June 2012. In August 2012, the EDB informed the GPA that the average utilisation rate of the 12 communal facilities of the KTESC was 37% (42%, 54% and 16% for the morning, afternoon and evening sessions respectively) (Note 10).
- 2.33 In December 2012, the GPA informed the EDB that the PSG was concerned about the utilisation of the KTESC which was below 60%. It requested the EDB to take follow-up actions (such as reviewing the size of the venues and opening up the facilities for booking by other B/Ds).

Note 10: *Utilisation rate is calculated as follows:*

Number of sessions used \div number of sessions available \times 100%

- In June 2013, the EDB informed the GPA that after conducting a sample study, the low utilisation of the facilities of the KTESC was attributed to:
 - (a) **Booked sessions unused.** Booking rates for three sessions were high (99% for both morning and afternoon sessions, and over 50% for the evening sessions), and the average wastage rate (i.e. booked sessions subsequently unused) was 60%; and
 - (b) Late/no release of unused sessions. Some 94% of the booked but subsequently unused sessions were only released for booking again one month or less before the session dates. Some 26% were released less than 7 days before the session dates, and 13% had not been released at all.

Improvement actions taken by EDB

- 2.35 In November 2013, the EDB informed the GPA that it had taken the following actions to improve the utilisation of the communal facilities:
 - (a) revamping the online booking system in October 2013 to generate reports on booking statistics;
 - (b) implementing a new arrangement with effect from August 2013 that if the user did not respond to an email issued by the AMO (one month prior to the date of the booked session) requesting confirmation of booking within 5 working days, the AMO would cancel the booking and release the venue for booking again; and
 - opening up the evening session of the lecture theatre, mini-lecture theatre and multi-purpose hall for booking by other B/Ds three months in advance with effect from September 2013. Relevant facility information had been posted onto the Government's Central Cyber Government Office website.

Marginal increase in average utilisation rate

2.36 Notwithstanding the actions taken by the EDB, Audit noted that the utilisation of the communal facilities had only been improved marginally, as shown in Table 10.

Table 10

Utilisation rates of communal facilities of KTESC

	Average utilisation rate		
Session	July 2011 to June 2012 (Note)	November 2013 to October 2014	
Morning	42%	43 %	
Afternoon	54%	51%	
Evening	16%	22%	
Average	37%	39%	

Source: EDB records

Note: The period for which the GPA requested the EDB to provide

utilisation information (see para. 2.32).

Reasons for the marginal improvement in utilisation

2.37 The problems of "booked sessions unused" and "late/no release of unused sessions" (see para. 2.34) still persisted. During the period from November 2013 to October 2014, out of 9,124 booked sessions, 4,981 sessions were not used (wastage rate of 55%). Audit analysed these 4,981 unused sessions and noted that:

- (a) for 1,812 (36%) sessions, the users did not turn up; and
- (b) for 3,169 (64%) sessions, while these bookings were cancelled in advance, 1,050 (33% of the 3,169) were only cancelled and released for rebooking 7 days or less prior to the event dates (see Table 11).

Table 11

Cancellation of booked sessions
(1 November 2013 to 31 October 2014)

Number of days cancelled in advance	Number	of sessions	
1 day	236	(7%)	1,050
2 to 7 days	814	(26%)	(33%)
8 to 14 days	645	(20%)	
15 to 30 days	940	(30%)	
31 to 60 days	484	(15%)	
Over 60 days	50	(2%)	
Total	3,169	(100%)	

Source: Audit analysis of EDB records

2.38 Regarding the improvement actions (see para. 2.35), Audit noted that:

- when the users did not respond to confirmation requests, the booked sessions could be released about 25 days prior to the session dates (see para. 2.35(b)). During the period from July to December 2014, there were 163 bookings which the users did not respond to the confirmation requests and had to be cancelled by the AMO. Of these 163 bookings, 118 (72%) were cancelled by the AMO 20 days or less prior to the event dates (including 67 bookings (41%) which were cancelled within 10 days prior to the event dates); and
- (b) the response to the opening up of the facilities for booking by other B/Ds was not encouraging. Up to 31 December 2014, the lecture theatre (the only facility that had been booked by other B/Ds) was only used by them for eight sessions.

- 2.39 In order to improve the utilisation of the communal facilities, the EDB needs to:
 - (a) strengthen control over the booking process; and
 - (b) consider opening up more sessions/venues for booking by other B/Ds and non-governmental organisations, as well as stepping up the publicity of such measure.

Feedback from users

2.40 The objectives of the KTESC put forward by the EDB included improving the standard of education services and facilitating the exchanges among education professionals. Hence, to ascertain the extent to which the objectives have been achieved and benefits realised, it is important to ascertain the awareness of, and obtain feedback on services provided from, users of the KTESC (namely parents, teachers and teaching professionals) on a regular basis. Table 12 shows the user surveys conducted by various divisions of the EDB.

Table 12
Surveys conducted by various EDB divisions on services provided

Services provided at	EDB division	User survey conducted
НКТС	Professional Development and Training Division	The HKTC conducted a survey on its services in 2005. However, there was no comprehensive survey conducted since the relocation of the HKTC to the KTESC in April 2006. The Division conducted two surveys in 2012 on the HKTC Bulletin and the provision of magazines in the resting area. Users' feedback on courses/activities organised by the HKTC was regularly collected while there was no regular survey to collect feedback on other services of the HKTC.

Table 12 (Cont'd)

Services provided at	EDB division	User survey conducted
SERC	Special Education and Kindergarten Education Division	In response to Audit's enquiry, the EDB informed Audit in March 2015 that:
		(a) for group visits, feedback was collected in the debriefing sessions at the end of every visit;
		(b) for individual visitors, their opinions were sought verbally from time to time when they borrowed books or requested assistance from SERC staff; and
		(c) a number of facilities/services of the SERC had been improved based on the feedback and opinions collected.
		Audit, however, noted that there was no documentation on feedback obtained.
CRC	CDI	From 2012 to 2014 (up to 30 September), of 172 group visits to the CRC, user surveys were conducted for 13 (8%) selected group visits covering student teachers, in-service kindergarten teachers, and primary and secondary school teachers. The CRC also collected user feedback via opinion forms provided in the centre. From April 2011 to September 2014, the CRC received 41 opinion forms.

Table 12 (Cont'd)

Services provided at	EDB division	User survey conducted
YAG	CDI	Feedback was collected from the participating students of 26 Celebrity Student Talks from the school years 2010/11 to 2013/14. Starting from 1 January 2015, feedback has also been collected from group visitors. As at 6 February 2015, 363 feedback forms were received from group visits. No feedback was collected from walk-in visitors.
Other training venues	various	With the exception of the Information Technology in Education Section, no user survey was conducted.

Source: Audit analysis of EDB records

Performance targets

With a view to monitoring the utilisation of various facilities in the KTESC, clear and meaningful targets together with a performance management mechanism under close monitoring by the senior management should be in place. Performance indicators (such as monthly in-house usage of resources of the CRC) were monitored. However, Audit found that except for the CRC and the SERC, performance targets on number of visitors to educational facilities (e.g. the YAG) or utilisation rates of communal facilities have not been set. For the CRC and the SERC, only targets on number of visitors have been set (see Table 4 in para. 2.11). Specific targets have not been set in relation to the other services provided by these two centres, i.e. usage and/or borrowing of the educational resources.

PART 3: OPERATIONAL ISSUES OF KTESC

- 3.1 The KTESC provides education resources and services for the educational and teaching professionals and parents at the CRC and the SERC. It also showcases the outstanding achievements of students at the YAG. This PART examines the following issues:
 - (a) services of the CRC (see paras. 3.2 to 3.11);
 - (b) borrowing service of the SERC (see paras. 3.12 to 3.20); and
 - (c) mini-theatre of the YAG (see paras. 3.21 to 3.24).

Services of the Central Resources Centre

- 3.2 According to the EDB, the CRC provides various educational services and resources (see para. 1.4(a)). Audit noted the following areas for improvement:
 - (a) borrowing of library resources (see paras. 3.3 to 3.6);
 - (b) usage of resources at the CRC (see paras. 3.7 and 3.8); and
 - (c) reporting of borrowing records (see paras. 3.9 to 3.11).

Borrowing of library resources

3.3 As at 30 September 2014, the CRC had a collection of some 41,000 items of library resources (excluding printed journals, EDB learning and teaching lists, and electronic databases/journals/newspapers). Details of the CRC library resources are shown in Table 13.

Table 13

CRC library resources
(30 September 2014)

Resource item	Available for loan	Not for loan	Total
Audio-visual materials	532	788	1,320
Books	26,963	9,538	36,501
Electronic resources	475	985	1,460
Learning/educational kits	116	484	600
Web resources	_	1,099	1,099
Total	28,086	12,894	40,980

Source: EDB records

3.4 Circulation turnover rate (CTR) is one of the performance indicators used to measure the borrowing of library resources by users. CTR is the number of times an item has been borrowed during a period, say a year. Audit noted that the EDB did not calculate the CTR of the CRC for performance monitoring purpose. Audit calculated the CTR of the CRC for the period from April 2011 to September 2014 and noted that although the CTR was steadily improving, there was scope for further improvement (see Table 14 below).

CTR of CRC

(2011-12 to 2014-15)

Table 14

Year	Number of items borrowed (a)	Average number of items available for loan (b)	CTR $(c) = (a) \div (b)$
2011-12	2,129	25,199	0.08
2012-13	,	,	
2012-15	2,363	25,865	0.09
2013-14	2,973	26,942	0.11
2014-15 (up to 30 September 2014)	2,339	27,926	0.17 (Note)

Source: Audit analysis of EDB records

Note: The CTR is adjusted to a yearly basis based on the data for the period from April to September 2014.

- 3.5 As mentioned in paragraph 3.3, the CRC has some 28,000 resource items available for borrowing. Audit analysis indicated that 85% of these items had not been borrowed by members during the period from April 2011 to September 2014.
- 3.6 Borrowing service is only available to registered members of the CRC. Audit analysis revealed that less than 10% of the members had used the borrowing service (see Table 15).

Table 15

Members who had used borrowing service (2011-12 to 2014-15)

Year	Number of members who had used the borrowing service (a)	Average number of members during the period (b)	Percentage of members who had used the borrowing service (c) = (a) ÷ (b) × 100%
2011-12	296	3,605	8.2%
2012-13	365	4,641	7.9%
2013-14	554	6,180	9.0%
2014-15 (up to 30 September 2014)	361	7,937	9.1% (Note)

Source: Audit analysis of EDB records

Note: The percentage is adjusted to a yearly basis based on the data for the period from

April to September 2014.

Usage of resources at the CRC

- 3.7 In addition to borrowing of library resources, the CRC also provides other professional educational services such as in-house reading of books and printed journals, access to electronic resources (databases, journals and newspapers) and provision of computer workstations with Internet access and Wi-Fi service.
- 3.8 Audit examined the usage records of these in-house services for 2014 and noted that there was scope for enhancing the usage of some services (see Table 16).

Table 16
Usage of in-house services/resources at CRC (2014)

In-house service/resource	Items available	Average monthly usage
Electronic newspaper service	_	1 request
Books placed on open shelves	16,500	1,136 books
Audio-visual materials placed on open shelves	120	17 items
Good practices and exemplary cases of Quality Education Fund projects placed on open shelves	1,330	52 items
Printed journals placed on open shelves (about 250 titles)	2,360	35 items
Reference materials and printed journals kept at storerooms	11,460	23 requests

Source: Audit analysis of EDB records

Reporting of borrowing records

- According to the records of the CRC, the monthly average number of items borrowed increased by 120% from 177 in 2011-12 to 390 in 2014-15 (up to September 2014). Audit examined the borrowing records for the period from April 2011 to September 2014 and found that there were anomalies in 449 borrowing records (which accounted for 4.6% of the 9,800 borrowing records) involving 17 users of whom:
 - (a) 6 users who had borrowed books (involving 186 borrowing records) were not on the CRC member list; and
 - (b) 11 members (involving 263 borrowing records) borrowed and returned books within a very short period of time (e.g. as short as a few seconds).

- 3.10 In response to Audit's enquiry, the EDB informed Audit in March 2015 that:
 - (a) for the cases mentioned in paragraph 3.9(a), 179 of the 186 borrowing records of 4 users were related to system testing. However, no record was available to explain the remaining 7 borrowing records of the other 2 users;
 - (b) for the cases mentioned in paragraph 3.9(b), all the 263 borrowing records of the 11 users identified by Audit were related to system testing; and
 - (c) the CRC had not created library accounts for testing purpose and the library staff would also occasionally use their own accounts to test the system. Therefore, borrowing records performed for testing purpose could not be singled out, and were included in the reported borrowing statistics.

Audit noted that there was no documentation showing the system testing mentioned by the EDB.

- 3.11 Audit considers that the EDB needs to:
 - (a) take actions to further promote the services (including borrowing services) of the CRC (see paras. 3.3 to 3.8); and
 - (b) enhance the library system of the CRC so that testing records could be separated from the borrowing statistics reported to management (see paras. 3.9 and 3.10).

Borrowing service of the Special Education Resource Centre

3.12 The SERC provides general library services, including books for loan to its members. It uses a computerised library system to manage the borrowing service. The loan limit for borrowing service for each member is three books with loan period of 14 days. As at 30 September 2014, the SERC had a collection of some 2,600 books and 4,497 members. Audit analysed the borrowing records for the two-year period from October 2012 to September 2014 and noted the following issues which warrant the management's attention (see paras. 3.13 to 3.20).

Book borrowing rate

3.13 According to the EDB's records, there were 11,472 borrowing records (on average 480 each month) for the two-year period from October 2012 to September 2014, involving 2,797 members (61% were teachers, 34% were general public and 5% were EDB staff) and 2,196 books. Tables 17 and 18 show the CTR of the SERC and the percentage of members who had used the borrowing service respectively.

Table 17

CTR of SERC
(October 2012 to September 2014)

Period	Number of borrowing records (a)	Average number of items available for loan (b)	CTR (c) = (a) ÷ (b)
October 2012 to September 2013	5,371	2,552	2.1
October 2013 to September 2014	6,101	2,598	2.3

Source: Audit analysis of EDB records

Table 18

Percentage of members who had used borrowing service (October 2012 to September 2014)

Period	Number of members who had used the borrowing service	Average number of members during the period	Percentage of members who had used the borrowing service
	(a)	(b)	$(c) = (a) \div (b) \times 100\%$
October 2012 to September 2013	1,632	3,920	42%
October 2013 to September 2014	1,819	4,223	43 %

Source: Audit analysis of EDB records

3.14 Audit analysis also showed that during the two-year period, except only one day, each and every day when the SERC was open, there were some members who came to borrow books. The daily average number of borrowers is shown in Table 19.

Table 19

Daily average number of borrowers (October 2012 to September 2014)

Period	Daily average number of borrowers
October 2012 to September 2013	9
October 2013 to September 2014	11

Source: Audit analysis of EDB records

3.15 During the Audit survey conducted on five days in January 2015 (see para. 2.24), Audit found that no member had borrowed any item from the SERC. Only on one of the five days, one member had visited the SERC and returned one book.

3.16 In response to Audit's enquiry, the EDB informed Audit in March 2015 that there were borrowing records on each day of Audit's five-day on-site survey. According to the EDB, there were 42 borrowing records involving 18 members. In Audit's view, EDB management needs to further investigate into this matter.

Discrepancies in borrowing records

3.17 During the on-site survey, Audit selected 15 books and checked the borrowing records as shown on the books (i.e. the page with stamped due dates) against the SERC's borrowing records generated from the computer system provided by the EDB. Audit noted that the numbers of borrowing as indicated by the due dates on the books were much less than those shown in the SERC's borrowing records (see Table 20).

Table 20
Discrepancies in borrowing records of 15 books
(October 2012 to September 2014)

	Number of times borrowed				
Book	Per SERC's borrowing record (a)	Indicated on the book (b)	Discrepancies (c) = (a) - (b)		
A	10	0	10		
В	8	0	8		
С	8	1	7		
D	7	0	7		
Е	7	0	7		
F	6	0	6		
G	6	0	6		
Н	6	1	5		
I	6	1	5		
J	6	1	5		
K	5	0	5		
L	5	0	5		
M	6	2	4		
N	4	1	3		
О	3	0	3		

Source: Audit analysis of EDB records and Audit on-site survey

3.18 Audit also noted discrepancies in borrowing records of some books (see Case 1 as an illustration).

Case 1

Discrepancies in borrowing records

1. The SERC had two copies of Book P. Based on the SERC's borrowing records, these two copies had been borrowed for more than one year as shown below:

Copy of Book P	Borrowing date	Return date
1	18 December 2012	26 December 2013
2	7 January 2013	22 January 2014

2. However, Audit noted that the SERC's borrowing records also showed that there were five borrowing records during the period when the two copies were already borrowed out and not available in the SERC as shown below:

Record	Borrowing date	Return date	
1	7 February 2013	25 February 2013	
2	14 March 2013	21 March 2013	
3	22 March 2013	9 April 2013	
4	16 October 2013	31 October 2013	
5	9 December 2013	23 December 2013	

Audit comments

3. There is a need to investigate the reasons for the discrepancies in the borrowing records as shown above and review the accuracy of the borrowing records of the SERC.

Source: Audit analysis of EDB records

- 3.19 In view of the findings mentioned in paragraphs 3.13 to 3.18, Audit considers that there is room for improvement in the keeping of borrowing records at the SERC. The EDB needs to:
 - (a) investigate the discrepancy between the borrowing activities as observed by Audit and the borrowing records in the computer system of the SERC (see paras. 3.15 to 3.18); and
 - (b) take effective measures to ensure the accuracy of the borrowing records of the SERC.

Access to the online catalogue of the SERC

The SERC has set up a website on which various teaching and learning resources, publications and reports, and links to other websites relating to special education are provided. The SERC has also maintained a library system to facilitate access of the library catalogue through the Internet. With the online library catalogue, potential users can have a general understanding on the resources available in the SERC and this facilitates them to visit the centre for more information should they find the information useful. However, Audit found that the online catalogue was not accessible despite many attempts during the period from mid-December 2014 to mid-January 2015. As the online catalogue serves to facilitate the public to check and reserve books of the SERC online, there is a need for the EDB to take remedial action.

Mini-theatre of the Young Achievers' Gallery

3.21 One of the facilities in the YAG is a mini-theatre (see Photograph 15). This mini-theatre shows a 180-degree panoramic film of about 15 minutes featuring students' outstanding achievements. The expenditure involved was \$5.1 million (comprising \$1.9 million for the digital settings and \$3.2 million for producing the film).

Photograph 15

Mini-theatre of YAG



Source: Photograph taken by Audit on 2 December 2014

- 3.22 According to EDB records, the panoramic film has been broadcast since the opening of the YAG. Upon Audit's enquiry about the broadcasting arrangement, EDB informed Audit in December 2014 that the film would be played for pre-arranged guided tours of 20 participants or above and on demand from walk-in visitor groups.
- 3.23 During the Audit's seven-day site survey at the YAG in January 2015, Audit observed that the entrance of the mini-theatre had been barred (see Photograph 16). There was also no signage informing visitors that they could make a request for film show. On enquiry, the staff replied that the film would not be shown for individual visitors.

Photograph 16

Entrance of mini-theatre of YAG



Source: Photograph taken by Audit on 9 January 2015

Audit noted that the EDB management was planning a conversion of the YAG in 2015-16 (see para. 2.29) but the mini-theatre would not be affected. According to EDB records, walk-in visitors account for some 50% of the total number of visitors. The EDB needs to promote their awareness of the showing of the film in the mini-theatre (e.g. by displaying signage in the YAG to inform the visitors the show time arrangement and taking measures to ensure that the film is played as scheduled).

PART 4: WAY FORWARD

4.1 This PART examines the way forward of the KTESC and makes audit recommendations.

Need to work out a strategy for effective use of the KTESC

4.2 The KTESC aims to provide an integrated and more efficient education services to the public through a centrally located composite centre. Given that the KTESC is conveniently located at Kowloon Tong with good transport facilities, and has over 3,000 m² of educational and communal facilities for public use, the EDB needs to make effective use of the KTESC. However, Audit's findings (see PART 2) indicated that the utilisation of the educational and communal facilities provided at the KTESC was not satisfactory. The EDB needs to, taking into account the views of the teaching professionals, work out a strategy for the effective use of the KTESC and closely monitor the implementation of the strategy.

Need for a post-implementation review of the KTESC

- 4.3 According to the best practice guide entitled "A User Guide to Post Implementation Reviews" published by the Efficiency Unit in February 2009, a post-implementation review (PIR) helps B/Ds evaluate whether a project has achieved its intended objectives, review its performance and capture learning points to improve the delivery and outputs of future projects.
- After the completion of a PIR, the review findings and recommendations should be reported to the senior management for consideration. A PIR report should document the effectiveness and efficiency of the project, the effectiveness of project management, the lessons learnt, and the best practices to be used in future projects.
- 4.5 With regard to paragraph 2.2, Audit noted that the EDB had not assessed the achievements of the expected benefits (e.g. how effectively the KTESC has facilitated exchanges among educational professionals). Audit further noted that although the KTESC had been established for over eight years, the EDB had not

conducted a PIR to evaluate the extent of benefits achieved and identify improvement areas. Substantial public money had been spent in the construction of the KTESC. To assess the effectiveness of the KTESC project in achieving its planned objectives and expected benefits as mentioned in the FC paper to justify the KTESC's construction, the EDB needs to conduct a PIR of the KTESC project, taking into account the audit findings in this Audit Report.

Audit recommendations

4.6 Audit has recommended that the Secretary for Education should:

PART 2: Realisation of expected benefits of KTESC

- (a) for changes to the accommodations at the KTESC after the PVC's approval in January 2004, seek approval from the PVC in accordance with Accommodation Regulation 312 and Annex IV (Part One) of the Accommodation Regulations;
- (b) take measures to ensure that in future changes to accommodations are properly approved by the PVC in accordance with Accommodation Regulation 312 and Annex IV (Part One) of the Accommodation Regulations;
- (c) improve the accuracy of the methods for recording the number of visitors to the CRC and the SERC, with a view to more accurately reflecting their utilisation;
- (d) collect visitor information of the facilities at the HKTC and monitor the usage of the HKTC facilities;
- (e) take effective action to improve the utilisation of the educational facilities (i.e. the CRC, SERC, HKTC and YAG);
- (f) take effective action to improve the utilisation of communal facilities, including:
 - (i) strengthening control over the booking of the facilities; and

- (ii) considering opening up more sessions/venues for booking by B/Ds and non-governmental organisations;
- (g) regularly conduct surveys to ascertain potential users' awareness of the KTESC and existing users' views on services provided by the KTESC;
- (h) set performance targets for the utilisation of various facilities of the KTESC;
- (i) consider setting performance targets on services (e.g. borrowing service) of the CRC and the SERC;

PART 3: Operational issues of KTESC

- (j) take effective action to further promote the services of the CRC and the SERC;
- (k) investigate the discrepancies between the borrowing activities as observed by Audit and the borrowing records in the computer system of the SERC (see paras. 3.15 to 3.18);
- (1) ensure that the borrowing statistics of the CRC and the SERC accurately reflect their actual borrowing activities;
- (m) take prompt action to resume the online library catalogue service for the SERC resources;
- (n) promote visitors' awareness of the panoramic film at the YAG (such as posting signages to inform visitors of the show times);

PART 4: Way forward

- (o) work out a strategy for the effective use of the KTESC and closely monitor the implementation of the strategy; and
- (p) conduct a PIR of the KTESC project, taking into account the audit findings in this Audit Report.

Response from the Government

4.7 The Secretary for Education agrees with the audit recommendations. He has said that:

PART 2: Realisation of expected benefits of KTESC

(a) since its establishment in 2006, the KTESC has been providing a wide range of educational services to support learning and teaching as well as teachers' professional development in Hong Kong. Various centre-based services are provided for school principals, teachers, parents, academics, students of educational institutes in post-secondary institutions, etc. in the KTESC through the CRC, SERC, and HKTC, etc. To support new services and/or revamped services, the educational and communal facilities provided therein have been improved and upgraded as necessary over the years to suit the needs of target users. Furthermore, in the past decade, there has been a sharp increasing trend in the use of electronic resources for educational purposes. The centres in the KTESC have upgraded their computer systems and uploaded resource materials on the web to cater for the needs of users who are more adapted to electronic-service. The adoption of electronic databases through remote access service provided by the various centres of the KTESC would certainly have impact on the utilisation rate of the educational and communal facilities therein, in terms of "physical" visits to the KTESC. Along this latest development, utilisation statistics of the educational and communal facilities in terms of physical visits and actual borrowing of resources will reflect only partial but not all facets of usage of the KTESC. Notwithstanding this, the EDB fully agrees that there is a need to ensure effective usage of the KTESC to meet the needs of those stakeholders who choose to seek centre-based services and to continue improving e-service for those who prefer electronic resources. The EDB will keep in view the latest service needs of stakeholders and review usage and service of the KTESC in the light of Audit's recommendations, any new services and/or revamped services to be introduced in the years ahead, as well as operational needs of the EDB in order to ensure the most effective use of the KTESC. As a first step, the EDB will convert the YAG into a multiple function hall to achieve better utilisation of the premises;

- (b) the EDB wrote to the PVC on 6 March 2015 to seek covering approval for changes from the approved SoA. The EDB would ensure strict compliance with the Accommodations Regulations and seek approval for future changes as appropriate;
- (c) automatic patron counter serves as an evidence-based, objective, reliable and cost-effective method for collecting visitor information for the various centres in the KTESC. Suitable deductions from the number of entries/exits collected from the automatic patron counter (to take into account multiple entries of staff to avoid over-counting) had been made when coming up with the number of visitors to the centres. In view of Audit's observations, the EDB would consider if there could be further improvements to the counting method;
- (d) as visitors have multi-purposes when coming to the KTESC, the CRC's unique design is to promote and enhance visitors' awareness of the CRC. By entering the multi-purpose hall via the CRC, visitors benefit from the display of the CRC educational resources. The CRC often collaborates with event organisers by supporting their functions with book fairs and exhibitions on related themes, so that visitors can enjoy the centre resources during the break or after the events;
- directing visitors to enter the multi-purpose hall via the CRC help enhance visitors' awareness of the CRC which is conducive to improving the utilisation of the CRC. Given physical layout constraint, the only viable means to avoid recording passers-by who enter the CRC solely for the purpose of visiting the multi-purpose hall is to block off the entrance of the hall from the CRC. However, this is not conducive to enhancing the awareness of the CRC among stakeholders and promoting its services;
- (f) the EDB had already commenced the revamping of the existing on-line room booking system to be completed in three phases. The system revamp would include the following improvement measures:
 - (i) introduction of a penalty system for late cancellation of bookings;
 - (ii) inclusion of the function of automatic cancellation of bookings;
 - (iii) provision of e-booking confirmation forms;

- (iv) provision of search function to enable users to manage their bookings; and
- (v) generation of statistical reports for analysis;
- (g) pending completion of the system revamp, the following interim tightened-up measures had been implemented:
 - (i) shortening the advance booking period of the communal facilities;
 - (ii) requiring earlier confirmation for use of the booked facilities; and
 - (iii) issuing monthly reports on cases of "booked sessions unused" and "late/no release of unused sessions" to senior management to step up monitoring efforts;
- (h) the cancellation of bookings by the AMO were currently done manually when users failed to respond to confirmation requests. The EDB had taken note of Audit's observations (see para. 2.38(a)) and had included the function of automatic cancellation in the system revamp to improve future arrangements;
- (i) the EDB would review the utilisation of the communal facilities after the full roll-out of the system revamp and consider the need for opening up of the facilities for external use:
- (j) surveys had been conducted to obtain feedback on facilities and services provided by the KTESC. The EDB would review the arrangement and conduct, as and when appropriate, more surveys having regard to operational needs and specific purposes of the facilities and services provided to obtain existing and potential users' feedback;
- (k) the EDB would take into account the purposes and specific/operational needs of various facilities of the KTESC and consider setting performance targets as appropriate;
- (l) the EDB would review the services of the CRC and the SERC and consider developing appropriate performance indicators to facilitate evaluation of the operation and service improvement of the centres;

PART 3: Operational issues of KTESC

- (m) unlike public libraries which were targeted at users of the general public, the CRC had its own specific target users of limited groups, including professionals in the field of education, teachers and school social workers, etc. The publications/books of the CRC were usually for functional/professional reading of the education professionals and teachers:
- (n) it was not appropriate to assess the utilisation of the CRC solely on the basis of the CTR because:
 - (i) the CTR did not reflect the usage of the electronic databases and resources which was one of the strengths of the CRC;
 - (ii) the number of resource items borrowed did not include in-house usage or reading of the CRC resources, loan of reference materials and inter-library loans; and
 - (iii) the CRC had recorded a steady rise in terms of the number of items borrowed in the past three years;
- (o) regarding Case 1 in paragraph 3.18:
 - the current library system did not allow books that had already been checked out to be checked out again. The actual return date of Book P should be 24 December 2012 for Copy 1 and 22 January 2013 for Copy 2 in the table under paragraph 1 of Case 1;
 - (ii) the five borrowing records were actual borrowing records of Book P after its return to the SERC; and
 - (iii) the "discrepancy" observed might be due to errors in decrypting the codes exported from the library system and the data conversion process when compiling the records for submission to Audit;
- (p) the online library catalogue service of the SERC had been resumed; and

PART 4: Way forward

(q) the EDB would consider conducting a PIR of the KTESC project having regard to the audit findings with a view to working out a strategy to enhance the effective use of the KTESC. The EDB would closely monitor the implementation of the strategy.

SoAs of the KTESC approved by the PVC in November 2002 and January 2004 and the usage of the KTESC as at 31 October 2014

	SoA of the KTESC approved b	y the PVC		- Usage as at
No.	Facilities	2002 2004 (Note 1)	January 2004	31 October 2014
			NOFA (m²)	NOFA (m²)
1	Media Production Services Unit	301	(Note 2)	654
2	Curriculum Resources Centre (now renamed CRC)	407	582 (Note 2)	(Note 2)
3	Technology Education Section: — Technology Subjects Section — Business Subjects Section — Home Economics Section — Computer Education Section	414 237 252 (Note 3)	340 (Note 3)	368 (Note 3)
4	Science Education Team (named as Science Section and Science Education Section in 2002 and 2004 respectively)	126	287	329
5	Arts Education Section	850	493	478
6	Language Learning Support Section (named as Language Learning Section in 2002)	187	1,015	602 (Note 4)
7	Fung Hon Chu Gifted Education Centre	1,060	1,060	736 (Note 5)
8	Training and Development Section (named as Training and Development Unit in 2002)	622	622	576
9	HKTC (named as HKTC cum Multimedia Professional Library in 2002)	897	878	444 (Note 6)

	SoA of the KTESC approved by the PVC				
No.	Facilities	November 2002 (Note 1)	January 2004	Usage as at 31 October 2014	
		NOFA (m²)	NOFA (m²)	NOFA (m²)	
10	General Teaching Council	164	164	— (Note 7)	
11	Kowloon Regional Education Office	2,019	2,019	1,804	
12	Psychological Services (Professional Support) Section	284	284	338	
13	Psychological Services (Special Education) Section	338	338	(Note 8)	
14	Special Education General Office	464	464	488	
15	Special Education Support and Placement	250	529	554 (Note 9)	
16	SERC (named as Resource Centre for Special Education Teachers of Special Education Support and Placement Section in 2002)	153	153	164	
17	Audiological Services Section	502	502	765	
18	Speech Therapy Services Section	263	301	(Note 10)	
19	Special Education Resource Teaching Unit	302	— (Note 11)	— (Note 11)	
20	Information Technology Education Resource Centre and Regional Support (named as Information Technology Centre in 2002)	1,275	808	804	
21	Central Management Office: Duplicating/Printing Room/Store Room	90	90	225	

No.	Facilities	November 2002 (Note 1)	January 2004	Usage as at 31 October 2014
		NOFA (m²)	NOFA (m²)	NOFA (m²)
22	Communal Area: — Lecture theatre cum control room — Conference/Seminar/Meeting rooms	506.5 634	506.5 634	752 555
	— Multi-purpose Area— Media Production Room	290 45	290 45	373 — (Note 12)
	Collection/Distribution AreaCentral Server Room	45 68.5	45 68.5	54 76
23	School Leadership and Professional Development Section	_	_	63
24	Life-wide Learning and Library Section	_	_	96
25	Placement and Support Section — Non-attendance Cases Team	_	_	241
26	Applied Learning Section	_	_	258
27	Home-School Cooperation Section	_	_	278
28	General Offices, CDI Administration Section	_	_	223
29	Textbook Review Team	_	_	115
30	YAG	_	_	304
31	Guidance and Discipline Section	_	_	26
32	Common functional spaces (e.g. pantries, lobbies, reception areas, etc.)	54 (Note 13)	54 (Note 13)	1,157
	Total	13,100	12,572	13,900

Source: Audit analysis of EDB records

Appendix A (Cont'd)

(para. 2.5 refers)

- Note 1: NOFAs of facilities provided at the KTESC were not stated in the funding paper approved by the FC in December 2002 (see para. 1.3). Instead, the construction floor areas (28,413 m²) were stated. According to the Architectural Services Department, the SoA of November 2002 approved by the PVC was used as the basis for calculating the construction floor areas of the KTESC.
- Note 2: According to the EDB, the Curriculum Resources Centre (item no. 2) merged with the Media Production Services Unit (item no. 1) and this Unit was closed down before the setting up of the KTESC.
- Note 3: The four sections were reorganised to form the Technology Education Section.
- Note 4: According to the EDB, the SoA approved for the Language Learning Support Section in January 2004 incorporated space requirement for a Language Resources Centre. The Centre was closed down at the time when the Section moved into the KTESC.
- Note 5: According to the EDB, some of the functions previously carried out by the Fung Hon Chu Gifted Education Centre had been taken over by the Hong Kong Academy of Gifted Education. As a result, there was a reduction of student activities conducted at the Centre.
- Note 6: The two previous locations of the HKTC (Kowloon and Hong Kong) merged and moved to the KTESC. The resources in the original proposed multi-media library of the Centre were provided in the CRC.
- Note 7: The provision of the General Teaching Council was dropped after the Government announced the delay on its establishment in the 2001 Policy Address.
- Note 8: According to the EDB, the SoA 2004 for the area included the Psychological Services (Professional Support) Section (item no. 12) and the Psychological Services (Special Education) Section (item no. 13). Due to changes in the mode of service delivery, these two Sections had been reorganised and the Educational Psychology Service (Kowloon) Section remains in the KTESC.
- Note 9: Special Education Support and Placement has been reorganised to form the Special Education Support 2 Section and Special Education Support 3 Section.
- Note 10: The Audiological Services Section (item no. 17) was merged with the Speech Therapy Services Section (item no. 18) to form the Speech and Hearing Services Section.

Appendix A (Cont'd) (para. 2.5 refers)

- Note 11: The EDB informed Audit that the then Education Department started to launch an Integrated Education Programme in some schools in late 1990s. Against the backdrop for introducing the integration policy, commencing from the early 2000, there were more resources and initiatives supporting schools to adopt the Whole School Approach to cater for students with special educational needs. It was the Education Department's policy objective that schools should adopt the Whole School Approach with school-based assistance to the students with special educational needs under the integration policy. Alongside with the development of the integration policy under which more schools are adopting the Whole School Approach, the department closed down by phases all Resource Teaching Centres and nearly all the Adjustment Units. Accordingly, the Special Education Resource Teaching Unit also became obsolete.
- Note 12: The EDB informed Audit that the Media Production Room was closed down before the setting up of the KTESC in 2006.
- Note 13: According to the EDB, the approved SoAs in 2002 and 2004 only contained information on the area of pantries (54 m²). There was no information on other common areas like lobbies and reception areas, etc.

Appendix B

Acronyms and abbreviations

AMO Administration and Management Office

Audit Audit Commission

B/Ds Bureaux/departments

CDI Curriculum Development Institute

CRC Central Resources Centre

CTR Circulation turnover rate

EDB Education Bureau

FC Finance Committee

GPA Government Property Agency

HKTC Hong Kong Teachers' Centre

KTESC Education Bureau Kowloon Tong Education Services

Centre

LegCo Legislative Council

m² Square metres

NOFA Net operational floor area

PIR Post-implementation review

PSG Property Strategy Group

PVC Property Vetting Committee

SERC Special Education Resource Centre

SoA Schedule of Accommodation

YAG Young Achievers' Gallery

CHAPTER 8

Correctional Services Department

Rehabilitation services provided by the Correctional Services Department

Audit Commission Hong Kong 1 April 2015 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. 64 of the Director of Audit contains 8 Chapters which are available on our website at http://www.aud.gov.hk

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REHABILITATION SERVICES PROVIDED BY THE CORRECTIONAL SERVICES DEPARTMENT

Contents

	Paragraph
EXECUTIVE SUMMARY	
PART 1: INTRODUCTION	1.1 - 1.11
Audit review	1.12
General response from the Government	1.13
Acknowledgement	1.14
PART 2: COUNSELLING AND PSYCHOLOGICAL SERVICES	2.1
Risks and Needs Assessment and Management Protocol for Offenders	2.2 - 2.18
Audit recommendations	2.19
Response from the Government	2.20
PART 3: VOCATIONAL TRAINING AND INDUSTRIES	3.1 - 3.2
Provision of vocational training	3.3 - 3.13
Audit recommendations	3.14
Response from the Government	3.15

	Paragraph
Management of industries	3.16 - 3.28
Audit recommendations	3.29
Response from the Government	3.30
PART 4: POST-RELEASE SUPERVISION AND COMMUNITY SUPPORT	4.1
Post-release supervision	4.2 - 4.13
Community support	4.14 - 4.17
Audit recommendations	4.18
Response from the Government	4.19
PART 5: WAY FORWARD	5.1
Re-integration programme	5.2 - 5.7
Audit recommendations	5.8
Response from the Government	5.9

Appendices		Page	
A :	25 correctional institutions and persons in custody (31 December 2014)	60	
B:	Six Supervision Schemes for persons discharged from Prisons	61 - 62	
C:	Rehabilitation Division of the CSD: Organisation chart (31 December 2014)	63	
D:	Success rates of discharged persons under ten Supervision Schemes (2010 to 2014)	64	
E:	Vocational training courses and training places provided/planned (2013-14 and 2014-15)	65	
F:	Commercial value of 13 trades under the Industries Units (2013-14)	66	
G:	Net contribution by trade (1996-97 and 2009-10 to 2013-14)	67	
Н:	Average number of PICs employed and net contribution per PIC by trade (2009-10 to 2013-14)	68	
I :	Supervision Orders and Recall Orders issued (2013 and 2014)	69	
J :	Overseas recidivism rates	70	
K:	Acronyms and abbreviations	71	



REHABILITATION SERVICES PROVIDED BY THE CORRECTIONAL SERVICES DEPARTMENT

Executive Summary

1. The mission of the Correctional Services Department (CSD) is to protect the public and reduce crime by providing a secure, safe and humane environment for persons in custody (PICs) and opportunities for their rehabilitation. Under its re-integration programme, the CSD's Rehabilitation Division with an estimated expenditure of \$907 million in 2014-15 provides rehabilitation services to persons detained in 25 correctional institutions (including counselling, vocational training, and aftercare and support services). According to the CSD's research, an average of 10% reduction in re-offending can be expected from proper implementation of rehabilitative programmes. The Audit Commission (Audit) has recently conducted a review of the provision of rehabilitation services with a view to identifying room for improvement.

Counselling and psychological services

2. **Provision of matching rehabilitative programmes.** Since October 2006, the CSD has implemented the Risks and Needs Assessment and Management Protocol for Offenders (the Protocol) to assess re-offending risks and rehabilitative needs of eligible PICs and provide rehabilitative programmes to serve their needs (matching programmes). Rehabilitative needs of eligible PICs are categorised under seven areas that cover Family/Marital, Employment, Community Functioning, Associates, Personal/Emotional, Criminal Attitude and Drug Abuse need-domains. Enrolment into the matching programmes is voluntary. Resources are prioritised for PICs with higher re-offending risks and greater rehabilitative needs under the Protocol with a view to delivering the rehabilitative programmes in a more targeted and effective manner. In 2014, of some 11,300 persons admitted to correctional institutions, the CSD carried out assessments for some 3,300 PICs but not for the remaining 8,000 PICs (who were not targeted by the CSD, being either non-locals or admitted for less than the specified durations). According to the CSD, it aimed

Executive Summary

to serve at least one of the identified needs for PICs and cover 80% of the target PICs every year. Audit analysis of PICs' rehabilitative needs served by the CSD has revealed that there is scope to serve more identified needs:

- regarding matching programmes provided by the Rehabilitation Section during the period January 2013 to September 2014, 38% of 6,223 needs identified for 1,939 PICs in the four non-drug related need-domains (i.e. Family/Marital, Employment, Community Functioning and Associates need-domains) were served. On average, 1.2 of the 3.2 needs identified per PIC were served while 2 needs identified per PIC remained unserved. In the Drug Abuse need-domain, 44% of 1,488 PICs' needs were served (based on a social work approach);
- (b) regarding matching programmes provided by the Psychological Services Sections in the remaining three need-domains (i.e. Personal/Emotional, Criminal Attitude and Drug Abuse need-domains):
 - (i) for young PICs (aged 14 to less than 21 or 25 for the Detention Centre) detained in correctional institutions other than the Drug Addiction Treatment Centres, 52% of their needs in the Personal/Emotional and Criminal Attitude domains and 57% of the needs in the Drug Abuse domain were served (based on a therapeutic approach) in 2014; and
 - (ii) for adult PICs (aged 21 or above) detained in Prisons and the Psychiatric Centre, apart from serving most of the needs of three types of PICs (violent, sex and female PICs having emotional and interpersonal problems), no matching programmes were provided to 346 eligible PICs with needs in the Personal/Emotional domain and 377 eligible PICs with needs in the Criminal Attitude domain during the period January 2013 to September 2014; and
- (c) the CSD operates three Drug Addiction Treatment Centres for the rehabilitation of drug inmates. In 2014, 1,041 persons were admitted to and 1,100 inmates were discharged from these three Centres. Audit noted that no matching programmes in the Personal/Emotional and Criminal Attitude need-domains were provided for 960 drug inmates during the period January 2013 to September 2014. A Psychological Services Section provides three levels of matching programmes (responsivity enhancement, abstinence maintenance, and intensive treatment) in the Drug Abuse need-domain in the three Centres to motivate behavioural

Executive Summary

changes. Audit noted that although 851 inmates were provided with the first of the three-level matching programmes in 2014, only 124 (15%) were further provided with intensive level programmes for their identified needs in the Drug Abuse need-domain (paras. 2.2 to 2.5 and 2.7 to 2.10).

3. The CSD's evaluation of the matching programmes in 2011 revealed that re-offending was less common among participants of matching programmes. To better serve PICs' rehabilitative needs, the CSD needs to review the provision of the matching programmes under the Protocol. Audit also noted that similar evaluation of the matching programmes had not been carried out since 2011 due to insufficient number of non-participating PICs to form a control group for carrying out comparative analysis with the participants. The CSD needs to explore other ways to evaluate the effectiveness of the matching programmes (paras. 2.11, 2.13 and 2.14).

Vocational training and industries

- 4. **Provision of vocational training.** The CSD provides compulsory vocational training to young PICs and voluntary vocational training to adult PICs. In 2014-15, some 100 training courses (costing \$13 million) were provided. Audit found that there was room for improvement in documenting the planning of training courses and the assignment of courses to young PICs (paras. 3.3, 3.6 and 3.7).
- Management of industries. 5. To fulfil the statutory requirement of engaging PICs in useful work and as part of rehabilitation, the CSD's Industries Units operate 13 trades to supply goods and services to the public sector. In an audit review conducted in 1998, Audit found that most of the trades operated by the then Correctional Services Industries persistently showed negative net contributions (i.e. production cost exceeding commercial value). Audit made recommendations to address the issues. However, the current audit review revealed that the negative net contribution problem found in the 1998 Audit Review persisted. The Operating Statements prepared by the CSD for these trades showed overall negative net contributions in the past three years, increasing from \$5.8 million in 2011-12 to \$15.8 million in 2013-14. According to the CSD, the decrease in penal population and the engagement of more PICs in vocational training had affected the financial performance. In Audit's view, the CSD needs to conduct a strategic review on the trade mix to explore the feasibility of introducing new trades that can replace the less cost-effective ones (paras. 3.16, 3.20 to 3.24).

Executive Summary

Post-release supervision and community support

- 6. Need to enhance counselling services for supervisees. The CSD provides statutory supervision to persons discharged from the Drug Addiction Treatment Centres for one year after discharge. According to CSD records, many supervisees recalled to the Centres during the supervision period were due to their relapse to drug abuse. There is a need for the CSD to consider the feasibility of further enhancing the provision of counselling services to its supervisees (paras. 4.2, 4.7 and 4.8).
- 7. Need to enhance pre-release employment support services. The CSD provides pre-release employment services for PICs before their discharge from correctional institutions. Job vacancy information from potential employers is regularly disseminated to PICs (e.g. through notice boards and during courses). Audit noted that, for some 12,000 persons discharged in 2014, 284 job applications were received through such services. However, for the one-day video-conferencing job fair held in September 2014, 599 job applications were received. The CSD should enhance promotional efforts for the pre-release employment services and consider organising more job fairs regularly (paras. 4.15 and 4.17).

Way forward

8. The CSD compiles success rates (measured by the percentages of the supervisees who have completed their statutory supervision periods without reconviction, and also without relapse to drug abuse in case of persons discharged from the Drug Addiction Treatment Centres) to monitor the effectiveness of its re-integration programme. Besides, it compiles recidivism rates (measured by percentages of re-admission of all local persons who have been under the CSD custody to correctional institutions within two years after discharge) to provide feedback for programme monitoring and evaluation. Audit noted that persons discharged from the Drug Addiction Treatment Centres had lower success rates and higher recidivism rates than those of discharged persons from other types of correctional institutions. The CSD needs to conduct a review of its rehabilitation services for persons detained in the Centres (paras. 1.11 and 5.3 to 5.5).

Executive Summary

9. While the CSD regularly reported the success rates in its Controlling Officer's Reports, it only disclosed the recidivism rates upon request. As the reported success rates cover discharged persons subject to supervision (i.e. only accounting for 18% of all discharged persons in 2014), the CSD needs to consider proactive disclosure of the recidivism rates which have a wider coverage (i.e. all discharged persons except non-locals) (paras. 5.3, 5.6 and 5.7).

Audit recommendations

10. 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 Commissioner of Correctional Services should:

Counselling and psychological services

(a) review the provision of the matching programmes under the Protocol and explore ways to evaluate the effectiveness of the Protocol regularly (para. 2.19(a) and (b));

Vocational training and industries

- (b) improve the documentation of the planning of the vocational training courses and the assignment of such courses to young PICs (para. 3.14(a));
- (c) conduct a strategic review on the trade mix of the Industries Units (para. 3.29(a));

Post-release supervision and community support

- (d) consider the feasibility of further enhancing the provision of counselling services for CSD supervisees (para. 4.18(a));
- (e) enhance promotional efforts for the pre-release employment services and consider organising more job fairs regularly (para. 4.18(c) and (d));

Executive Summary

Way forward

- (f) conduct a review of rehabilitation services provided to drug inmates, taking into account the audit findings in this Audit Report (para. 5.8(a)); and
- (g) consider proactive disclosure of the recidivism rates (para. 5.8(b)).

Response from the Government

11. The Secretary for Security welcomes and the Commissioner of Correctional Services agrees in principle with the audit recommendations.

PART 1: INTRODUCTION

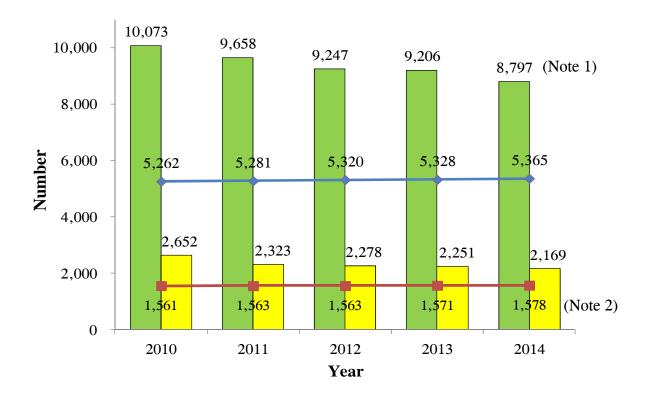
1.1 This PART describes the background to the audit and outlines the audit objectives and scope.

Background

- The mission of the Correctional Services Department (CSD) is to protect the public and reduce crime by providing a secure, safe and humane environment for persons in custody (PICs) and opportunities for their rehabilitation. Over the years, the CSD has developed a correctional system which places increasing emphasis on correction and rehabilitation of PICs. According to its Controlling Officer's Report (COR), the CSD operates two programmes, namely prison management and re-integration. Of the estimated expenditure of \$3,367 million in 2014-15 under the General Revenue Account, \$2,460 million (73%) was allocated to the prison management programme and \$907 million (27%) to the re-integration programme.
- As at 31 December 2014, the CSD managed 30 correctional facilities, comprising 25 correctional institutions for various types of PICs (see Appendix A), three half-way houses (Note 1) and two custodial wards (Note 2). The average occupancy rate of correctional institutions was 77%. Generally speaking, the penal population in correctional institutions has been declining in the past five years. In 2014, the total number of admission to correctional institutions was 11,301 and that of discharge was 11,844. Figure 1 shows the CSD's staff establishment as stated in the CORs, the average daily number of PICs and the number of supervisees under CSD's supervision (Note 3) for the period 2010 to 2014.
- **Note 1:** A person who is under supervision after discharge from a correctional institution may reside in a half-way house. Group counselling services are provided to residents to assist their re-integration into society.
- **Note 2:** They are located at public hospitals for PICs who are suffering from illness and referred by Medical Officers of various correctional institutions.
- **Note 3:** The CSD provides statutory supervision to persons discharged under various Ordinances (see para. 1.6).

Figure 1

CSD's staff establishment,
average daily number of PICs and number of supervisees
(2010 to 2014)



Legend: Staff establishment (for prison management programme)

Staff establishment (for re-integration programme)

Average daily number of PICs

Number of supervisees as at 31 December of the relevant years

Source: CSD records

Note 1: Of these PICs, about 90% were adults aged 21 and over, and 10% were young persons aged 14 to less than 21.

Note 2: The establishment of 1,578 staff for the re-integration programme comprised staff of the Operations Division responsible for maintaining order and control, and providing custodial care of PICs in the Drug Addiction Treatment Centres, the Rehabilitation Centres, the Training Centre and the Detention Centre, and staff of the Rehabilitation Division. Only the staff of the Rehabilitation Division are responsible for implementing the re-integration programme (see para. 1.9). As at December 2014, the Rehabilitation Division had 744 staff (47% of the staff establishment for the re-integration programme).

Correctional institutions

- A person may be sentenced to Prison by the Court if he is convicted of an offence punishable by imprisonment. However, if the Court is satisfied that, having regard to his age, character and previous conduct, it is in his and the public interest that he should undergo a period of training or rehabilitation, the Court may, after considering reports prepared by the CSD (Note 4) and the Social Welfare Department (SWD), pass a sentence of detention in a Drug Addiction Treatment Centre, a Rehabilitation Centre, a Training Centre or a Detention Centre under the pertinent Ordinances. For PICs detained in these Centres, the Commissioner of Correctional Services appoints a Board of Review (Note 5) under the relevant Ordinances to review the progress of such persons on a regular basis and make recommendations for his determination of their discharge.
- 1.5 A brief description of the 25 correctional institutions is as follows:
 - (a) *Prisons*. The CSD operates 15 Prisons (12 for imprisonment of adult PICs and 3 for young PICs) under the Prisons Ordinance (Cap. 234). As required by the Prison Rules (Cap. 234A), adult prisoners need to engage in useful work six days a week but not more than 10 hours a day. The work programme aims to engage them in meaningful work, and help them build up good working habit and acquire vocational skills. Young persons have to participate in a programme with half-day education and half-day vocational training;
 - (b) **Drug Addiction Treatment Centres.** A drug addict found guilty of an offence punishable by imprisonment may be sent to one of the three Drug Addiction Treatment Centres (hereinafter referred to as drug inmate) under the Drug Addiction Treatment Centres Ordinance (Cap. 244). Therapeutic programmes including work therapy, individual counselling and group counselling are provided to help him get rid of drug dependence and correct his criminal behaviour. The treatment and rehabilitation programmes last from 2 to 12 months;
- **Note 4:** The CSD takes into account various factors in compiling the report, such as family composition, previous conviction records, criminal background, and employment, medical and drug addiction history.
- **Note 5:** The composition of the Board varies among Ordinances. It mainly consists of senior staff of the CSD, officer-in-charge of the Centres and public officers selected by the Commissioner of Correctional Services.

- (c) Rehabilitation Centres. The CSD operates four Rehabilitation Centres under the Rehabilitation Centres Ordinance (Cap. 567) for young offenders (aged 14 to less than 21). The centre programmes comprise two phases. Phase 1 places an emphasis on disciplinary training where a PIC attends half-day vocational training and half-day educational or counselling programmes. Phase 2 involves a community integration programme, under which an offender resides at a Rehabilitation Centre with a half-way house setting, and he is permitted to go out to work, attend training and educational courses, or perform community services. The detention period ranges from 3 to 9 months;
- (d) *Training Centre*. The CSD operates one Training Centre under the Training Centres Ordinance (Cap. 280) for young offenders (aged 14 to less than 21). Individualised programmes are provided to offenders, taking into consideration their behaviour and progress in providing the necessary correctional interventions. The detention period ranges from 6 to 36 months;
- (e) **Detention Centre.** The CSD operates one Detention Centre under the Detention Centres Ordinance (Cap. 239). The centre programmes emphasise strict discipline, hard work and physical training in order to instill in detainees a respect for the law. Young offenders (aged 14 to less than 21) may be detained for 1 to 6 months and young adults (aged 21 to less than 25) for 3 to 12 months; and
- (f) **Psychiatric Centre.** Persons sentenced under the Mental Health Ordinance (Cap. 136) and PICs requiring psychiatric observation, treatment, assessment or special psychological care are detained in the Centre.

Post-release supervision

1.6 Under the four relevant Ordinances, persons discharged from the Drug Addiction Treatment Centres, the Rehabilitation Centres and the Detention Centre are required to undergo a supervision period of one year after discharge, while those discharged from the Training Centre are required to undergo a supervision period of three years after discharge (see para. 1.5(b) to (e)). In addition, there are six other Supervision Schemes with different supervision periods and conditions provided under other Ordinances for persons discharged from Prisons (see Appendix B for

details). The CSD is required to provide statutory supervision to persons discharged (i.e. supervisees) from the four types of correctional institutions and those under the six Supervision Schemes (hereinafter referred to as the ten Supervision Schemes):

Ten Supervision Schemes:

- Drug Addiction Treatment Centre
- Rehabilitation Centre
- Training Centre
- Detention Centre
- Post-Release Supervision of Prisoners Scheme
- Young Persons in Custody under Prison Programme
- Pre-release Employment Scheme
- Release Under Supervision Scheme
- Conditional Release Scheme
- Supervision After Release Scheme
- 1.7 During the supervision period, CSD officers will meet with the supervisees and visit their places of residence or workplaces on a regular basis in order to render them close supervision and counselling services. As at 31 December 2014, 2,169 supervisees were under CSD statutory supervision.

Re-integration programme

1.8 In view of the growing importance of the correction and rehabilitation of PICs, the CSD established the Rehabilitation Division in 1998 for better coordination of rehabilitation policies and development under re-integration programme (see para. 1.2), aiming to facilitate re-integration of rehabilitated persons into the community as law-abiding citizens after release. An organisation chart of the Rehabilitation Division is shown at Appendix C. According to the CSD's research, correctional interventions can lead to significant reductions in re-offending, and an average of 10% reduction in re-offending can be expected from proper implementation of rehabilitative programmes.

- 1.9 According to the CSD's COR, the Rehabilitation Division responsible for the re-integration programme mainly provides:
 - (a) welfare, assessment, individual and group counselling services to PICs during their periods of detention or imprisonment;
 - (b) counselling services to PICs with emotional and behaviour problems and structured psychological treatment programmes for those in need;
 - (c) education and vocational training to young PICs, except those detained in the Detention Centre (Note 6);
 - (d) opportunities for adult PICs to engage in useful work and voluntary vocational training;
 - (e) aftercare and support services to discharged persons during the supervision period (see paras. 1.6 and 1.7); and
 - (f) education, publicity and public involvement services to solicit community support for rehabilitated persons.

In March 2009, the Security Bureau reported to the Legislative Council (LegCo) Panel on Security that the rehabilitation services provided by the CSD under the re-integration programme were contributory to rehabilitated persons' successful re-integration into society and reduced the incidence of recidivism.

Risks and Needs Assessment and Management Protocol for Offenders

1.10 With the assistance of an overseas Correctional Authority and a local university (Note 7), the CSD has developed the Risks and Needs Assessment and Management Protocol for Offenders, under which re-offending risks and rehabilitative needs of offenders are assessed and classified into various categories. After conducting such assessments, the CSD provides rehabilitative programmes

- **Note 6:** The Detention Centre does not provide education and vocational training because the centre programmes emphasise strict discipline, hard work and physical training (see para. 1.5(e)).
- **Note 7:** The CSD engaged a local university at a cost of \$1 million to develop tools to systematically assess the re-offending risks and rehabilitative needs of offenders.

matching the offenders' rehabilitative needs. The CSD has implemented the Protocol since October 2006.

Monitoring of effectiveness of the re-integration programme

1.11 The CSD compiles success rates of persons discharged from the ten Supervision Schemes (see para. 1.6) to monitor the effectiveness of its re-integration programme. The success rates are measured by the percentages of the supervisees who have completed their statutory supervision periods without reconviction, and also without relapse to drug abuse in case of persons discharged from the Drug Addiction Treatment Centres. The CSD reports these success rates as performance indicators in its CORs and Annual Reviews. Appendix D shows the success rates of discharged persons under the ten Supervision Schemes from 2010 to 2014. Among them, the success rate of persons discharged from the Drug Addiction Treatment Centres was the lowest (51.4% in 2014).

Audit review

- 1.12 The Audit Commission (Audit) has recently conducted a review of the provision of rehabilitation services by the Rehabilitation Division of the CSD. The review has focused on the following areas:
 - (a) counselling and psychological services (PART 2);
 - (b) vocational training and industries (PART 3);
 - (c) post-release supervision and community support (PART 4); and
 - (d) way forward (PART 5).

Audit has found that there are areas where improvements can be made by the CSD in providing its rehabilitation services, and has made a number of recommendations to address the issues.

General response from the Government

1.13 The Secretary for Security welcomes and the Commissioner of Correctional Services agrees in principle with the audit recommendations.

Acknowledgement

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

PART 2: COUNSELLING AND PSYCHOLOGICAL SERVICES

2.1 This PART examines the CSD's provision of counselling and psychological services to PICs under the Risks and Needs Assessment and Management Protocol for Offenders.

Risks and Needs Assessment and Management Protocol for Offenders

- As mentioned in paragraph 1.8, correctional interventions can lead to significant reductions in re-offending, and an average of 10% reduction in re-offending can be expected from proper implementation of rehabilitative programmes. Since October 2006, the CSD has implemented the Risks and Needs Assessment and Management Protocol for Offenders (hereinafter referred to as the Protocol see para. 1.10). The Protocol comprises two major components:
 - (a) assessment of re-offending risks and rehabilitative needs of PICs; and
 - (b) provision of rehabilitative programmes matching the identified needs of PICs willing to participate in the programmes.
- According to the CSD, resources would be prioritised for PICs with higher re-offending risks and greater rehabilitative needs under the Protocol, and tailor-made matching rehabilitative programmes (hereinafter referred to as matching programmes) would be provided accordingly, with a view to delivering the programmes in a more targeted and effective manner. In October 2006, the CSD started to assess re-offending risks and rehabilitative needs of PICs. Since January 2007, the CSD has implemented matching programmes to serve the

rehabilitative needs of PICs in 23 of the 25 correctional institutions (Note 8) by phases (Note 9).

Assessment of re-offending risk and rehabilitative needs

- 2.4 Officers of the Rehabilitation Section assess re-offending risks and rehabilitative needs of selected groups of PICs (Note 10) upon their admission to correctional institutions through conducting interviews with them and reviewing the related case files, as follows:
 - (a) **Re-offending risks.** The risks are assessed by considering factors including the PICs' age, previous conviction records, histories of drug abuse, and education levels. Based on the assessment results, the PICs will be classified into one of the three risk categories, namely low risk, moderate risk, or high risk; and
 - (b) **Rehabilitative needs.** PICs' needs are categorised into the following seven need-domains and CSD officers will rate the PICs' rehabilitative needs in each domain by one of the four need-levels, namely considerable needs, some needs, no needs, or assets (Note 11):
- **Note 8:** The CSD does not provide matching programmes to PICs undergoing Phase 2 programme in two Rehabilitation Centres as they may work or study outside the Centres in daytime.
- Note 9: During the initial phase from 2007 to 2009, matching programmes were provided to PICs in the 3 Drug Addiction Treatment Centres, 2 Rehabilitation Centres, the Detention Centre and the Training Centre and local young PICs in three Prisons only. Such programmes were extended to the other eight Prisons in 2010 and further extended to all the 15 Prisons and the Psychiatric Centre in 2012.
- Note 10: According to the Protocol's User Manual, the target groups are: (a) all the PICs of the Drug Addiction Treatment Centres, the Rehabilitation Centres, the Training Centre, and the Detention Centre; and (b) local young PICs with sentence of 3 months or above and local adult PICs with sentence of 12 months or above in Prisons and Psychiatric Centre. For example, in 2014, of the 11,301 persons admitted to correctional institutions, the CSD carried out assessments for all 3,333 eligible PICs within the target groups but not for the remaining 7,968 PICs (who were either non-locals or admitted to Prisons with sentences of less than the specified durations).
- **Note 11:** A PIC with a rating of assets in a particular domain reflects his strength in the related aspects.

- Family/Marital domain
- Employment domain
- Community Functioning domain
- Associates domain
- Personal/Emotional domain
- Criminal Attitude domain
- Drug Abuse domain

After completing the assessment, a treatment plan for providing matching programmes will be prepared for each PIC identified with rehabilitative needs (see para. 2.6 for details). Nevertheless, PICs' participation in such programmes is voluntary.

Provision of matching programmes

- 2.5 The Rehabilitation Section and the two Psychological Services Sections (see Appendix C) are responsible for providing matching programmes to PICs to serve their identified needs in the seven domains (see Table 1), as follows:
 - (a) Rehabilitation Section. As at December 2014, the Section deployed 47 staff to provide the matching programmes. The programmes involve group counselling sessions and activities (such as experience sharing and role play sessions) which aim at implanting socially acceptable values, evoking the conscience of PICs, and giving support and assurance for effecting positive changes (Note 12). The matching programmes consist of six sessions, each lasting for an hour. In 2014, the Section completed 3,333 assessments and provided 3,408 counselling sessions under the matching programmes; and

Note 12: The Rehabilitation Section also engaged a service provider to provide matching programmes for the Drug Abuse domain in seven Prisons. The related cost in 2014-15 was \$0.3 million.

(b) **Psychological Services Sections.** According to the CSD, as at December 2014, there were no dedicated staff deployed to implement the matching programmes. 48 staff (including 24 Psychologists) were deployed to carry out both core duties (Note 13) and the matching programmes. The matching programmes mainly consist of six sessions, each lasting for two to three hours. In 2014, the Sections provided 5,815 counselling sessions under the matching programmes.

Note 13: Core duties include conducting psychological evaluation requested by the Court and Review Boards (see Note 4 to Appendix B), providing psychological services to PICs with suicidal/self-harm risk, adjustment, emotional and other psychological problems referred from the correctional institutions, and providing consultation to institutional management.

Table 1

Provision of matching programmes in seven need-domains

	Need-domain	Matching programme provider		
Fou	ar need-domains (23 correctional institutions):	Rehabilitation Section		
(a) (c)	Family/Marital; (b) Employment; Community Functioning; and (d) Associates			
Two need-domains (23 correctional institutions):				
(e)	Personal/Emotional; and (f) Criminal Attitude:			
	(i) 12 Prisons and 1 Psychiatric Centre; and	Psychological Services Section 1		
	(ii) 3 Prisons, 3 Drug Addiction Treatment Centres, 2 Rehabilitation Centres, 1 Training Centre and 1 Detention Centre	Psychological Services Section 2		
(g)	Drug Abuse need-domain (23 correctional institutions):			
	(i) 6 correctional institutions (2 Prisons, 2 Drug Addiction Treatment Centres, 1 Rehabilitation Centre and 1 Detention Centre);	• Rehabilitation Section and Psychological Services Section 2 (Note)		
	(ii) 13 correctional institutions (12 Prisons and 1 Psychiatric Centre); and	Rehabilitation Section		
	(iii) 4 correctional institutions (1 Prison, 1 Drug Addiction Treatment Centre, 1 Rehabilitation Centre and 1 Training Centre)	Psychological Services Section 2		

Source: Audit analysis of CSD records

Note: Owing to an increase in the number of PICs identified with needs in the Drug Abuse domain, the Rehabilitation Section and the Psychological Services Section 2 are both providing matching programmes for six correctional institutions. The Rehabilitation Section adopts a social work approach while the Psychological Services Section 2 adopts a therapeutic approach.

According to the Protocol's User Manual, the CSD's target service groups for providing matching programmes are PICs with high or moderate re-offending risks and considerable or some needs in a particular domain (eligible PICs). For PICs of the Drug Addiction Treatment Centres, the Rehabilitation Centres, the Training Centre and the Detention Centre, matching programmes will be provided normally two to three months after admission. For all local young PICs with sentence of three months or above, and local adult PICs with sentence of 12 months or above in Prisons and the Psychiatric Centre, the CSD will arrange matching programmes for them three to six months and nine months before their expected discharge dates respectively.

Need to review provision of matching programmes

Under the Protocol, PICs' rehabilitative needs are categorised into seven domains. According to the CSD, the Protocol does not require serving PICs' needs in all domains. It aims to serve "at least one of the seven need-domains" of the PICs and cover 80% of the target PICs every year (Note 14). When providing the matching programmes to PICs under the Protocol, the CSD adopts such standard which is consistent with overseas practice. Based on the CSD's database, Audit conducted an analysis of the rehabilitative needs in the seven domains of 1,955 PICs (Note 15) during the period January 2013 to September 2014. While 99% of the 1,955 PICs had at least one of their needs served, Audit found that there was room for further improvement as detailed in paragraphs 2.8 to 2.10.

Note 14: According to the CSD, apart from the rehabilitative assistance provided by the matching programmes, other assistance includes vocational training (see PART 3) and family visits. They are related to the Protocol and considered as the backbone of assistance.

Note 15: Different types of PICs participated in matching programmes at different times (see para. 2.6). Audit analysis covered: (a) PICs of the 3 Drug Addiction Treatment Centres, the 2 Rehabilitation Centres, the Training Centre and the Detention Centre admitted and discharged between 1 January 2013 and 30 September 2014; and (b) PICs of the 15 Prisons and 1 Psychiatric Centre discharged between 1 December 2013 and 30 September 2014 (programme records for these PICs had only been maintained since December 2013). On this basis, there were 1,955 PICs with rehabilitative needs in any one of the seven domains, comprising 1,939 with needs in any one of the four non-drug related domains under the purview of the Rehabilitation Section and 16 with needs in the remaining three domains.

- 2.8 *Matching programmes provided by the Rehabilitation Section.* Based on the CSD's database, Audit noted that:
 - (a) for the four non-drug related need-domains under the purview of the Rehabilitation Section (see items (a) to (d) in Table 1 in para. 2.5), of the 1,939 PICs (Note 16), 488 (25%) had none of their identified needs served. The other 1,107 (57%) had their identified needs partially served (Note 17) and 344 (18%) PICs had their identified needs fully served;
 - (b) as shown in Table 2, 2,372 (38%) of the 6,223 identified needs of the 1,939 eligible PICs were served for the period January 2013 to September 2014. On average, 1.2 of the 3.2 needs identified per PIC were served while 2 needs identified per PIC remained unserved; and

Note 16: Based on CSD records, matching programmes were not provided to 335 eligible PICs in the four domains mainly because of their: (a) refusal to participate in the programme; (b) mental/physical incapacity; and (c) disciplinary problems. These PICs were excluded in the analysis in Table 2.

Note 17: *PICs'* rehabilitative needs were considered partially served when matching programmes were only provided to serve some of their identified needs.

Number of needs identified and served by Rehabilitation Section in four non-drug related need-domains in 23 correctional institutions (January 2013 to September 2014)

Table 2

Type of institution	Number of PICs (Note)	Number of needs identified (a)	Number of needs served (b)	Percentage of needs served (c) = (b)/(a) × 100%
3 Drug Addiction Treatment Centres	1,065	3,688 (3.5)	779 (0.7)	21% (see para. 2.8(c))
15 Prisons and 1 Psychiatric Centre	656	1,801 (2.7)	879 (1.3)	49%
2 Rehabilitation Centres	90	332 (3.7)	316 (3.5)	95%
1 Training Centre	38	122 (3.2)	119 (3.1)	98%
1 Detention Centre	90	280 (3.1)	279 (3.1)	100%
Overall	1,939	6,223 (3.2)	2,372 (1.2)	38%

Source: Audit analysis of CSD records

Note: The number of PICs' rehabilitative needs identified varied from 1 to 4 each.

Remarks: The figures in brackets denote the average number of needs identified/served per PIC.

(c) for the Drug Abuse domain served by the Rehabilitation Section in the 19 correctional institutions (including two Drug Addiction Treatment Centres — see items (g)(i) and (ii) in Table 1 of para. 2.5), 662 (44%) of the 1,488 persons identified with needs were served. For the two Drug Addiction Treatment Centres, the needs of 492 (54%) of 910 drug

inmates were served. In particular, the percentages of persons served were on the low side for the Rehabilitation Centre (15%), and the 14 Prisons and the Psychiatric Centre (26%).

- 2.9 Matching programmes provided by the Psychological Services Sections. The two Sections are responsible for providing matching programmes to PICs in the Personal/Emotional, Criminal Attitude and Drug Abuse need-domains (see items (e) to (g) in Table 1 in para. 2.5). Through activities (e.g. discussion, role plays and games) under various themes (such as motivation enhancement, problem solving, criminal attitude, and preventing drug abuse), PICs may develop attitudes and skills instrumental to rehabilitation. Audit noted that:
 - (a) in relation to the provision of the matching programmes for the Personal/Emotional and Criminal Attitude need-domains in 23 correctional institutions (see items (e) and (f) in Table 1 in para. 2.5):
 - (i) **Young PICs.** In response to Audit's enquiry (Note 18), the CSD in January 2015 said that in 2014, 467 needs were identified and 241 (52%) needs were served for young PICs detained in correctional institutions other than the Drug Addiction Treatment Centres (see items (g)(i) and (iii) in Table 1 in para. 2.5). The audit findings for drug inmates are reported in paragraph 2.10(c); and
 - (ii) *Adult PICs*. The CSD's policy was to provide matching programmes to three types of PICs in Prisons and the Psychiatric Centre, namely violent offenders, sex offenders and female PICs having emotional and interpersonal problems (Note 19). Matching
- **Note 18:** The breakdown of the number of needs served for individual PICs in different correctional institutions was not readily available from CSD records.
- Note 19: In response to Audit's enquiry on the reasons for only providing matching programmes to the three types of adult PICs, the CSD informed Audit in January 2015 that factors considered in according service priority included public concern, resource implications, gender mainstreaming policy and overseas practice. Furthermore, individual psychological services had been provided to PICs in more than 8,000 referral cases every year for addressing their needs (i.e. serving their needs in the Personal/Emotional domain).

programmes were provided to most of them accordingly (Note 20). However, Audit analysis of other PICs revealed that for the period January 2013 to September 2014, no matching programmes were provided to 346 eligible PICs with needs in the Personal/Emotional domain and 377 eligible PICs with needs in the Criminal Attitude domain, despite that they were the target service groups under the Protocol (see para. 2.6); and

- (b) in relation to the provision of matching programmes in the Drug Abuse need-domain provided by the Psychological Services Section 2, for young PICs detained in correctional institutions other than the Drug Addiction Treatment Centres (see items (g)(i) and (iii) in Table 1 in para. 2.5), 57% of their needs in the Drug Abuse domain were served in 2014. The situation for drug inmates is reported in paragraph 2.10(d).
- 2.10 **Drug Addiction Treatment Centre inmates.** The CSD operates three Drug Addiction Treatment Centres for the rehabilitation of drug inmates. In 2014, 1,041 persons were admitted to and 1,100 inmates were discharged from these three Centres. In view of the comparatively lower success rates for persons discharged from the three Centres (see para. 1.11 and item (a) at Appendix D), Audit examined the matching programmes in the seven need-domains provided for drug inmates and noted that there was room for improvement, as evidenced by the following:
 - the Rehabilitation Section provides matching programmes in four non-drug related need-domains (Family/Marital, Employment, Community Functioning and Associates domains) for drug inmates in the three Centres. On average, only 0.7 (21%) of the 3.5 non-drug related needs identified per inmate for the 1,065 inmates in the three Centres were served during the period January 2013 to September 2014 (see Table 2 in para. 2.8(b)). In other words, 2.8 of the non-drug related needs identified per inmate remained unserved;

Note 20: Between October 2013 and September 2014, matching programmes were provided to 23 (96%) of 24 eligible violent offenders and 207 (83%) of 249 eligible sex offenders. Between March 2011 (commencement of the programme) and December 2014, 58 (91%) of 64 eligible female PICs had participated in the matching programmes.

- (b) the Rehabilitation Section provides matching programmes in the Drug Abuse need-domain in only two of the three Centres, aiming to reduce drug abusers' relapse to drug abuse. Audit analysis revealed that the needs of 418 (46%) of 910 drug inmates in the two Centres were not served during the period January 2013 to September 2014;
- the Psychological Services Section 2 is responsible for providing matching programmes in three need-domains (Personal/Emotional, Criminal Attitude and Drug Abuse domains) for drug inmates in the three Centres. Matching programmes were only provided in the Drug Abuse need-domain but not the other two need-domains. Audit's further analysis revealed that 880 needs in the Personal/Emotional domain and 931 needs in the Criminal Attitude domain were identified for 960 inmates during the period January 2013 to September 2014 but were not served; and
- (d) the Psychological Services Section 2 provides three levels of matching programmes in the Drug Abuse need-domain in the three Centres, as follows:
 - (i) **Responsivity enhancement programme.** It aims at enhancing inmates' treatment responsivity, including their motivation to change, perceived usefulness of treatment, perceived possibility of success and self-efficacy. The programme consists of one session, lasting for one to two hours. Inmates need to complete this programme before they participate in other programmes;
 - (ii) Abstinence maintenance programme. It aims at improving inmates' efficacy in dealing with problems of drug abuse and reducing relapse through increasing their motivation to change, identifying high risk situations relating to relapse as well as developing basic skills to deal with these situations. The programme consists of six sessions, each lasting for two to three hours; and
 - (iii) *Intensive treatment programme*. It consists of intensive treatments which facilitate cognitive and behavioural changes of inmates crucial to maintaining drug abstinence. The programme consists of six sessions, each lasting for two to three hours.

Of the 1,145 eligible drug inmates (i.e. with high or moderate re-offending risks and considerable or some needs in the Drug Abuse domain) in 2014, 851 (74%) were provided with responsivity enhancement programme. However, of these 851 inmates, only 124 (15%) were further provided with abstinence maintenance programme or intensive treatment programme.

2.11 Audit notes the CSD's view that it may deviate from the original design and methodology of the Protocol if the CSD's performance is measured by the standard of "all seven need-domains". However, according to the CSD, correctional interventions can lead to significant reductions in re-offending, and an average of 10% reduction in re-offending can be expected from the proper implementation of rehabilitative programmes. The target service group under the Protocol are PICs with high or moderate re-offending risks. assessments carried out by the Rehabilitation Section, each eligible PIC had on average 3.2 rehabilitative needs in four non-drug related domains but only 1.2 needs per PIC were served (see Table 2 in para. 2.8(b)). Moreover, the success rate of persons discharged from the Drug Addiction Treatment Centres was the lowest among the ten Supervision Schemes. The CSD needs to review the provision of the matching programmes with a view to better serving PICs' rehabilitative needs, taking into account the audit findings in paragraphs 2.8 to 2.10.

Need to explore ways of regularly evaluating effectiveness of matching programmes

2.12 The Rehabilitation Section conducts questionnaire surveys for adult and young PICs and drug inmates participating in the matching programmes in each need-domain to ascertain whether the programmes are useful in meeting their rehabilitative needs. The respondents of recent surveys generally found the matching programmes useful. Furthermore, the Psychological Services Sections also from time to time use internationally recognised psychological tests to evaluate the effectiveness of their matching programmes. According to the recent test results, the matching programmes had a favourable impact on PICs (Note 21).

Note 21: Generally, the matching programmes effectively reduced the participants' level of criminal thinking. As for drug abusers and sex offenders, the matching programmes enhanced the former's confidence in coping with high-risk factors relating to their drug abuse problems and enhanced their relapse-prevention skills, and deepened the latter's empathy towards the victims.

- 2.13 In March 2012, the Security Bureau reported to LegCo Panel on Security that:
 - (a) as the Protocol had been implemented for five years, the CSD conducted a review of the effectiveness of the matching programmes in 2011. The results revealed that for young persons discharged in 2007 (the first year of the implementation of the Protocol), the re-offending rate of those who had participated in the matching programmes was 45.9%, while the re-offending rate of those who had not participated was 60.6%. The findings revealed that re-offending was less common among those who had participated in the matching programmes; and
 - (b) the CSD had conducted questionnaire surveys for young PICs after their participation in the matching programmes. According to the result analysis under a score system (from the lowest of 1 to the highest of 5), the respondents generally agreed that they had a positive change in their attitude towards their families (4.11 on average), had enhanced their job-searching confidence and skills (4.01 on average), and had a marked improvement on their attitude on delinquency (4.29 on average) (Note 22).
- However, Audit noted that the 2011 evaluation only covered young offenders and no similar analyses of the impact of matching programmes on re-offending rates had been carried out by the CSD since 2011. According to the CSD, such analysis was not carried out because most respondents had participated in the matching programmes after the full implementation of the Protocol. There was an insufficient number of non-participating PICs to form a control group for carrying out comparative analysis similar to that in paragraph 2.13(a). In Audit's view, as the Protocol has been implemented for eight years, the CSD needs to explore other ways to evaluate its effectiveness covering all participants regularly (e.g. by comparing the rehabilitation needs of individual participants before and after participating in the matching programmes).

Note 22: According to other survey-result analyses of the drug inmates and young PICs conducted in 2014, the average scores for attitude towards their families and job-searching confidence and skills were 4.24 and 4.03 respectively.

2.15 The Rehabilitation Section has only conducted analyses of the questionnaire survey results for young PICs and drug inmates for management review but not for adult PICs (see Note 22 to para. 2.13(b)). In Audit's view, the CSD should carry out analyses of the survey results of the matching programmes provided for both adult and young PICs for management review.

Need to submit statistics on rehabilitative needs served for management review

Audit noted that the Rehabilitation Section and the Psychological Services Sections submitted statistics on the number of counselling sessions provided under the matching programmes for management review but not on the number of rehabilitative needs served for different types of PICs. To help monitor the level of rehabilitation services provided for further improvement, statistics on the number of needs identified and served similar to that shown in Table 2 in paragraph 2.8(b) should also be regularly compiled and submitted for management review.

Need to record reasons for PICs not attending matching programmes

- 2.17 Audit noted that there were no guidelines requiring CSD officers to record reasons for PICs not attending matching programmes or only attending matching programmes for some of the need-domains where PICs were identified with considerable or some needs under the Protocol. In this regard, the Rehabilitation Section and the Psychological Services Sections have adopted the following practices:
 - (a) **Rehabilitation Section.** According to the CSD, as the existing service standard is to provide matching programme in at least one need-domain, officers only record the reasons when PICs did not attend any matching programmes; and
 - (b) **Psychological Services Sections.** The Sections require their staff to record the reasons for sex offenders not attending such programmes, but not other types of offenders.

Audit considers that the CSD needs to ascertain whether the unserved needs have been attributable to PICs' refusal to attend the matching programmes. The CSD also needs to require officers to record the reasons for PICs not attending matching programmes and take improvement measures where appropriate.

Audit recommendations

- 2.19 Audit has recommended that the Commissioner of Correctional Services should:
 - (a) review the provision of the matching programmes under the Protocol, taking into account the audit findings in paragraphs 2.8 to 2.10;
 - (b) explore ways to evaluate the effectiveness of the Protocol regularly for all participants of the matching programmes;
 - (c) carry out analyses of the survey results of the matching programmes provided for both adult and young PICs;
 - (d) require CSD officers to submit statistics regularly on rehabilitative needs identified and served under the matching programmes for different types of PICs for management review; and
 - (e) issue guidelines for CSD officers to record reasons for PICs not attending matching programmes and take improvement measures where appropriate.

Response from the Government

- 2.20 The Commissioner of Correctional Services agrees in principle with the audit recommendations. He has said that:
 - (a) the CSD will keep the provision of the matching programme under review, with a view to facilitating the re-integration and rehabilitation of PICs:

- (b) the effectiveness of matching programmes has all along been under close and regular monitoring. The CSD will explore other approaches (e.g. quantitative and qualitative tools) to achieve a more thorough evaluation of effectiveness of the Protocol;
- (c) regular reviews on the survey results of the matching programmes provided for adult and young PICs will continue to be conducted;
- (d) the audit recommendation of submitting statistics regularly on rehabilitative needs identified and served under the matching programmes has been implemented in the Rehabilitation Section by requiring relevant data to be entered in the Rehabilitative Programmes Management System. The relevant information is accessible by the management for review; and
- (e) the CSD will continue to adopt its existing practice requiring institutional officers responsible for duties under the Protocol to explain in their monthly returns to the CSD Headquarters if the institution has not provided any matching programmes to PICs with identified needs. This practice is considered proper, effective and consistent with "at least one of the seven need-domains" standard. The CSD will also require officers to record reasons for PICs not attending matching programmes for further improvement in implementing the Protocol.

PART 3: VOCATIONAL TRAINING AND INDUSTRIES

3.1 This PART examines the CSD's efforts in providing vocational training to PICs (see paras. 3.3 to 3.15) and managing industries in the correctional institutions (see paras. 3.16 to 3.30).

Industries and Vocational Training Section

- 3.2 According to the CSD, work and vocational training help provide positive regimes for PICs to enhance their employability, which facilitates their re-integration into society upon release. The Industries and Vocational Training Section under the Rehabilitation Division (see Appendix C) is responsible for providing work and vocational training to PICs through the following units:
 - (a) the Vocational Training Unit provides vocational training for both young and adult PICs to help them gain accredited skills and recognised qualifications. As at September 2014, the Unit had an establishment of 30 staff; and
 - (b) three Industries Units manage the industrial operations in 13 trades. They provide a wide range of goods and services to the public sector that enables PICs to acquire good working habit and contribute to society during their imprisonment. As at September 2014, the Units had an establishment of 361 staff.

Provision of vocational training

3.3 The CSD has provided compulsory half-day vocational training to young PICs in eight institutions (i.e. three Prisons, two Drug Addiction Treatment Centres (Note 23), two Rehabilitation Centres (Note 24) and one Training Centre — see

- Note 23: With effect from February 2015, inmates in one of the Drug Addiction Treatment Centres are relocated to a Prison for young PICs (see Note 2 to Appendix A). As such, vocational training is only provided in seven institutions for young PICs.
- **Note 24:** The CSD does not provide vocational training to PICs undergoing Phase 2 programme in the other two Rehabilitation Centres as they may work or study outside the Centres in daytime.

Vocational training and industries

Appendix A). For adult PICs (aged 21 or above) detained in other institutions, they may apply for vocational training courses on a voluntary basis. The CSD adopts the following criteria for determining the eligibility of an adult PIC for enrolling vocational training courses:

- (a) the applicant is allowed to be employed or work and is not subject to any condition of stay in Hong Kong after discharge;
- (b) the applicant should have a remaining sentence of 3 to 24 months; and
- (c) the remaining sentence of the applicant must be long enough for him to complete the course.

In addition to eligibility, the CSD also considers factors such as the applicants' education background, physical and mental fitness, conduct and work performance when assessing their applications.

- 3.4 In order to provide market-oriented vocational training to PICs, the CSD mainly engages training organisations, such as the Employees Retraining Board and the Vocational Training Council, to provide full-time and part-time courses to PICs (Note 25).
- 3.5 In 2013-14, the CSD spent \$13 million (Note 26) for providing vocational training to PICs. The number of adult and young PICs eligible for vocational training and the number of courses provided in 2013-14 and planned for 2014-15 are shown in Appendix E.

- Note 25: For adult PICs, the courses cover areas including construction, business, food and beverages, retailing, tourism, computer applications, health care and logistic support. For young PICs, the courses cover areas including office and business operations, computer applications, food and beverages, personal care and building services.
- **Note 26:** The expenditure included course fees for recognised training bodies, employment follow-up services, and training equipment and materials.

Need to improve documentation of planning process

3.6 According to the CSD, to keep pace with the changing needs of the community, a review of vocational training is conducted at every year end to work out the action plan for the year ahead, which includes training places, course types, course schedules and other training related matters. In determining training courses, apart from the number of PICs eligible for vocational training, other factors such as availability of instructors, labour market information, availability of training courses in the market, setting of correctional institutions and PICs' feedback on courses held previously will also be considered. Audit noted that the planning of vocational training courses was documented in the files for various meetings, such as the Directorate Weekly Meeting, Quarterly Review Meeting, Industries and Vocational Training Steering Committee Meeting, and Industries and Vocational Training Monthly and Weekly Meetings (Note 27). However, the available records could only partially support the planning process on how some 100 training courses (costing \$13 million) had been determined each year. As a good management practice and to facilitate management review, the CSD needs to improve its documentation of the planning of vocational training courses.

Need to improve provision of vocational training to young PICs

3.7 As mentioned in paragraph 3.3, vocational training is compulsory for young PICs. Audit examination of the provision of vocational training to young PICs revealed the following areas for improvement:

Note 27: According to the CSD, the planning documentation was kept in different files as it involved decisions based on different considerations from the operational, security, resources and policy planning perspectives.

- (a) Need to improve documentation on assigning courses. The CSD Headquarters has advised institutions responsible for providing vocational training courses to lay down their own specific criteria for assigning courses to young PICs. However, of the eight institutions detaining young PICs, only three had drawn up such guidelines. In response to Audit's enquiry in December 2014, the other five institutions did so in January and February 2015. Audit's field visits to two institutions in November and December 2014 revealed that the assignment results of the PICs to courses were recorded in minutes of meetings of the Work and Vocational Training Allocation Boards (Note 28), but there was no documentation on the details of the Boards' considerations such as PICs' background and preference. In Audit's view, to ensure that appropriate vocational training courses are provided to young PICs, the CSD needs to improve documentation of assigning courses; and
- (b) *Under-utilisation of training places*. The CSD enters into service contracts with the training organisations for the provision of vocational training to young PICs in eight institutions. The contract periods vary from 6 to 18 months. Most of the contracted training courses (with class sizes of 15 to 20) are provided throughout the year. The number of young PICs attending the courses varies with the number of admission of PICs (determined by the Court) and their detention periods. In recent years, the number of admission of PICs to the institutions had decreased from 1,358 in 2010 to 660 in 2014. Audit examination of the training places provided in two institutions in 2013-14 and the period April to September 2014 revealed that the utilisation of training places was less than 50% in the latter period (see Table 3).

Note 28: The Work and Vocational Training Allocation Boards are established in all correctional institutions for work and vocational training allocation. The Boards comprise the Deputy Heads and Section Heads of the institutions.

Utilisation of training places for young PICs at two correctional institutions (April 2013 to September 2014)

Table 3

	Institution A		Institution B		
	2013-14	April to September 2014	2013-14	April to September 2014	
Monthly average number of PICs who attended training courses (a)	42	45	92	56	
Monthly average number of training places provided (b)	85	98	120	115	
Number of training courses provided by:					
CSD staff	1	1	2	2	
Training organisations (Note 1)	2 (Note 2)	5 (Note 3)	5 (Note 2)	5 (Note 3)	
Monthly average of training places filled (c) = $(a)/(b) \times 100\%$	49%	46%	77%	49%	

Source: Audit analysis of CSD records

Note 1: The contract sums of the service contracts with training organisations ranged from \$216,330 to \$956,700 in 2013-14 and \$96,000 to \$1,185,888 for the period April to September 2014.

Note 2 All courses were paid on a lump sum basis.

Note 3: Four courses were paid on a lump sum basis and one course had payment terms with a variable element.

Upon Audit's enquiry about the under-utilisation of training places, in March 2015, the CSD informed Audit that:

- (i) the CSD had been reviewing the training places in response to the actual intake situation. For instance, the CSD suspended two teen's training programmes in Chi Lan Rehabilitation Centre in November 2012 and Lai Chi Rehabilitation Centre in August 2014 in view of the intake situation; and
- an abundant number of training places for young PICs should (ii) always be made available and ready to meet the statutory requirements as stipulated under the Drug Addiction Treatment Centres Regulation (Cap. 244A), the Training Centres Regulation and the Rehabilitation Centres Regulation (Cap. 280A) (Cap. 567A), and the Standard Minimum Rules for the Treatment of Prisoners adopted by the United Nations. There were genuine difficulties for the CSD to predict the number of intakes of different classes of PICs which was beyond CSD control. The CSD had all along worked with various training bodies for providing courses to young PICs. These training bodies, however, would need to have forward planning of their training places even without a definite forecast of the possible intakes. The CSD had to actively adjust the training places in view of the dynamic situation as far as practicable.

Need to improve training-need surveys

3.8 As mentioned in paragraph 3.3, adult PICs may apply for vocational training courses on a voluntary basis. To better understand their training needs, the CSD conducted an anonymous survey for adult PICs eligible for vocational training (Note 29) and a total of 1,279 responses were received in September 2013. Audit noted that:

Note 29: The survey covered local adult PICs with earliest discharge dates (see Note 2 to Appendix B) between 1 July 2014 and 31 March 2015 and all local adult drug inmates detained at the Drug Addiction Treatment Centres as at 10 September 2013.

- (a) 364 respondents indicated that courses on computer software applications (including webpage design and digital film editing) would better meet their needs. However, only two such courses with a total of 13 training places were provided. On the other hand, while only 233 respondents considered that courses on commerce (including word processing and business Putonghua) would better meet their needs, 17 courses on such subjects with a total of 420 training places (Note 30) were provided; and
- (b) 252 respondents suggested that new courses should be organised. The courses proposed by most respondents were gymnastic instructor (42 responses), hairstyling (19 responses) and English (15 responses). However, none of these courses was planned for adult PICs. In this connection, Audit noted that hairstyling was provided to young PICs in the past years.

According to the CSD, apart from considering the diverse views of the PICs expressed in the surveys, other factors such as security, operation, feasibility of the penal environment and market sustainability were considered when it planned for training courses for PICs. The courses mentioned in (b) above were not provided due to concerns such as security and technical considerations.

- 3.9 Furthermore, Audit noted that the surveys were conducted twice in 2005 and 2013 for adult PICs. According to the CSD, it did not conduct survey for young PICs because CSD staff would:
 - (a) regularly observe young PICs since their admission;
 - (b) collect feedback from them and understand their training needs through interviews and class work assessments; and
 - (c) render professional counselling and advice to them to improve their performance during the course of training.

Note 30: These included courses on business Putonghua, word processing, basic computer concepts and keyboard operation.

Vocational training and industries

In Audit's view, to systematically ascertain the PICs' vocational training needs, the CSD should consider conducting training-need surveys regularly covering both adult and young PICs, and take their views into consideration in planning the training courses. In case that their needs cannot be met by individual institutions in the short term due to various constraints, such issues should be brought up to the senior management for their consideration.

Need to improve course evaluation

- 3.10 According to the Manual of the Industries and Vocational Training Section (Section Manual), officers should evaluate the effectiveness of vocational training courses by:
 - (a) conducting class inspection during the vocational training courses; and
 - (b) collecting feedback from adult PICs upon completion of the courses.
- 3.11 Audit examination of the CSD's evaluation of all the training courses provided in 2013-14 revealed that:
 - (a) five class inspections were conducted for 63 courses provided for adult PICs but nine inspections were conducted for 37 courses provided for young PICs; and
 - (b) feedback was collected from adult PICs for 9 of 11 full-time courses but no feedback was collected for all 52 part-time courses.

Audit considers that the CSD needs to provide more guidelines on conducting class inspection and remind officers to comply with the requirements on course evaluation for adult PICs.

3.12 Audit also notes that the CSD only collects written feedback from adult PICs upon their completion of the courses. According to the CSD, for young PICs, instead of collecting written feedback upon completion of courses, CSD staff could obtain verbal feedback/comments from them during the courses. However, there was no record of the feedback collected in such informal manner. Audit considers

that there is a need to state clearly in the Section Manual the requirement of collecting feedback from young PICs to ensure that a consistent and systematic approach is adopted.

Need to follow up on post-release employment

- 3.13 To assess the effectiveness of vocational training courses, the CSD requires the training organisations (see para. 3.4) to follow up the employment status of adult trainees for a period of six months after their release (Note 31). Audit found that:
 - (a) Need to follow up the employment status for more adult trainees. Of the total 63 courses provided in 2013-14, follow-up actions on the employment status were not taken for 32 (51%) courses. Audit's further analysis revealed that:
 - (i) 14 courses were procured by the CSD through 20 service contracts. However, the CSD had not specified in the contracts requiring the training organisations to follow up the employment status of their trainees; and
 - (ii) 18 courses were provided by government-funded training organisations to the CSD at no cost. There was no contractual agreement between the CSD and the training organisations and it was the practice of these organisations not to follow up the employment status of some of their trainees in generic skill courses (Note 32).
- Note 31: Apart from discharged persons under statutory supervision, CSD staff are not allowed to communicate with discharged persons in accordance with the Prison Rules. When applying for a vocational training course, a PIC is required to give consent to let training organisations follow up on their employment status.
- **Note 32:** For example, the Employees Retraining Board did not follow up the employment status of their trainees attending vocational training courses such as word processing and computer application.

According to the CSD, employment follow-up service was included in the service contracts (other than those mentioned in (a)(i)) for some trade-specific courses, such as restaurant service courses arranged by the Employees Retraining Board and provided by the Society for the Rehabilitation and Crime Prevention and the Vocational Training Council, as well as those construction related courses from the Construction Industry Council. Audit considers that the CSD should ensure that the requirement of following up the employment status of the trainees is specified in all service contracts. Besides, it should consider seeking the government-funded training organisations' assistance in following up the employment status of all of their trainees; and

(b) Need to make better use of employment information of young trainees. Unlike adult PICs, training organisations for young PICs were not required to follow up the employment status of their trainees. According to the CSD, as all young PICs were subject to supervision upon release (see para. 1.6), their employment status would be followed up by supervising officers of the Rehabilitation Units (see para. 4.4) and input into the CSD's database. The Vocational Training Unit had made use of such information for evaluation and planning purposes. However, no management information was compiled for senior management's review. The CSD needs to make improvement in this regard.

Audit recommendations

- 3.14 Audit has *recommended* that the Commissioner of Correctional Services should:
 - (a) improve the documentation of the planning of the vocational training courses and the assignment of such courses to young PICs at correctional institutions;
 - (b) consider conducting regular surveys to ascertain the vocational training needs of both adult and young PICs, and take into consideration such survey results in planning vocational training courses as far as practicable;
 - (c) for the purpose of improving course evaluation:

- (i) provide more guidelines on class inspection;
- (ii) remind CSD officers to comply with the requirements in evaluating the effectiveness of vocational training courses for adult PICs; and
- (iii) consider extending the evaluation requirement to training courses for young PICs;
- (d) take measures to ensure that the requirement of following up the employment status of adult trainees is specified in all service contracts and consider seeking government-funded training organisations' assistance to follow up employment status of their trainees; and
- (e) make better use of the employment information of young trainees captured in the CSD's database to compile management information for evaluation and planning purposes.

Response from the Government

- 3.15 The Commissioner of Correctional Services agrees in principle with the audit recommendations. He has said that:
 - (a) the CSD will continue to ensure that clear documentation in relation to the planning and assignment of vocational training courses is in place;
 - (b) the CSD will continue its existing practice to conduct surveys to ascertain the vocational training needs for adult PICs;
 - (c) since all the courses for adult offenders are conducted in institutions with Industrial and Vocational Training Officers on the institutional establishment, class inspections are conducted by these officers during their daily workshop inspections. Starting from 2015, the relevant guideline has been revised to require the Vocational Training Managers at the Headquarters to conduct at least one class inspection to every course for adult and young offenders. This requirement will be stated in the Section Manual;

- (d) starting from 2015, the CSD has included the employment follow-up requirement in all trade-specific training service contracts; and
- (e) the CSD will continue to make reference to the employment information of young trainees when evaluating and planning vocational training courses. The use of the employment information of young trainees captured in the Rehabilitative Programmes Management System database is just one of the many considerations for course planning and endorsement by CSD senior management. Other considerations include feedback from trainees, the employment market needs, security and operational concerns.

Management of industries

- 3.16 One of the main objectives of the Industries and Vocational Training Section is to provide PICs with useful work to fulfil the statutory requirement (see para. 1.5(a)). By engaging PICs in meaningful work:
 - (a) their idleness and tension will be reduced, which contributes to prison stability; and
 - (b) good work habit will be developed, which enhances their employability and facilitates their rehabilitation.

Furthermore, through the supply of various goods and services to government bureaux and departments (B/Ds) and public bodies, the work of the Industries Units would bring an incidental benefit of saving public money.

Trades operated by the Industries Units

3.17 As mentioned in paragraph 3.2(b), the three Industries Units under the Industries and Vocational Training Section are responsible for managing the industrial operations in the provision of a wide range of goods and services. For 2013-14, the total commercial value of goods and services (Note 33) under the

Note 33: The assessment of commercial value was based on government contract prices wherever available or on market prices estimated by the Industries Units in the absence of government contract prices.

13 trades managed by the Industries Units amounted to \$381.9 million (see Appendix F). As at 31 December 2014, the Units employed 4,296 PICs (Note 34).

- 3.18 It is the CSD's policy that the Industries Units serve primarily the public sector including B/Ds, financially autonomous public bodies and other non-profit making or charitable organisations. Financial Circular No. 3/2014 stipulates that B/Ds (but not for other financially autonomous bodies or government subvented organisations) should obtain the goods and services that the Industries Units can provide whenever possible. For 2014, in terms of commercial value, about 58% of business came from B/Ds, 41% from the Hospital Authority and the remaining 1% from other subvented organisations.
- 3.19 According to the Section Manual, products supplied to B/Ds are charged on the basis of recovering only the direct cost of products (e.g. materials, transportation charges, inspection and installation fees). For financially autonomous public bodies and government subvented organisations, the Industries Units have the discretion to decide on the price based on the following two objectives:
 - (a) recovering at least the direct cost of products; and
 - (b) regulating the in-take of work to ensure the optimum employment of PICs.

Need to conduct a strategic review on trade mix

3.20 The Industries Units have achieved the major objective of engaging PICs in useful work. In terms of saving public money through the production of goods and services (see para. 3.16), the cost-effectiveness of the trades operated by the Units should be optimised. In determining the cost-effectiveness of a trade, the commercial value of the goods/services and the production cost (Note 35) have to be taken into account. The excess of the commercial value over the production cost is

- **Note 34:** Apart from those engaged in the industrial operations, some 1,900 PICs were deployed to carry out repairs works at correctional institutions and domestic work such as cleaning, gardening, hair cutting and cooking.
- **Note 35:** The production cost includes the material cost, staff cost, expenses on fuel, light and power, depreciation charges, payment of PICs earnings, trade running cost and administrative overheads.

the net contribution made by the Industries Units. On the contrary, a negative net contribution (the excess of the production cost over commercial value) represents the net costs incurred in keeping the PICs purposefully employed.

- 3.21 In the 1998 Audit Review of the then Correctional Services Industries (Note 36), Audit found that most of the 16 trades operated by the Industries persistently showed negative net contributions in five years (1992-93 to 1996-97) and some trades employed fewer PICs. Audit recommended that the CSD should conduct an overall strategic review of the trades with a view to expanding the cost-effective and employment-effective trades (which employed more PICs). The CSD agreed with the recommendation and took measures to improve four of its trades, namely garment, laundry, envelope making and book binding (Note 37).
- 3.22 The CSD prepares an annual Operating Statement of the Industries Units showing the commercial value, direct and indirect costs (Note 38) and net contribution of 13 trades. Based on the Operating Statements, Audit noted that from 2009-10 to 2013-14 the contribution margin had dropped from 68% to 59%. The net contribution had dropped from \$56.8 million in 2009-10 to a deficit of \$5.8 million in 2011-12 and thereafter the negative net contributions continued to increase to \$15.8 million in 2013-14 (see Table 4).

Note 38: Based on the CSD's Operating Statement of the Industries Units, direct costs included material cost, labour cost and electricity, and indirect costs included staff cost, depreciation, other running costs and administrative overheads.

Note 36: In 1998, Audit completed an audit review of the operations and management of the Correctional Services Industries and the results were included in Chapter 3 of the Director of Audit's Report No. 30 of June 1998.

Note 37: The CSD introduced measures such as opening more workshops to enhance the productivity and increase work posts of the relevant trades.

Table 4

Overall financial performance of trades (1996-97 and 2009-10 to 2013-14)

	2009-10 (\$ million)	2010-11 (\$ million)	2011-12 (\$ million)	2012-13 (\$ million)	2013-14 (\$ million)	1996-97 (\$ million) (Note)
Commercial value (a)	425.1	399.5	412.8	385.5	381.9	425.0
Total direct costs (b)	137.5	139.4	186.5	167.4	158.2	139.4
Contribution margin $(c) = (a) - (b)$	287.6	260.1	226.3	218.1	223.7	285.6
Contribution margin percentage (d) = (c) / (a) × 100%	68%	65%	55%	57%	59%	67%
Total indirect costs (e)	230.8	251.5	232.1	224.8	239.5	242.3
Net contribution $(f) = (c) - (e)$	56.8	8.6	(5.8)	(6.7)	(15.8)	43.3

Source: CSD records

Note: This was the financial performance reported in the 1998 Audit Review.

- An examination of the net contribution by trade revealed that the negative net contribution problem found in the 1998 Audit Review persisted. Except for laundry, the remaining trades consistently showed negative net contributions during the period (see Appendix G). Among them, the garment trade was the major contributor with a negative net contribution of \$55.2 million in 2013-14. An analysis of the net contribution on a per-PIC basis shows that the precast concrete trade and the printing trade were the two least cost-effective and employment-effective (see Appendix H).
- 3.24 In view of the financial performance of the Industries Units as reported in paragraphs 3.22 and 3.23, Audit enquired the CSD about its measures to address the issue. In January and March 2015, the CSD informed Audit that:
 - (a) the prime objective of the Industries Units was to engage PICs in useful work and most of the trades were labour-intensive. The downward trend of penal population (see Figure 1 in para. 1.3) and engagement of PICs in vocational training activities in recent years inevitably affected the financial performance of the trades;
 - (b) the CSD had reservation on the financial performance of trade analysis where the total indirect costs were deducted from the contribution margin to reflect the net contribution of trades. The indirect costs included elements of custodial security, discipline enforcement, rehabilitative function and vocational training, which did not contribute to the production costs of trades; and
 - (c) looking for improvement opportunities, the Industries Units would upgrade workshops equipment and introduce more mechanisation in production.

Regarding (b) above, as shown in Table 4 in paragraph 3.22, the deduction of total indirect cost from the contribution margin to arrive at the net contribution of trades was the methodology used by the CSD in preparing the Operating Statement of the Industries Units. As regards (c), apart from measures to improve the efficiency of existing trades, Audit considers that the CSD needs to conduct a strategic review on the trade mix (e.g. exploring the feasibility of introducing new trades that can replace the less cost-effective ones such as those mentioned in para. 3.23).

Need to manage stock levels of the trades

- 3.25 The Industries Units are responsible for the production control of the trades, which includes planning, scheduling, dispatching and storage of finished goods. The general objective of production control is to achieve optimum use of resources such as machinery, equipment, materials and labour. According to the CSD, owing to production lead time and the need to maintain a stable level of workload, the Industries Units maintain stocks of its finished products.
- 3.26 For stock management purpose, the Industries Units have put in place the following controls:
 - (a) conducting physical stocktaking exercise twice a year in March and September and holding management meeting monthly; and
 - (b) preparing a stock report on items which have not been issued for use during the year for review by the senior management (i.e. non-moving stock report).
- 3.27 Audit reviewed the non-moving stock report as at October 2014 and noted that non-moving stocks amounted to about \$0.3 million (comprising raw material of \$108,855 and finished goods of \$231,819) out of the total stock balance of \$50.6 million (valued at cost).
- Audit analysis of the stock records kept in the CSD's database as at 31 October 2014 revealed that the stock levels of 50 types of raw materials (totalling \$0.5 million) and 83 types of finished goods (totalling \$3.1 million) were greater than their annual consumption (Note 39) by one year or more (i.e. slow-moving stock). Audit considers that the CSD needs to prepare slow-moving stock reports for management review and manage the risk of obsolescence of such stocks.

Note 39: Annual consumption in this context means the amount of raw material that was issued for use in the previous year and the finished goods that were delivered in the previous year.

Audit recommendations

- 3.29 Audit has *recommended* that the Commissioner of Correctional Services should:
 - (a) conduct a strategic review on the trade mix (e.g. exploring the feasibility of introducing new trades that can replace the less cost-effective ones) of the Industries Units; and
 - (b) prepare slow-moving stock reports for management review and manage the risk of obsolescence of such stocks.

Response from the Government

- 3.30 The Commissioner of Correctional Services agrees in principle with the audit recommendations. He has said that:
 - (a) for some trades such as precast concrete, garment and printing, there are vocational training courses running in parallel with the industrial production, namely the Intermediate Concretor Course, the Overhead Crane Operator Certificate Course and the Forklift Truck Operator Certificate Course in precast concrete workshop, Clothing Marketing Course in various garment workshops as well as the Qualification Framework in the Stanley Prison printing workshop. For enhancing the net contribution of production, digital printing was introduced in 2014 in Stanley Prison and Lo Wu Correctional Institution for higher-end products. One of the vacated precast concrete workshops in Tai Lam Correctional Institution was also converted to co-locate two metal workshops;
 - (b) trade selection is not solely based on net contribution and cost-effectiveness but also the needs of the public sector, security and operational concern, and characteristics of the prison labour. An example is handmade envelope for PICs with low literacy, short sentence, poor physique, drug abuse background or task in cell requirement;

- (c) for better inventory management, the CSD enhanced the computer system in late 2014 by developing a contract management module to bar the stock replenishment level. Finished goods are made to stock and corresponding materials are procured according to the demand and forecast from clients. Actual consumption may differ; and
- (d) slow-moving stock reports are now available to monitor the obsolescence of stocks. Such reports are also tabled for discussion during management monthly meetings. Moreover, the slow-moving stock situation will be critically reviewed after half-yearly stocktaking exercise and are scrutinised by the senior management at the monthly meetings.

PART 4: POST-RELEASE SUPERVISION AND COMMUNITY SUPPORT

4.1 This PART examines the CSD's efforts in providing post-release supervision for discharged persons (see paras. 4.2 to 4.13) and in soliciting community support for them (see paras. 4.14 to 4.17).

Post-release supervision

- 4.2 Under the various Ordinances governing correctional institutions, the CSD is responsible for supervision and rehabilitation of discharged persons during the supervision periods (see para. 1.6). The CSD issues a Supervision Order to a person to be discharged (who becomes a supervisee) specifying:
 - (a) the supervision period which is either specified in the relevant Ordinance or determined by the relevant Supervision Board/Review Board under the Ordinance; and
 - (b) supervision conditions which should be complied with by the supervisee during the supervision period. The number of supervision conditions varies among discharged persons under different Supervision Schemes.

The supervision conditions mainly require a supervisee to:

- meet with the supervising officer as instructed and at least once a month;
- reside at a place approved by the supervising officer;
- undertake an employment approved by the supervising officer;
- inform the supervising officer at once of any changes in his home or office address and any employment particulars including dismissals;
- inform the supervising officer or obtain prior permission from officer of his intention to leave Hong Kong or reside abroad;
- unless with reasonable excuse, engage in gainful employment in accordance with the instructions of the supervising officer;
- be of good behaviour; and
- not to commit any criminal offence.

4.3 A supervisee needs to comply with the specified supervision conditions during the supervision period. Any breach of such conditions may result in a recall of the supervisee to detention in the institution or other penalties according to the relevant Ordinance (such as liable upon conviction to a fine of \$5,000 and 12 months' imprisonment).

Post-release supervision work

4.4 The objectives of post-release supervision are to ensure supervisees' compliance with the supervision conditions and help them re-integrate into society through regular contacts, close supervision and timely intervention by supervising officers. In each of the two Rehabilitation Units in the Rehabilitation Division (see Appendix C), a Superintendent, who is assisted by a Chief Officer and Principal Officers, oversees supervising teams to carry out the supervision duties:

Particulars	Rehabilitation Unit 1 (RU1)	Rehabilitation Unit 2 (RU2)
Type of supervisees	Young female PICs discharged from Prisons, and PICs discharged from Drug Addiction Treatment Centres, Rehabilitation Centres, Training Centre and Detention Centre	Adult PICs and young male PICs discharged from Prisons
Number of supervising teams	50	14
Number of CSD officers (supervising officers)	100 (2 in each team)	28 (2 in each team)
Number of supervision cases as at 31 December 2014	1,523	646

Post-release supervision and community support

In addition to 28 CSD officers, the RU2 is assisted by 8 Assistant Social Work Officers seconded from the SWD (headed by 1 Social Work Officer) to provide guidance and counselling services for its supervisees under the Post-Release Supervision of Prisoners Scheme (see item (a) at Appendix B) and refer them to welfare services if necessary (Note 40).

- 4.5 According to CSD Standing Orders, a supervising officer should:
 - (a) ensure that the supervisee is leading a law-abiding and industrious life, and is in every respect in compliance with the supervision requirements; and
 - (b) initiate timely and appropriate actions including recall to prevent the supervisee from any deterioration in performance.
- In the event of a breach of a supervision condition, the supervising officers should make a report, via the Officer-in-charge of the Rehabilitation Unit, to the CSD's Supervision Case Review Committee or the relevant Supervision Board/Review Board (see para. 4.2(a)) within two working days for its consideration and recommendation of a recall action. A proposal for recall action should either be approved by the Commissioner of Correctional Services, the Chief Executive of the Hong Kong Special Administrative Region or the relevant Statutory Board as determined by the relevant Ordinances. Upon approval, the Commissioner will issue a Recall Order to require the supervisee to return to the correctional institution. As at the end of 2014, 2,169 discharged persons were under CSD supervision while 436 persons were yet to be recalled under the Recall Orders, including 100 Orders outstanding for more than one year (of whom 46 for more than two years) (Note 41).

Note 40: Since the establishment of the Scheme in 1996, the CSD and SWD have jointly provided guidance and counselling to help discharged persons re-integrate into society.

Note 41: The names of persons yet to be recalled were placed on the Hong Kong Police Force's Wanted Person List and the Immigration Department's Departmental Watch List for locating them.

Need to consider enhancing counselling services for supervisees

- 4.7 Audit noted that about 86% of Recall Orders were issued to persons discharged from the Drug Addiction Treatment Centres in 2013 and 2014 (see Appendix I). In terms of completion of the statutory supervision period, the success rate for these supervisees in 2014 was 51.4% (or a failure rate of 48.6%). Based on CSD records, supervisees of the Centres were recalled mainly because of their relapse to drug abuse during the supervision period. Of the 1,004 Recall Orders issued to recall supervisees to the Drug Addiction Treatment Centres in 2014, 748 (75%) of the recalls were due to relapse to drug abuse.
- 4.8 In Audit's view, the high percentages of recall cases of the Drug Addiction Treatment Centres due to relapse to drug abuse is a cause for concern. There is a need for the CSD to consider the feasibility of further enhancing its counselling services for supervisees.

Urine specimen tests for supervisees

- According to CSD Standing Procedures, supervising officers should collect urine specimens from supervisees discharged from the Drug Addiction Treatment Centres at least once a month for chemical testing to ensure that they do not relapse to drug abuse during the supervision period. Supervisees are required to attend and supply specimens at the CSD Urine Specimen Collection Centre in Lai Chi Kok. The specimens are then delivered to the Government Laboratory and the test results are sent to the responsible supervising officers for review. According to the CSD, in case that the test results indicate a breach of the supervision condition of relapse to drug abuse, application for recall would be made by supervising officers after having sought explanation from the supervisee or attempts were made to locate the supervisee and a Recall Order may be issued (see para. 4.6).
- 4.10 Therefore, timely completion of a urine specimen test and initiation of recall action by the CSD within one month is important in that:
 - (a) it enables the early detection of relapse of drug abuse by its supervisees as reported to LegCo in 2013 (see para. 5.4); and

- (b) for a confirmed relapse of drug abuse, the next round of urine specimen test may be obviated.
- 4.11 Audit examination of 30 cases of recall to the Drug Addiction Treatment Centres in 2013 and 2014 because of relapse to drug abuse revealed that 39 to 59 days had been taken to issue a Recall Order (from the date of urine specimen submission to the Government Laboratory to the date of issuing a Recall Order). Audit noted that:
 - (a) the Government Laboratory took 22 to 30 days to issue the test reports (Note 42);
 - (b) the CSD took 12 to 31 days after the issue of the test reports to follow up the cases and issue Recall Orders. In particular, in 10 of the 30 cases examined, the CSD took 20 days or more (from the date of the issue of drug confirmatory reports by the Government Laboratory) to issue Recall Orders; and
 - (c) because supervising officers are required to collect urine specimens from supervisees at least once a month (see para. 4.9), by the time the Recall Orders were issued, specimens for the next test had already been submitted to the Government Laboratory.
- 4.12 In March 2015, the CSD informed Audit that:
 - (a) a number of procedures were involved in the workflow: (i) from the completion of tests by a Chemist of the Government Laboratory to the confirmation of test result by a Senior Chemist; (ii) the time required for the CSD staff to physically collect (Monday and Thursday) and deliver the results to institutional General Offices; (iii) the time required for the

Note 42: In March 2015, the Government Laboratory informed Audit that urine samples submitted by the CSD fell within the category of judicial-confirmation (routine) drug urinalysis. The target time of completing the tests was 22 working days. In 2013 and 2014, 98% and 100% respectively of the urine specimen tests for the CSD were completed within 22 working days (i.e. 31 calendar days). In addition, the Government Laboratory provided urgent urinalysis service for the CSD if necessary.

Offices to distribute the test results to Rehabilitation Unit officers; and (iv) the time required for the Rehabilitation Unit officers to input the test results into the computer before the reports reached their supervising officers for follow-up action;

- (b) the target time set for each step upon receipt of the urine specimen test result to the submission of an application for the recall action had been laid down in CSD Guidelines, which also had been under review by external bodies from time to time:
- (c) the CSD considered that the period to be examined should be that between receipt of reports and submission of application for the recall action by supervising officers, but not counting from the Government Laboratory's test report date;
- (d) all these cases were handled in compliance with the stipulated guidelines with an average of 9 calendar days taken (which included 7 calendar days to locate the supervisee to seek justification and 2 more working days for submission of application for recall action) between the receipt of test reports from the Government Laboratory and the application for recall action, ranging from the shortest of 4 calendar days to the longest of 13 calendar days; and
- while every effort should be made to expedite the process, reasonable time should be allowed for the Supervision Case Review Committee/Commissioner of Correctional Services to make their judgment and to exercise their power in an independent and discreet manner. The CSD had attempted to shorten the workflow by communicating with the Government Laboratory to consider using confidential email or facsimile in the delivery and receipt of the test results, but the reply was negative in view of the forensic requirements. There might be inevitable delay as a result of Government Laboratory's operational requirements for hand-delivery of the reports.
- 4.13 In Audit's view, the CSD needs to liaise with the Government Laboratory with a view to expediting the urine specimen tests to enable early detection of drug-taking by supervisees.

Community support

4.14 Community acceptance and support is essential to the rehabilitation of persons and their re-integration into the community. The CSD also advocates equal employment opportunities for rehabilitated persons and has referred them to employers. As CSD staff are not generally allowed to communicate with rehabilitated persons (see Note 31 to para. 3.13), post-release/post-supervision support services are provided by other government departments (such as the SWD) and non-governmental organisations (NGOs). The CSD has collaborated with over 80 religious bodies and non-government social services agencies to offer assistance to rehabilitated persons.

Employment support

4.15 To enhance the employability of rehabilitated persons after release, the CSD provides pre-release employment services with an aim to provide an interactive job-matching platform for potential employers and rehabilitated persons. Job vacancies of various trades from the potential employers are regularly referred to PICs through notice boards in correctional institutions. Such information is also conveyed to PICs during the Induction Programme and Pre-release Re-integration Orientation Course. Interested persons due for discharge within three months may approach CSD staff for application. The CSD will arrange job interviews in person, video-conference or tele-conference at the request of potential employers.

Need to enhance employment support services

4.16 In addition to the regular pre-release employment services, the CSD held a video-conferencing job fair on 26 September 2014 jointly with a non-profit making organisation and an NGO. The event provided opportunities for PICs due for discharge in four months to have real-time interviews with employers through video-conferencing technology. Audit analysis of the statistics on the provision of the pre-release employment services and the video-conferencing job fair is shown in Table 5.

Table 5

Employment support services provided by the CSD (2013 and 2014)

Type of services	Year/Date	No. of employers	No. of job types	No. of vacancies	No. of applications	No. of jobs offered
Pre-release	2013	127	238	1,201	179	154
employment services (Note)	2014	186	383	2,118	284	107
Video- conferencing job fair	26 Sep 2014	74	157	728	599	235

Source: Audit analysis of CSD records

Note: The CSD has only kept data on the number of vacancies provided by employers and the number of applications since August 2012. From 2004 (when the services were first provided) to January 2012, a total of 249 employers had offered 898 jobs to rehabilitated persons.

4.17 Audit noted that:

- (a) **Pre-release employment services.** Some 13,000 and 12,000 PICs were discharged from correctional institutions in 2013 and 2014 respectively. However, only 179 and 284 applications were received and 154 and 107 jobs were offered respectively during the same period. There is a need for the CSD to enhance its promotional efforts in the institutions with a view to improving the utilisation of the services; and
- (b) Video-conferencing job fair. In the one-day job fair on 26 September 2014, 599 applications were received against 728 vacancies and 235 jobs were offered. However, the job fair was held on an ad hoc basis (Note 43). The CSD should consider organising more job fairs regularly with a view to providing more employment opportunities to PICs due for discharge.

Note 43: The previous job fair was held in August 2011 for PICs in two correctional institutions due for discharge in three months.

Audit recommendations

- 4.18 Audit has *recommended* that the Commissioner of Correctional Services should:
 - (a) consider the feasibility of further enhancing the counselling services for CSD supervisees;
 - (b) liaise with the Government Laboratory with a view to expediting the urine specimen tests to enable the early detection of relapse to drug abuse by CSD supervisees;
 - (c) enhance promotional efforts for the pre-release employment services in the correctional institutions; and
 - (d) consider organising more job fairs regularly to enhance employment support to PICs due for discharge.

Response from the Government

- 4.19 The Commissioner of Correctional Services agrees in principle with the audit recommendations. He has said that:
 - (a) it is the CSD's duty to regularly consider the feasibility of further enhancing rehabilitation assistance for all PICs. Intensive counselling is given to supervisees all along. There is an upward trend of success rate for persons discharged from the Drug Addiction Treatment Centres in the recent three years;
 - (b) efforts have been made to step up the process and a number of meetings have been held with the Government Laboratory from time to time for the possibility of expediting urine specimen tests. The CSD will continue to liaise with the Government Laboratory to see if the latter can do anything further to expedite the process;

- (c) the CSD will continue to step up its promotional efforts on the pre-release employment services with a view to facilitating rehabilitated persons' re-integration to society. The CSD has all along strived to engage employers' support for offenders' rehabilitation. Efforts have been continuously made to help rehabilitated persons to secure gainful employment, including enhancement of pre-release employment services. The ratio of job applications over job types for the pre-release employment services was fairly high; and
- (d) the CSD will continue to engage employers with a view to attracting their support for offender rehabilitation. Liaison has been continuously made with interested co-organising parties for job fairs. Job fairs are only one of the various sustainable initiatives of employment support which include employment symposiums, arrangement of employers to visit institutions, employment promotion talks delivered by CSD senior officers and operations under the Caring Employers Scheme. Furthermore, job fairs are supplementary to the regular pre-release employment services, with a view to arousing public attention. The co-organised events need the joint efforts and cooperation from employers and merchant associations at times.

PART 5: WAY FORWARD

5.1 This PART explores the way forward for the CSD's provision of the rehabilitation services.

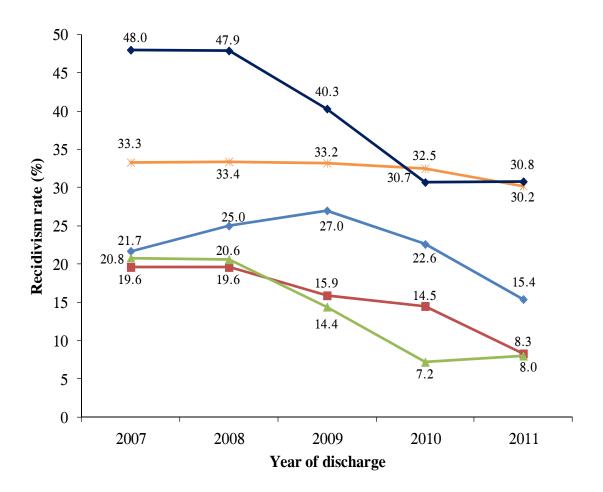
Re-integration programme

- As mentioned in paragraph 1.11, the CSD compiles success rates which cover persons discharged under the ten Supervision Schemes to monitor the effectiveness of its re-integration programme. The success rates are published in the CSD's CORs and Annual Reviews.
- 5.3 The CSD also compiles recidivism rates of all discharged local persons to facilitate studies on re-offending behaviour and to provide timely feedback for programme monitoring and evaluation. The recidivism rates are percentages of re-admission of all local persons who have been under the CSD custody (irrespective of whether they are subject to supervision) to correctional institutions (due to conviction of a new offence) within two years after discharge. The recidivism rates are not published in the CORs and Annual Reviews, but available upon request. The recidivism rates for all local persons discharged from 2007 to 2011 (Note 44) are shown in Figure 2.

Note 44: As of December 2014, only recidivism rates up to 2011 were available because the CSD needed to ascertain whether a discharged local person had been convicted of a new offence within two years after his discharge.

Figure 2

Recidivism rates of all discharged local persons from different correctional institutions (Year of discharge: 2007 to 2011)



Legend: Drug Addiction Treatment Centres

Prisons

Training Centre

Detention Centre

Rehabilitation Centres

Source: CSD records

Need for a review to enhance rehabilitation services for drug inmates

- According to its 2013-14 COR, the CSD's targets were to ensure that its re-integration programme achieved the highest possible success rates in assisting rehabilitated persons to re-integrate into society, and to enhance community acceptance of and support for them. As shown in item (a) at Appendix D, although the success rate for persons discharged from the Drug Addiction Treatment Centres was rising, it was still the lowest among the ten Supervision Schemes. As shown in Figure 2, the recidivism rate of local persons discharged from the Drug Addiction Treatment Centres had declined since 2007 but was the highest (30.8%) among the persons discharged from five types of correctional institutions in 2011. In this connection, Audit noted that LegCo Members had expressed concerns over the low success rates of supervisees from the Drug Addiction Treatment Centres. In response, the CSD informed LegCo in 2013 and 2014 that:
 - (a) the success rate of supervisees from the Drug Addiction Treatment Centres was affected by a number of personal and social factors, which included the criminal conviction and drug abuse history of the supervisees, the motivation and determination of supervisees to stay away from drugs, the support of the community and their family members, as well as the prevalence of drug problem in the community; and
 - (b) the CSD had enhanced the counselling services for drug inmates so as to strengthen their determination to stay away from drugs and the monitoring of their relapse problem by expediting the confirmatory tests to enable the early detection of drug-taking by supervisees.
- In light of the lower success rates and the higher recidivism rates for local persons discharged from the Drug Addiction Treatment Centres, the CSD needs to conduct a review of the rehabilitation services provided to these inmates with a view to further improving its rehabilitative programmes. In the review, the CSD should take into account the following audit findings in this Audit Report:
 - in PART 2, Audit has identified areas for improvement in providing matching programmes by the Rehabilitation Section and the Psychological Services Sections, including those for inmates of the Drug Addiction Treatment Centres (see paras. 2.7 to 2.18);

- (b) in PART 3, Audit has identified areas for improving the planning, implementation and evaluation of the vocational training courses provided to PICs during their detention in the correctional institutions (see paras. 3.6 to 3.13); and
- (c) in PART 4, Audit has found that as many recall cases of drug inmates were attributable to their relapse to drug abuse, the CSD should consider the feasibility of further enhancing its counselling services (see paras. 4.7 and 4.8).

Need to disclose recidivism rates

- At present, the CSD only reports the success rates for discharged persons under supervision in its COR but not the recidivism rates for all discharged local persons. Audit noted that the reported success rates did not fully reflect the effectiveness of the CSD's rehabilitation services because:
 - (a) many discharged persons were not subject to supervision. For example, of some 12,000 PICs discharged in 2014, only 2,169 (18%) under supervision by the CSD (see para. 1.7) were covered in compiling the success rates. The effectiveness of the rehabilitation services for the remaining 82% of discharged persons was not measured; and
 - (b) except for the Training Centre, the supervision period of young PICs in other institutions was one year (see para. 1.6). Considering the time required for the judicial process before conviction (Note 45), the success rate could only take into account re-conviction cases that occurred within the short supervision period.

Note 45: According to the Hong Kong Judiciary Annual Report 2014, the average waiting time for criminal cases in the Court of Appeal of the High Court (counting from the date of setting down a case to hearing) in 2013 was 50 days while that in the District Court (counting from the date of first appearance of defendants to hearing) was 60 days.

Audit's research revealed that different recidivism rates covering all discharged persons (see para. 5.3) had been disclosed by the correctional authorities in Australia, Singapore and the United States of America (see Appendix J). In response to Audit's enquiry, the CSD has said that the recidivism rate cannot be used as an indicator to directly reflect the effectiveness of any programme as the rate is also affected by various personal and social factors, such as ex-offenders' motivation to change, personal and family background and community support. Nevertheless, Audit notes that a mission of the CSD is to protect the public and reduce crime. In Audit's view, the CSD needs to consider proactive disclosure of the recidivism rates on suitable platforms for public information.

Audit recommendations

- 5.8 Audit has *recommended* that the Commissioner of Correctional Services should:
 - (a) conduct a review of rehabilitation services provided to drug inmates with a view to improving the services, taking into account the audit findings in this Audit Report; and
 - (b) consider proactive disclosure of the recidivism rates on suitable platforms.

Response from the Government

- 5.9 The Commissioner of Correctional Services agrees in principle with the audit recommendations. He has said that:
 - (a) it is an on-going practice for the CSD to conduct reviews on all correctional programmes and due regard has been paid to the Drug Addiction Treatment Centre programmes which cater for the relatively more hard-core offenders with drug addiction history. Apart from regular reviews, thematic studies of the Drug Addiction Treatment Centre programmes are conducted from time to time, both internally and by external bodies such as academic bodies; and

- (b) the CSD considers it not appropriate to use the recidivism rate as a performance indicator because:
 - (i) recidivism is defined differently by different jurisdiction. In CSD context, there are four critical success factors to achieve its mission of, among others, reducing crime as to build a safer and more inclusive society. Two (i.e. quality custodial services and comprehensive rehabilitative programmes) are under the CSD's direct control and responsibility, whereas offenders' responsivity and determination to turn over a new leaf as well as community support are at best under the CSD's influence; and
 - (ii) according to the "Introductory Handbook on the Prevention of Recidivism and the Social Re-integration of Offenders" published by the United Nations Office on Drugs and Crime in 2012, "people commit crime for many reasons and also stop committing crime for many reasons. The criminal justice intervention is not necessarily the most significant factor influencing desistance from crime".

25 correctional institutions and persons in custody (31 December 2014)

Co	Correctional institution		Age of PICs	Number of PICs
Prison	12 for adults (Note 1)	15	21 and over	6,746
	3 for young persons (Note 2)		14 to <21	459
Drug	1 for adult males	3	21 and over	426
Addiction Treatment	1 for young males		14 to <21	49
Centre	1 for adults and young females (Note 2)		Adults: 21 and over Young offenders: 14 to <21	133
Rehabilitati	on Centre	4 (Note 3)	14 to <21	47
Training Co	entre	1	14 to <21	134
Detention Centre		1	Young offenders: 14 to <21 Young adults: 21 to <25	61
Psychiatric	Centre	1	14 and over	242
	Total	25	_	8,297

Source: CSD records

Note 1: A Prison ceased operation in January 2015.

Note 2: With effect from February 2015, the Prison for young females also provides drug addiction treatment programme for young female drug inmates. As a result, the Drug Addiction Treatment Centre for females detains adult drug inmates only.

Note 3: Two Rehabilitation Centres offer Phase 1 programme and the other two offer Phase 2 programme (see para. 1.5(c)).

Six Supervision Schemes for persons discharged from Prisons

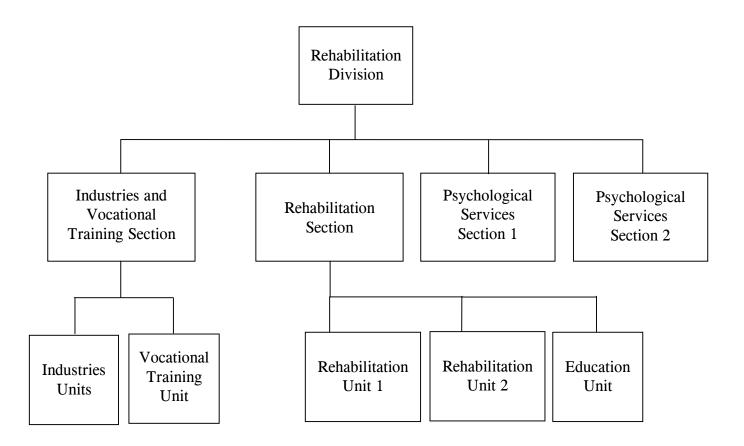
Type of programmes/schemes	Ordinance	Discharge persons under supervision	Supervision period
(a) Post-Release Supervision of Prisoners Scheme	Post-Release Supervision of Prisoners Ordinance (Cap. 475)	PICs who are serving a sentence of imprisonment of (a) 6 years or more; and (b) 2 years or more but less than 6 years for sexual, triad-related or violent crime if considered necessary by the Supervision Board (Note 1)	Decided by the Supervision Board (Note 1), but not longer than remitted part of sentence
(b) Young Persons in Custody under Prison Programme	Criminal Procedure Ordinance (Cap. 221)	Young PICs who begin serving a prison sentence of 3 months or more before attaining the age of 21 and have not reached the age of 25 at the time of release	1 year
(c) Pre-release Employment Scheme	Prisoners (Release under Supervision) Ordinance (Cap. 325)	PICs serving sentence of 2 years or more and are within 6 months of the expiry of their imprisonment who are released as recommended by the Supervision Board (Note 1)	Up to the earliest discharge date (Note 2)
(d) Release Under Supervision Scheme	Prisoners (Release under Supervision) Ordinance (Cap. 325)	PICs who have served not less than half or 20 months of a sentence of 3 years or more whose applications for early release have been approved as recommended by the Supervision Board (Note 1)	Up to the latest discharge date (Note 3)

Type of programmes/schemes	Ordinance	Discharge persons under supervision	Supervision period
(e) Conditional Release Scheme	Long-term Prison Sentences Review Ordinance (Cap. 524)	PICs serving indeterminate sentence may be conditionally released by the Chief Executive of the Hong Kong Special Administrative Region upon the recommendation of the Review Board (Note 4) and are placed under supervision. Upon satisfactory completion of the supervision period, the board may recommend commuting the indeterminate sentence to a determinate one	Decided by the Review Board (Note 4), but not more than 2 years
(f) Supervision After Release Scheme	Long-term Prison Sentences Review Ordinance (Cap. 524)	PICs who are given a determinate sentence after completing the Conditional Release Scheme are subject to supervision	Decided by the Review Board (Note 4), but not longer than remitted part of sentence

Source: CSD records

- Note 1: A Supervision Board with members appointed by the Chief Executive of the Hong Kong Special Administrative Region is established under the respective Ordinance. It is responsible for, among others, considering whether any PIC to whom the Ordinance applies should be granted early release under supervision and if so, to order his release.
- Note 2: Earliest discharge date is the discharge date after taking into account remission earned.
- Note 3: Latest discharge date is the discharge date determined by the original sentence without any remission.
- Note 4: A Review Board with members appointed by the Chief Executive of the Hong Kong Special Administrative Region is established under the Ordinance. It is responsible for, among others, conducting reviews of indeterminate and long-term sentence of PICs.

Rehabilitation Division of the CSD Organisation chart (31 December 2014)



Source: CSD records

Success rates of discharged persons under ten Supervision Schemes (2010 to 2014)

	Supervision Scheme	2010 %	2011 %	2012 %	2013 %	2014 %
(a)	Drug Addiction Treatment Centres (non-conviction and free from drugs in one year after discharge)	49.7 (1,413)	42.2 (1,376)	43.6 (1,121)	46.8 (1,182)	51.4 (1,180)
(b)	Training Centre (non-conviction in three years after discharge)	68.6 (140)	63.4 (172)	62.1 (153)	61.8 (123)	67.3 (113)
(c)	Rehabilitation Centres (non-conviction in one year after discharge)	92.6 (363)	97.3 (226)	95.5 (179)	94.4 (124)	95.2 (145)
(d)	Detention Centre (non-conviction in one year after discharge)	94.4 (234)	94.6 (168)	97.8 (138)	96.5 (115)	94.9 (98)
(e)	Post-Release Supervision of Prisoners Scheme (non-conviction during the supervision period, the supervision period was determined by the Supervision Board but not longer than the remitted part of sentence)	86.6 (367)	87.3 (315)	87.6 (322)	89.6 (288)	90.5 (262)
(f)	Young Persons in Custody under Prison Programme (non-conviction in one year after discharge)	80.4 (92)	84.8 (125)	91.3 (160)	93.3 (164)	91.0 (178)
(g)	Pre-release Employment Scheme (non-conviction between the release date and the earliest date of discharge)	100.0 (59)	100.0 (53)	100.0 (53)	100.0 (42)	100.0 (33)
(h)	Release Under Supervision Scheme (non-conviction between the release date and the latest date of discharge)	100.0 (6)	100.0 (18)	100.0 (15)	100.0 (24)	100.0 (21)
(i)	Supervision After Release Scheme (non-conviction during the supervision period, which was determined by the Review Board but not longer than the remitted part of sentence)	100.0 (5)	100.0 (10)	100.0 (5)	100.0 (4)	100.0 (2)
(j)	Conditional Release Scheme (non-conviction during the supervision period which was determined by the Review Board — Note)	_	_	_	_	100.0 (1)

Source: CSD records

Note: For the Conditional Release Scheme, there was no case from 2010 to 2013.

Remarks: The numbers in brackets denote the numbers of supervisees who had completed the supervision period in the relevant years.

Vocational training courses and training places provided/planned (2013-14 and 2014-15)

	2013	3-14	2014-15		
	Adult	Young	Adult	Young	
PICs (as at September — Note 1)	9,194	689	8,742	564	
Eligible PICs (as at September — Note 1)	2,436	689	2,259	564	
Percentage of eligible PICs	26%	100%	26%	100%	
Number of courses provided/planned	63	37	61 (Note 2)	36	
Number of training places provided/planned	1,347	Not available (Note 3)	1,389 (Note 2)	Not available (Note 3)	
Expenditure	\$13 m	nillion	\$13 million (Estimate)		

Source: Audit analysis of CSD records

- Note 1: The CSD only collects information on the number of PICs eligible to apply for vocational training courses in September each year for course planning purposes.

 The corresponding numbers of PICs as at September 2013 and September 2014 are therefore used to show the proportion of eligible PICs.
- Note 2: The figures for 2014-15 are the number of courses planned to be provided and the related training places. From April to September 2014, 18 courses with 328 training places were completed.
- Note 3: According to the CSD, such statistics are not kept because vocational training is compulsory for young PICs whose admission is determined by the Court, which varies from time to time.

Commercial value of 13 trades under the Industries Units (2013-14)

The sale	Commer	cial value
Trade	(\$ million)	(Percentage)
Laundry	207.5	54.3%
Garment	84.9	22.2%
Carpentry	21.1	5.5%
Leather products	19.6	5.1%
Fibreglass	10.8	2.8%
Book binding	8.7	2.3%
Metal	6.8	1.8%
Sign making	6.0	1.6%
Printing	5.5	1.4%
Simple manual work	4.8	1.3%
Envelope making	3.0	0.8%
Precast concrete	1.7	0.5%
Knitting	1.5	0.4%
Total	381.9	100.0%

Source: CSD records

Net contribution by trade (1996-97 and 2009-10 to 2013-14)

Trade	2009-10	2010-11	2011-12	2012-13	2013-14	1996-97 (Note 1)			
Trade	(\$ million)	(\$ million)	(\$ million)	(\$ million)	(\$ million)	(\$ million)			
Trade with positive	Trade with positive net contribution								
Laundry (Note 2)	105.8	82.3	87.3	87.4	118.9	95.8			
Trades with negati	ive net contrib	oution							
Garment	(18.8)	(26.8)	(33.0)	(27.0)	(55.2)	(9.9)			
Carpentry	(11.2)	(17.9)	(8.5)	(13.9)	(22.9)	(9.8)			
Book binding	(5.4)	(6.5)	(11.1)	(11.2)	(9.3)	(5.1)			
Sign making	(4.6)	(5.3)	(3.8)	(2.7)	(8.3)	(2.1)			
Metal	(6.9)	(5.8)	(8.0)	(6.7)	(7.9)	(10.5)			
Fibreglass	(5.5)	(4.2)	(4.7)	(4.7)	(6.5)	(3.0)			
Leather products (Note 3)	(8.5)	(8.5)	(8.8)	(12.5)	(6.5)	(2.3)			
Shoe making (Note 3)	_	_	_	_	_	(2.7)			
Precast concrete	(4.5)	(5.3)	(4.6)	(5.8)	(5.3)	(8.8)			
Simple manual work	5.9	(0.3)	(1.4)	(2.2)	(3.8)	(2.1)			
Printing	(5.3)	(4.8)	(4.0)	(3.9)	(3.7)	(6.5)			
Envelope making	(0.4)	(1.1)	(0.2)	(2.2)	(3.3)	(1.6)			
Knitting	(1.2)	(2.3)	(1.1)	(1.3)	(2.0)	(2.9)			
Ground maintenance and labour (Note 4)	17.4	15.1	(3.9)	_	_	14.8			
Total	56.8	8.6	(5.8)	(6.7)	(15.8)	43.3			

Source: CSD records

Note 1: This was the net contribution of trades reported in the 1998 Audit Review.

Note 2: It comprised domestic and commercial laundry and their net contributions were separately reported in the 1998 Audit Review.

Note 3: In 1999-2000, the CSD combined the shoe making and leather products into one trade.

Note 4: Starting from 2012-13, the CSD excluded the ground maintenance and labour trade (general maintenance and repair works, gardening and general labour services).

Average number of PICs employed and net contribution per PIC by trade (2009-10 to 2013-14)

Trade	2009-10	2010-11	2011-12	2012-13	2013-14
Trade with positive	e net contributio	on	,		
Laundry	1,276	1,248	1,154	1,020	947
	(+\$82,896)	(+\$65,961)	(+\$75,684)	(+\$85,680)	(+\$125,521)
Trades with negati	ive net contribu	tion			
Garment	1,803	1,632	1,595	1,664	1,694
	(-\$10,448)	(-\$16,425)	(-\$20,683)	(-\$16,241)	(-\$32,610)
Book binding	438	580	549	518	478
	(-\$12,238)	(-\$11,156)	(-\$20,146)	(-\$21,578)	(-\$19,537)
Carpentry	295	360	343	333	319
	(-\$38,121)	(-\$49,851)	(-\$24,721)	(-\$41,790)	(-\$71,674)
Leather products	198	243	257	264	237
	(-\$43,017)	(-\$34,807)	(-\$34,294)	(-\$47,521)	(-\$27,551)
Envelope making	319	333	330	250	200
	(-\$1,110)	(-\$3,321)	(-\$592)	(-\$8,730)	(-\$16,653)
Simple manual work	461	303	229	184	241
	(+\$12,859)	(-\$1,006)	(-\$6,295)	(-\$11,708)	(-\$15,682)
Fibreglass	191	155	131	142	137
	(-\$28,890)	(-\$26,995)	(-\$35,905)	(-\$33,157)	(-\$47,311)
Sign making	133	144	145	136	135
	(-\$34,230)	(-\$36,972)	(-\$26,574)	(-\$20,052)	(-\$61,770)
Metal	111	122	108	92	93
	(-\$62,345)	(-\$47,084)	(-\$73,894)	(-\$73,499)	(-\$85,066)
Knitting	32	81	75	61	54
	(-\$37,928)	(-\$28,022)	(-\$15,160)	(-\$21,213)	(-\$35,857)
Precast concrete	40	42	40	49	39
	(-\$111,299)	(-\$127,133)	(-\$114,969)	(-\$117,845)	(-\$135,253)
Printing	35	31	32	33	34
	(-\$152,246)	(-\$155,518)	(-\$125,790)	(-\$118,651)	(-\$108,496)
Total number of PICs employed	5,332	5,274	4,988	4,746	4,608

Source: Audit analysis of CSD records

Remarks: The numbers in brackets denote the net contribution per PIC for the relevant trade.

Supervision Orders and Recall Orders issued (2013 and 2014)

	2013		20)14
	No.	%	No.	%
Supervision Orders issued (Note)				
Drug Addiction Treatment Centres	1,202	57%	1,074	56%
Rehabilitation Centres	149	7%	118	6%
Training Centre	116	5%	137	7%
Detention Centre	100	5%	105	5%
Other six Supervision Schemes	557	26%	493	26%
Total	2,124	100%	1,927	100%
Recall Orders issued (Note)				
Drug Addiction Treatment Centres	1,022	87%	1,004	86%
Rehabilitation Centres	53	4%	47	4%
Training Centre	57	5%	60	5%
Detention Centre	18	2%	24	2%
Other six Supervision Schemes	26	2%	32	3%
Total	1,176	100%	1,167	100%

Source: CSD records

Note: While only one Supervision Order is issued to a supervisee, more than one Recall Order may be issued for breach of supervision condition on more than one

occasion during the supervision period.

Overseas recidivism rates

Australia:

Northern Territory Department of Correctional Services (Annual Statistics 2012-13):

- Two-year recidivism rates in 2011-12:
 - (a) Prisoners returning to prison: 52.4%
 - (b) Offenders returning to a Community Corrections program: 8.6%

New South Wales Department of Attorney General and Justice (Annual Report 2012-13):

- Two-year recidivism rates in 2011-12:
 - (a) Prisoners returning to prison: 42.5%
 - (b) Offenders returning to community corrections: 11.8%
- Singapore Prison Service (Annual Report 2013):
 - Two-year recidivism rates in 2010:
 - (a) Penal: 23.3%
 - (b) Drug Rehabilitation Centre: 27.5%
 - (c) Overall: 23.6%
 - Two-year recidivism rates in 2011:
 - (a) Penal: 27%
 - (b) Drug Rehabilitation Centre: 31.1%
 - (c) Overall: 27.4%
- California Department of Corrections and Rehabilitation, the United States of America (2013 Outcome Evaluation Report):
 - One-year recidivism rates in 2010-11:
 - (a) Arrest: 56.4%
 - (b) Return to Prison: 37.4%
 - (c) Conviction: 20.7%
 - Two-year recidivism rates in 2009-10:
 - (a) Arrest: 69.1%
 - (b) Return to Prison: 53%
 - (c) Conviction: 37.7%
 - Three-year recidivism rates in 2008-09:
 - (a) Arrest: 75.3%
 - (b) Return to Prison: 61%
 - (c) Conviction: 49.1%

Source: Audit research

Appendix K

Acronyms and abbreviations

Audit Audit Commission

B/Ds Bureaux and departments

COR Controlling Officer's Report

CSD Correctional Services Department

LegCo Legislative Council

NGOs Non-governmental organisations

PICs Persons in custody

RU1 Rehabilitation Unit 1

RU2 Rehabilitation Unit 2

SWD Social Welfare Department